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The Kangaroo Report

Volume 2

The Commercial Exploitation of Kangaroos in Australia by State

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INTRODUCTION

The Commercial Exploitation of Kangaroos in Australia by State

An overview of the findings of Chapters 1 to 8: quotas, kill numbers and the public record, 2025–2026

Author	Peter Hylands
Prepared	October 2026
Data current to	October 2026 (as stated in each chapter)

I.1 Purpose and scope

Volume 1 of *The Kangaroo Report* examined the national commercial harvest, the use of Authority to Control Wildlife (ATCW) permits in Victoria, the history of Kangaroo persecution in Western Australia, commercial and damage mitigation killing in Queensland, and the plausibility of published Kangaroo population estimates. Volume 2 takes the analysis state by state. Each of its eight chapters tests one jurisdiction against that government's own published data, updated wherever possible to the latest figures released in 2026.

Chapters 1 to 5 cover the five mainland states whose commercial industries operate under Commonwealth-approved wildlife trade management plans: Victoria, South Australia, New South Wales, Queensland and Western Australia. An addendum to Chapter 1 examines the killing of Kangaroos in Victoria's national parks and on other public land. Chapter 6 covers Tasmania. It sits outside the Commonwealth framework, but it runs a commercial trade in wallabies and Forester Kangaroos killed under permit. Chapters 7 and 8 cover the two territories, neither of which has a commercial industry. The ACT kills Kangaroos in its nature reserves and calls it conservation. In the Northern Territory, killing under permit goes almost unreported.

This Introduction draws the chapters together. Section I.2 sets out the commercial quotas and kill. Section I.3 covers the killing that takes place outside the quotas. Section I.4 summarises each chapter, Section I.5 identifies the themes common to all eight jurisdictions, and Section I.6 explains how the figures should be read.

Table I.1. Jurisdictions covered in Volume 2

Chapter	Jurisdiction	Commercial industry	Main killing systems examined	Latest data used
1	Victoria	Yes, Commonwealth-approved plan	Kangaroo Harvest Program; ATCW permits	Q1 2026
1 Addendum	Victoria, public land	–	ATCWs in national parks and reserves	April 2026
2	South Australia	Yes, Commonwealth-approved plan	Commercial quota; Permits to Destroy Wildlife	2025 Harvest Report (March 2026)
3	New South Wales	Yes, Commonwealth-approved plan	Commercial quota; licences to harm	June 2026
4	Queensland	Yes, Commonwealth-approved plan	Commercial quota; Damage Mitigation Permits	7 October 2026
5	Western Australia	Yes, Commonwealth-approved plan	Commercial quota; damage licences	2024 take; 2025 quota
6	Tasmania	No Commonwealth plan; carcasses enter commercial use	Property Protection Permits; game licences	2024 permit returns
7	Australian Capital Territory	No	Reserve cull; rural licences	2026 cull
8	Northern Territory	No	Permits to kill “problem” wildlife; damage mitigation	2023 licences

I.2 The commercial harvest, 2025 and 2026

In 2025 the five mainland states set commercial quotas totalling about 6.23 million Kangaroos (derived). Western Australia had not published its 2025 take at the time of writing. In the other four states, shooters killed 1,444,484 Kangaroos against quotas of 6,051,902, or 24 per cent (derived). More than 4.6 million animals that governments said could be shot were left unshot (Table I.2).

Table I.2. Commercial quota and actual take by state, 2025 and 2026

State	Quota 2025	Actual take 2025	Share of quota	Quota 2026	Take 2026 to date
New South Wales	2,186,952	634,087	29%	1,453,025	333,983 (to June)
Queensland	2,941,550	609,842	21%	2,850,900	504,071 (to 7 October)
South Australia	805,800	124,192	15%	600,400	Not yet published
Victoria	117,600	76,363	65%	95,450	21,780 (Q1)
Western Australia	182,390	Not yet published	–	Not yet published	Not yet published
Total, four states reporting 2025 take	**6,051,902**	**1,444,484**	**24%**	**4,999,775**	**–**

Data note. Victorian figures are DEECA's final 2025 figures (April 2026), as used throughout Chapter 1 and its Addendum. The Victorian 2026 quota shown is the commercial (Kangaroo Harvest Program) component. The recommended maximum including ATCW permits is 207,800. Western Australia took 77,683 Kangaroos against a 2024 quota of 250,430 (31 per cent).

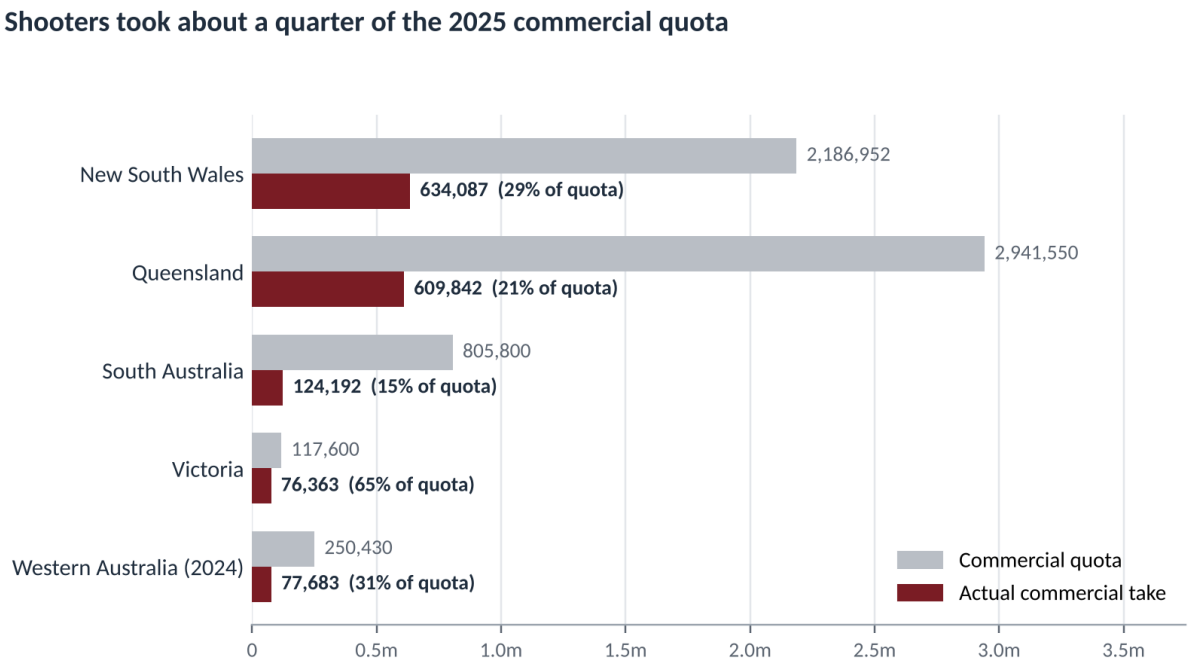


Figure I.1. Commercial quota and actual commercial take by state, 2025 (Western Australia 2024)

Source: Chapters 1 to 5; state government harvest reports and quota notices; shares derived.

The pattern is the same in every large shooting state. Queensland took 21 per cent of its quota, New South Wales 29 per cent and South Australia 15 per cent. Victoria, with by far the smallest quota, took 65 per cent. The quota is not a limit that shooters press against. It is a figure set from population estimates that, as Chapters 1 to 5 show, rise and fall in ways Kangaroo breeding cannot explain.

Quotas have been cut for 2026, by about a third in New South Wales and a quarter in South Australia, but they remain far above anything taken in recent years. Queensland's 2026 quota of 2,850,900 is more than four times its 2025 take. By 7 October 2026, shooters had taken 18 per cent of it.

I.3 Killing outside the commercial quotas

The commercial take is only part of the story. Every jurisdiction also authorises Kangaroos and wallabies to be killed under damage, destruction or “problem animal” permits. In two jurisdictions, Tasmania and the ACT, that is the main or only form of killing, and in the Northern Territory it is the only form. Table I.3 sets out the most recent figures in each chapter.

Table I.3. Kangaroos and wallabies killed or authorised outside the commercial harvest, latest year available

Jurisdiction	Year	System	Authorised	Reported killed	Note
New South Wales	2025	Licences to harm, commercial zones	439,620	187,220	Up to 304,923 including licences with no return
Queensland	2025	Damage Mitigation Permits	375,236	47,120	Allowance rising since 2022 while take has fallen
South Australia	2025	Permits to Destroy Wildlife	183,655	8,791	Killed figure covers 26 Nov 2024 to 20 Jan 2026
Victoria	2025	ATCW permits, Grey Kangaroos	174,022	Not reported	Holders are not required to report kills
Western Australia	2022	Damage licences	1,774	No returns	Most recent year reported in Chapter 5

Jurisdiction	Year	System	Authorised	Reported killed	Note
Tasmania	2024	Property Protection Permits	Unlimited (Forester Kangaroo 11,840)	503,164	Bennett's Wallaby, pademelon and Forester Kangaroo (derived)
ACT	2026	Reserve cull	3,633 (target)	3,906	3,562 Kangaroos and 344 wallabies, plus 1,290 pouch young
ACT	Typical year	Rural licences	about 9,100	Not reported	Independent review (2024)
Northern Territory	2023	Permits to kill problem wildlife	14,892	Not reported	Obtained by HSI; NT publishes no figures

Figure I.2 brings both kinds of killing together. Across Australia, in the latest year for which each jurisdiction has data, about 2.76 million Kangaroos and wallabies were killed or authorised to be killed (derived). About 2.27 million were reported kills. The other 0.49 million were authorised under permits whose holders did not report what they killed. The figure excludes dependent young, which are not counted in any official total. On the rate used in Volume 1 (30 joeys per 100 adults taken), they would add several hundred thousand deaths.

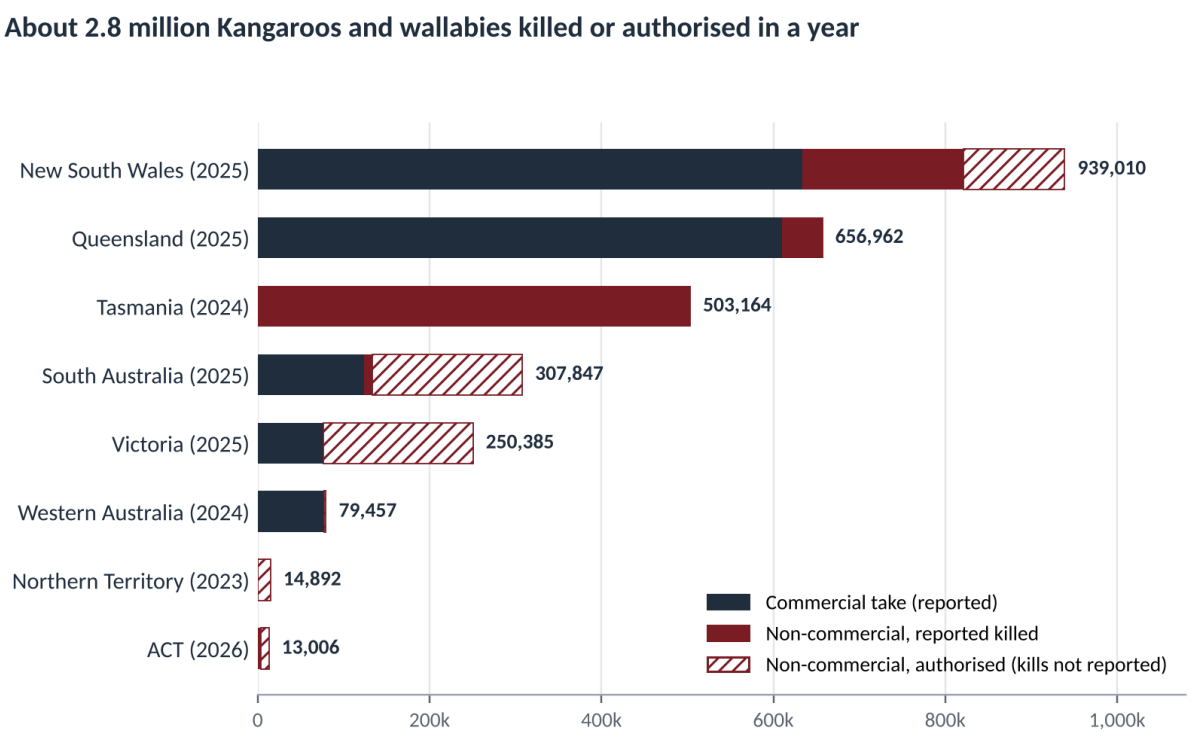


Figure I.2. Kangaroos and wallabies killed commercially and under non-commercial permits, by jurisdiction, latest year available

Source: Chapters 1 to 8. Years differ between jurisdictions. Western Australia non-commercial figure is for 2022. ACT includes an estimated 9,100 killed under rural licences in a typical year. South Australian reported kills cover 26 November 2024 to 20 January 2026. All totals derived.

Three features stand out. First, non-commercial killing is large. In New South Wales it added up to 304,923 Kangaroos to the commercial take in 2025. Tasmania reported more macropods killed under permit (503,164) than South Australia, Victoria and Western Australia shot commercially combined. Second, it is growing. Licences to harm in New South Wales doubled between 2023 and 2025, and South Australian destruction permits trebled between 2022 and 2025. Third, most of it is not verified.

Victoria and the Northern Territory publish, at most, the number of animals authorised. South Australia's returns account for under 5 per cent of the animals its destruction permits allowed.

I.4 Summary of chapter findings

Chapter 1: Victoria

Victoria will target 207,800 Grey Kangaroos in 2026, on a population estimate of 2,306,000 that was modelled, not surveyed. The Government's 2025 “total take” of about 250,000 is not a count. It adds commercially killed animals to the maximum numbers authorised under ATCW permits, which holders need not report. Commercial quotas have never been filled: the industry took between 43 and 80 per cent each year from 2019 to 2025. Survey counts and population estimates moved in opposite directions at the last two surveys. Females were 39 per cent of the commercial kill in Q1 2026, when 6,481 joeys were killed and excluded from the data. The Western Grey Kangaroo remains on the commercial list despite clear signs of decline.

Addendum to Chapter 1: Parks Victoria and public land

The Victorian Government has shot Kangaroos in the Mallee national parks since 1984. Between 2004 and 2022 Parks Victoria set targets totalling about 86,000 Kangaroos in Wyperfeld, Hattah-Kulkyne and Murray Sunset National Parks. The Red Kangaroo, now confined to the far north-west, rose from 42 per cent of targets in 2013 to 73 per cent in 2017 and 2022, yet only 6 to 14 per cent of Red Kangaroo targets were found and killed. In 2025 ATCWs authorised 16,344 Western Grey Kangaroos, 14,838 of them in the Loddon Mallee, almost all on public land. The department says its systems cannot distinguish public from private land permits.

Chapter 2: South Australia

South Australia set a 2025 commercial quota of 805,800 and shooters killed 124,192, or 15 per cent. From 2021 to 2025 the quota totalled 2,876,300 and the kill 498,718 (17 per cent), the lowest ratio of take to quota in Australia. The commercial-species estimate rose 77 per cent between 2022 and 2025. The Red Kangaroo estimate then fell by 921,382 animals, or 31 per cent, in a single year. The Minister claimed drought subsidies and bounties would remove 50,000 to 100,000 extra Kangaroos. The total 2025 take rose by 17,689. Destruction permits authorised 183,655 Kangaroos and wallabies in 2025, three times the 2022 figure, and the Western Grey Kangaroo was named on 88 per cent of permits.

Chapter 3: New South Wales

New South Wales set a 2025 quota of 2,186,952 and its shooters killed 634,087 (29 per cent). The population estimate rose 44 per cent in one year, from 9.63 million to 13.91 million, then fell to 9.59 million. In the Griffith North zone the Red Kangaroo estimate rose almost tenfold in a year. The survey method has changed five times since 2001. Licences to harm authorised 485,668 native animals in 2025, double the 2023 figure, including 439,620 Kangaroos in the commercial zones alone. Together the two systems killed up to about 939,000 Kangaroos in 2025 (derived). In July 2026 a parliamentary committee found the licensing system “out of date”.

Chapter 4: Queensland

Queensland sets the largest quotas in Australia: 2,941,550 in 2025, of which 609,842 (21 per cent) were taken, and 2,850,900 in 2026, of which 504,071 had been taken by 7 October. The commercial take has fallen by three-quarters since its 2006 peak of 2,000,085, while quotas have risen. The official estimate for the three commercial species halved from 37.6 million in 2001 to 19.3 million in 2025, against a Nature Knowledge Channel estimate of about 6.3 million. Damage Mitigation Permit take fell 89 per cent, from 419,358 in 2015 to 47,120 in 2025, while the DMP allowance grew to 386,164 for

2026. The Whiptail Wallaby, whose commercial take fell from 53,908 in 1979 to 190 in 2002, shows where unrealistic quotas lead.

Chapter 5: Western Australia

Western Australia's commercial industry is a fraction of what it was. The Red Kangaroo take has fallen from about 300,000 a year around 1970 to 14,831 in 2024, 17 per cent of quota. The combined population estimate fell by two-thirds, from 4.25 million in 2019 to 1.30 million for 2025, and the 2025 quota of 182,390 rests on estimates adjusted from earlier surveys, since no aerial surveys were flown in 2024. Harvest suspensions are now routine, and the Euro has gone from the trade. About 39 per cent of Western Greys shot in 2024 were female. The 2025 harvest figures had not been published at the time of writing.

Chapter 6: Tasmania

Tasmania has no Commonwealth-approved commercial Kangaroo plan, yet animals killed under damage permits and game licences pass into commercial use, largely as pet food. In 2024 landholders reported killing 633,953 protected animals under Property Protection Permits, most of them Bennett's Wallabies and Tasmanian Pademelons, under permits with no quota. About 2.8 million native animals were killed under permit between 2019 and mid-2022. The Forester Kangaroo, the State's only Kangaroo, has been killed at two to three times a recommended 10 per cent ceiling. The Government's own 2024 surveys recorded the lowest pademelon density since 2002, and there was one proactive compliance inspection that year.

Chapter 7: The Australian Capital Territory

The ACT says it has no commercial Kangaroo harvesting. Even so, it shot 3,562 Eastern Grey Kangaroos, 1,290 pouch young and 344 wallabies in its reserves in 2026, the largest cull since 2019. The reserve target has nearly trebled in two years, from 1,336 in 2024 to 3,633 in 2026. Some 27,452 adult Kangaroos were shot in Canberra's reserves from 2015 to 2026, and about 37,000 including pouch young (derived). Females were 49 to 58 per cent of the kill. Rural licences add about 9,100 a year. Carcasses are buried, left where they fall, or made into baits for 1080 poisoning. The Government told inquirers it does not hold data on the conservation benefit claimed for the cull.

Chapter 8: The Northern Territory

The Northern Territory has no commercial industry, because on its own 2008 assessment there are too few Kangaroos to shoot profitably. Red Kangaroo densities averaged 0.82 per km^2 across the regions surveyed in 2006, against the 2 to 3 per km^2 at which commercial shooters stop. On the Burt Plain, the estimated population fell by two-thirds between 1999–2001 and 2006, and no Territory-wide estimate has been published since. Permits authorised the killing of 14,892 Kangaroos and wallabies in 2023, 69 per cent of all native animals licensed to be killed. These figures were obtained by Humane Society International, because the Territory publishes none. The Government says the Agile Wallaby is declining yet continues to issue permits to kill it.

I.5 Common themes

Read together, the eight chapters describe one national system rather than eight separate ones. Five themes recur.

1. **Quotas are set far above what can be found.** No large shooting state took more than 29 per cent of its 2025 quota. Unfilled quotas are consistent with population estimates that are too high (Chapters 1 to 5).
2. **Population estimates move in ways breeding cannot explain.** Examples include the 44 per cent rise and 31 per cent fall in New South Wales and the 77 per cent rise in South Australia from

2022 to 2025. one Queensland survey site (Taroom) recorded a 94 per cent rise in a year, and Victorian counts and estimates moved in opposite directions. Each implies growth beyond the 10 per cent ceiling used in Volume 1.

3. **Non-commercial killing is growing, and most of it is unverified.** Licences and permits doubled or trebled in New South Wales and South Australia between 2022 and 2025. Victoria and the Northern Territory publish no kill figures, and South Australia only partial returns.
4. **Females and young are a large and uncounted share.** Females were 39 per cent of Victoria's commercial kill in Q1 2026, 39 per cent of Western Greys shot in Western Australia in 2024, and 49 to 58 per cent of the ACT cull. Joeys are not counted in any official commercial total.
5. **Public information is incomplete and getting harder to obtain.** Western Australia had not published its 2025 harvest. Victoria does not record what ATCW holders kill, and Queensland publishes no complete permit register. The ACT does not hold data on the benefit of its cull, and the Northern Territory publishes nothing.

Table I.4. What each jurisdiction publishes

Jurisdiction	Commonwealth-approved commercial plan	Share of 2025 quota taken	Non-commercial killing: what is published	Latest commercial take published
Victoria	Yes	65%	Animals authorised (maxima) only	Q1 2026
South Australia	Yes	15%	Animals authorised; partial kill returns	2025 (annual report)
New South Wales	Yes	29%	Authorised and reported culled; returns incomplete	June 2026
Queensland	Yes	21%	DMP allowance and take; no register for other species	7 October 2026
Western Australia	Yes	Not yet published (31% in 2024)	Licences issued; no returns	2024
Tasmania	No	–	Animals reported killed; no limits	–
ACT	No	–	Reserve cull reported in detail; rural kills not reported	–
Northern Territory	No	–	Nothing published	–

I.6 Reading the figures

The chapters were prepared as stand-alone reports in October 2026 and are reproduced here in full. Each states the currency of its data on its opening page. In reading the figures in this Introduction and the chapters that follow, four points should be kept in mind.

- **Authorised is not killed.** Permit figures for Victoria, South Australia, Western Australia and the Northern Territory are the maximum numbers allowed. Actual kills may be lower or higher, and are not verified.
- **Years differ.** Jurisdictions publish on different cycles. Figure I.2 and Table I.3 use the most recent year in each chapter, from 2022 (Western Australian licences) to 2026 (the ACT cull).
- **Derived figures are marked.** Totals, shares and differences calculated by the Nature Knowledge Channel from government data are marked "(derived)".
- **Data notes record discrepancies.** Where government sources disagree, or a figure has been revised, the chapters say so in a data note rather than choosing silently. The Victorian commercial and ATCW figures for 2025 are an example: DEECA's final figures (April 2026) replace the preliminary December 2025 estimates, and the chapters note the revision.

Tables, figures and sections are numbered by chapter, as in Volume 1. Table 3.4, for example, is the fourth table in Chapter 3, and Table 1A.2 is the second table in the Addendum to Chapter 1. The Introduction's tables and figures are numbered I.1, I.2 and so on.

CHAPTER 1

Commercial Exploitation of Kangaroos in Victoria

Grey Kangaroo quotas, commercial take and Authority to Control Wildlife permits, 2017–2026

Author	Peter Hylands
Prepared	October 2026
Data current to	Q1 2026 (DEECA quarterly reporting)

Executive summary

Victoria will target 207,800 Grey Kangaroos in 2026, on a population estimate of 2,306,000 that was modelled, not surveyed. This chapter tests that figure, and the record behind it, against the Victorian Government's own reporting from 2017 to the first quarter of 2026.

The principal findings are:

1. **The 2025 "total take" of 250,385 is not a count. It adds 76,363** commercially killed animals (tagged and reported) to 174,022 animals *authorised* under Authority to Control Wildlife (ATCW) permits. On 23 December 2025 the Government confirmed that ATCW figures are maxima, and that permit holders need not report what they kill. The claimed 12.0 per cent take rate (derived from DEECA's final figures), above the 10 per cent ceiling, therefore rests largely on numbers no one has verified.
2. **Commercial quotas are never filled.** From 2019 to 2025 the commercial industry took between 43 and 80 per cent of its quota each year. The unfilled shortfall was 94,518 animals in 2023, 74,490 in 2024 and 41,237 in 2025. Persistent under-use is consistent with population estimates that are too high.
3. **Survey counts and population estimates move independently.** In 2022 the number of Kangaroos counted fell by 5 per cent while the estimate rose 24 per cent. In 2024 the count rose 50 per cent while the estimate fell 12 per cent. Each reversal coincided with a change in survey or modelling method.
4. **Females and joeys form a growing share of the kill.** Females were 33.7 per cent of the commercial take in 2024, 50.5 per cent in Q3 2025 and 39 per cent in Q1 2026, reaching 46 per cent of Eastern Greys in Barwon South West. In Q1 2026 alone, 6,481 joeys were killed and excluded from the commercial data, despite the authorisation condition in Victoria that Kangaroos with obvious dependent young must not be shot.

5. **The Western Grey Kangaroo remains on the commercial list despite clear signs of decline.** The commercial industry took only 2,750 Western Greys in all of 2025, 20 per cent of quota (derived). In Q1 2026 it reported 2,711, almost as many as in the whole of the previous year.

Taken together, the data describe a management system whose estimates rise regardless of how many animals are killed, and whose least accountable component, ATCW permits, is now its largest.

1.1 Introduction, context and data sources

Victoria in the national picture

The commercial killing of Kangaroos in Victoria is the most recent extension of a mainland industry that has been in decline for more than a decade. In the mid-1970s the Federal Government, through figures such as Lionel Murphy, Jim Cairns and Gough Whitlam, sought greater protection for Kangaroos. Today the Commonwealth routinely approves state killing programs, and the reformed *Environment Protection and Biodiversity Conservation Act 1999* will not protect any of the species discussed in this chapter.

The scale of state-sanctioned killing is large. In 2025 Victoria targeted about 1.1 million protected native animals across some 100 species, with the actual kill estimated at around 1 million; the outcome of ATCW permits is not recorded. Nationally, close to 10 million protected native animals are likely to have been targeted under state schemes in 2025, up from about 9.1 million in 2024. Historically about half of what is targeted is killed, with the largest shortfall always in the commercial sector.

Table 1.1. Commercial quota and actual take, Victoria and mainland Australia, 2025

2025	Commercial quota	Actual commercial take	Share of quota taken
Australian mainland (including Victoria)	6.3 million	about 1.5 million	24%
Victoria	about 117,000	about 76,000	65%

Mainland commercial quotas typically run at 5 to 6 million a year, yet actual take has kept falling. That decline has continued despite repeated extensions of the industry's reach: shooting zones pushed east towards the coast in New South Wales, new species added, public land opened, more females shot, bounties and subsidies paid, and Victoria added as a trial in 2014 and as a full commercial state from late 2019. The persistent shortfall is a supply problem, not the lack of demand that governments claim.

The market itself is small and shrinking. Federal data put Kangaroo meat exports at A$10.9 million in 2025, 60 per cent of it to the European Union, followed by Canada and Papua New Guinea. Most Kangaroo meat goes to the domestic pet food trade. At about $28 per animal in Victoria (section 1.6), the industry is a low-value activity that depends on diesel at every stage, from shooters' vehicles to remote chillers and transport to processors. Its emissions per dollar of output are therefore likely to be among the highest of any industry, and subsidies that send shooters further into low-density areas increase them.

Against that background, Victoria's own history is stark. Of the 16 species of the Kangaroo family present in Victoria 150 years ago, 7 are extinct and 4 more are endangered (section 1.8).

The Victorian system

Victoria kills Grey Kangaroos through two parallel systems with very different standards of accountability. The chapter examines both, with emphasis on the period from the 2024 population survey to March 2026.

Table 1.2. Victoria's two systems for killing Grey Kangaroos

System	Purpose	Who kills	What is reported
Kangaroo Harvest Program (KHP)	Commercial sale of carcasses and skins	163 authorised commercial shooters (2024–2026 authorisations)	Every animal is tagged and self-reported by species, sex and zone; joeys at foot are reported only in part
Authority to Control Wildlife (ATCW)	Non-commercial "control" on private and public land	Landholders and public land managers	Only the maximum number authorised; actual kills are not reported

Commercial shooting began as a trial in 2014 and became a permanent program in late 2019. The Red Kangaroo was removed from the KHP in 2019. Eastern and Western Grey Kangaroos remain on it.

Quotas are set each year from a population estimate. The combined (KHP plus ATCW) "recommended maximum" take is 10 per cent of estimated abundance under the Kangaroo Harvest Management Plan (KHMP). Commercial quota is released in quarterly batches, and unallocated tags can be carried into later quarters. From 2025 the seven commercial shooting zones were merged into five: Gippsland, Hume, Loddon Mallee, Grampians and Barwon South West. The merger makes comparison with earlier zone data difficult.

Sources. The analysis draws on two Nature Knowledge Channel papers by Peter and Andrea Hylands: *2026: Commercial exploitation of Kangaroos in Victoria* (20 December 2025) and *Commercial exploitation of Kangaroos in Victoria: Q1 2026* (30 June 2026). Both compile figures from the Victorian Government's KHP quarterly reports, quota notices, survey reports and correspondence with the Department of Energy, Environment and Climate Action (DEECA). Figures marked *derived* in this chapter are calculated from those sources and are not published by the Government. The Government itself notes that commercial figures are self-reported and that reported and actual figures may differ because of memory bias.

1.2 Population surveys and estimates

Victoria's Grey Kangaroo estimate has risen from 1.43 million in 2017 to 2.31 million in 2025, but the raw survey counts do not support the path it took. Five aerial surveys have been flown since commercial shooting began; the next is scheduled for the last quarter of 2026.

Table 1.3. Aerial survey counts and population estimates, Grey Kangaroos, Victoria

Survey	Grey Kangaroos counted	Population estimate	Estimated per animal counted (derived)	Context reported
2024	8,948 (3,090 km of transects)	2,078,000	232	New model-based method; ground surveys added in species overlap zone
2022	5,947	2,363,850	397	Serious flooding
2020	6,268	1,912,000	305	Black Summer bushfires
2018	4,707	1,381,000	293	—
2017	2,607	1,429,000	548	Shorter transects

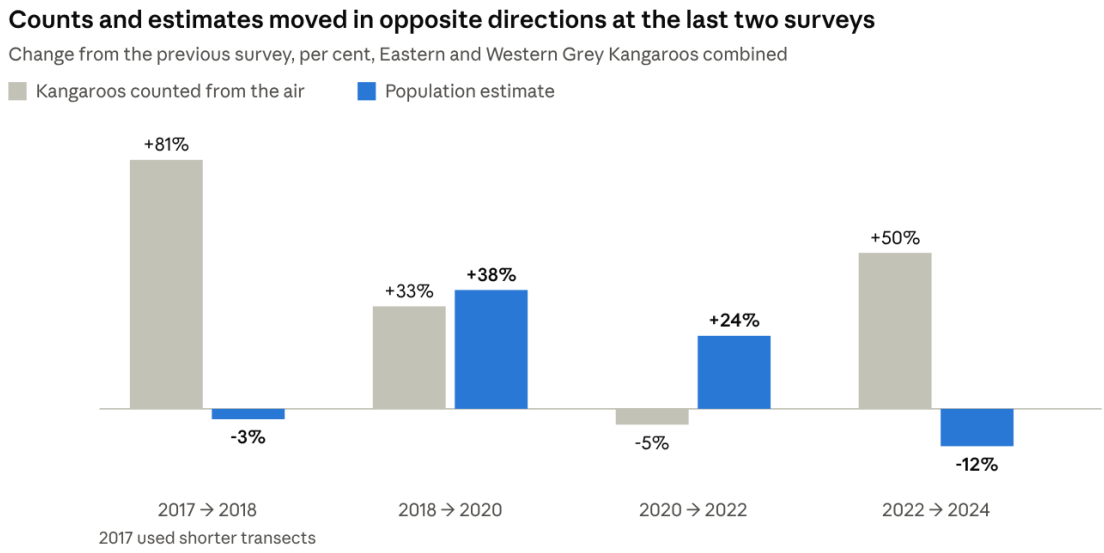


Figure 1.1. Change in survey counts and population estimates from the previous survey, Eastern and Western Grey Kangaroos combined

Source: Victorian Government aerial survey reports 2017–2024, as compiled by Hylands (2025); percentage changes derived.

The two most recent surveys reversed the relationship between what was seen and what was estimated. In 2022 fewer Kangaroos were counted than in 2020, yet the estimate rose by 24 per cent. In 2024 half as many again were counted, yet the estimate fell by 12 per cent. Before the 2024 survey, Hylands predicted that roughly 8,500 animals would need to be counted to hold the 2022 estimate; 8,948 were counted and the estimate still fell.

The Government's own re-analysis shows how much the method matters. Re-run under the new model-based approach, the 2022 estimate becomes 1.76 million Eastern Greys and 227,000 Western Greys, about 1.99 million in total, not 2.36 million. On that basis the Government reports an 18 per cent rise in Eastern Greys to 2024, while noting "substantial overlap between the confidence intervals" so that "certainty in the actual percentage changes in abundance was low".

Three further points bear on reliability:

- **The 2025 estimate is modelled, not counted.** No survey was flown in 2025, yet the estimate rose by 228,000 to 2,306,000. That figure sets the 2026 quota.
- **Distance-sampling corrections depend on stable transects.** Raw counts are scaled up for animals assumed to be missed far from the aircraft and then extrapolated across similar habitat. Where transects are moved or dropped between surveys, a zero count can be replaced rather than carried forward, which biases the trend upward.
- **The Red Kangaroo estimate is volatile on very small counts.** It was 13,000 in 2017 (23 animals counted), 44,000 in 2018 (91), 30,000 in 2020 (102), 54,000 in 2022 (140) and 39,000 in 2024. In 2017 permits were issued to kill 2,187 more Red Kangaroos than the entire estimated state population.

Hylands (2026) estimates that Victorian Grey Kangaroo estimates are inflated by a factor of about 2.6, which would put the true population below 1 million rather than above 2.3 million. On that basis, a 2026 quota of 207,800 would represent more than 20 per cent of the population, double the recommended maximum.

1.3 Quotas and targeted numbers, 2010–2026

The number of Grey Kangaroos Victoria plans to kill each year has grown from 39,559 in 2010 to 207,800 in 2026. Most of that growth followed the introduction of commercial shooting.

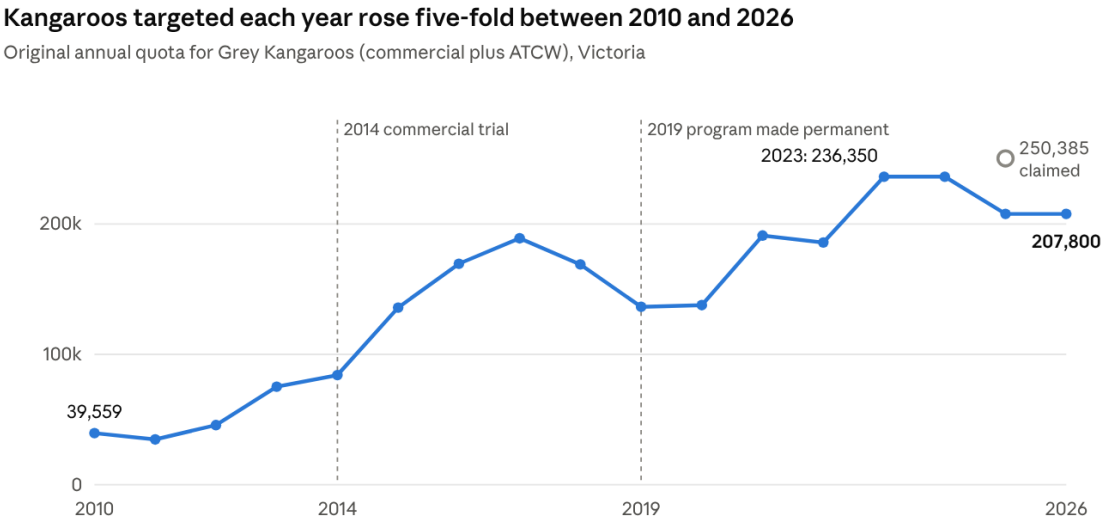


Figure 1.2. Original annual quota for Grey Kangaroos (commercial plus ATCW), Victoria

Source: Victorian Government quota notices, original (unrevised) quotas, as compiled by Hylands (2025); 2025 claimed take from DEECA KHP reporting.

The original quota is shown for each year, not the downward revisions made once it became clear commercial demand would not fill it. Each new survey has been followed by a higher quota: the 2020 survey claimed a 41 per cent population increase and the 2022 survey a further 24 per cent. The 2021 quota of 191,200 was set within a year of the 2019–20 bushfires, which killed wildlife on a scale that prompted international donations for its recovery.

In 2025 the planned total was 207,800, but DEECA's final figures report a total take of 250,385. As section 1.5 shows, most of the difference is permits issued, not animals counted. As Juliet Gellatley observed in 2005, once established a Kangaroo industry "has its own imperatives and would kill increasing numbers of Kangaroos, even if populations crashed".

1.4 Commercial take against quota, 2019–2025

In every year since the program became permanent, commercial shooters have left a large part of the quota unused. Because commercial kills are tagged and reported, this is the most reliable measure available of how many Kangaroos can actually be found and shot.

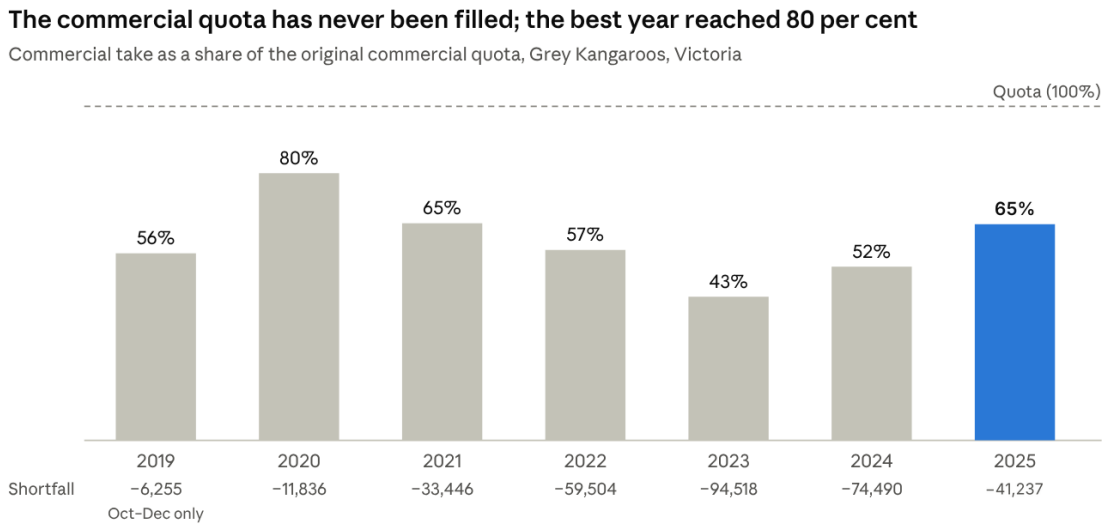


Figure 1.3. Commercial take as a share of the original commercial quota, Grey Kangaroos, Victoria

Source: DEECA KHP annual and quarterly reports, as compiled by Hylands (2025); shortfall = original quota minus reported commercial take.

The three most recent years show the pattern clearly. In 2023 the industry took 72,232 Kangaroos against a quota of about 166,750 (derived). In 2024 it took 81,160 against 155,650. In 2025 it took 76,363 against 117,600, with Eastern Greys at 71 per cent of their quota and Western Greys at only 20 per cent (derived).

The Government's response to under-use has been to revise quotas downward during the year rather than to revisit the estimates behind them. The 2024 quota was cut to 142,350 in July and to 111,175 in September, when all fourth-quarter allocations were removed. The 2025 quota was cut to 94,700, with fourth-quarter allocations set at zero in Gippsland, Hume and Loddon Mallee. The percentage taken varies with the size of the quota, but every year shows the same result: a quota set from the estimate cannot be filled by a commercial industry that has every incentive to fill it.

1.5 The 2025 year in detail

DEECA's final figures (April 2026) report that 250,385 Grey Kangaroos were taken in 2025: 12.4 per cent of the Eastern Grey population estimate and 9.0 per cent of the Western Grey, or 12.0 per cent overall (derived), above the 10 per cent recommended maximum. Seven in ten of those animals were never counted.

Table 1.4. Components of the 2025 “total take”, Grey Kangaroos

Component of the 2025 "total take"	Eastern Grey	Western Grey	Total	Status of the figure
Commercial (KHP)	73,613	2,750	76,363	Tagged and reported (DEECA final)
ATCW permits	157,678	16,344	174,022	Maximum authorised; actual kills not reported
Total	**231,291**	**19,094**	**250,385**	**70 per cent unverified**

Shaded row: figure not verified by any count.

On 23 December 2025 the Government confirmed the nature of the ATCW figure in writing: "ATCW numbers reported always represent the maximum number of animals (wildlife) authorised for control… The actual number of animals that are controlled under each authorisation may be lower… persons who hold an ATCW are not required to report actual numbers controlled." The Government's preliminary December 2025 report gave a take rate of 11.1 per cent, which appears to have been

calculated against the modelled 2025 estimate of 2,306,000. DEECA's final species rates are instead consistent with the 2024 survey estimate of 2,078,000, which the Government names as its base: against it, the final total is 12.0 per cent (derived). Even against the modelled estimate it is 10.9 per cent (derived), still above the ceiling.

The Government attributes the record ATCW numbers to drought across western Victoria. The highest proportional takes were Eastern Greys in the Grampians zone (16 per cent) and Western Greys in Loddon Mallee (21 per cent). It concedes that "careful management of numbers taken through both ATCW permits and the KHP will be required during 2026 to limit the likelihood of total take exceeding the recommended maximum".

Commercial take by quarter

Table 1.5. Commercial quota and take by quarter, 2025

Quarter 2025	Commercial quota	Commercial take	Share of quota
Q4	5,200 (three zones set to zero)	30,181 (derived from final annual total)	580%
Q3	32,380	13,985	43%
Q2	not reported	13,886	—
Q1	37,950	18,311	48%

The fourth quarter stands out. To September only 46,182 commercial kills had been reported, against 59,149 tags consumed. DEECA's final annual total of 76,363 therefore implies a fourth-quarter take of 30,181 (derived). That is more than in any earlier quarter of the year, in a quarter whose new quota was only 5,200. It is possible only through tags carried over from earlier quarters, and it raises the question of how the fourth-quarter kills were recorded. The preliminary December estimate, which imputed a fourth-quarter take of 31,778, was revised down by only 1,597.

The Grampians fires

The catastrophic fires in the Grampians in 2025 prompted repeated requests to suspend shooting in the area. DEECA declined, stating that around 3 per cent of the Grampians and Barwon South West zones had been burnt and that "no changes to the Kangaroo Harvest Program quota are being made at this time". The response measured the fire's footprint against the area of the shooting zones, not against the habitat or populations affected.

Data note. The December 2025 source gives the 2025 ATCW quota as 90,200, but its species figures (84,550 Eastern, 7,650 Western) sum to 92,200. The 2025 commercial quota is also reported variously as 117,600 (original), 106,750 and 94,700 (after the Q4 cut). This chapter uses 117,600 for comparison with earlier years. The 2025 take figures in this section are DEECA's final figures (April 2026). They replace the preliminary December 2025 estimates of 77,960 commercial and 179,044 ATCW (total 257,004); the zone-level take rates quoted above come from the December report.

1.6 The 2026 quota and first-quarter results

Victoria's 2026 quota is 207,800 Grey Kangaroos, 9.0 per cent of the modelled 2025 estimate (derived). More than half is allocated to ATCW permits, the component that is not reported.

Table 1.6. Grey Kangaroo quotas for 2026, commercial and ATCW

2026 quota	Eastern Grey	Western Grey	Total
Commercial (KHP)	84,600	10,850	95,450
ATCW permits	102,100	11,100	113,200
Recommended maximum total	**186,700**	**21,100**	**207,800**

The commercial quota is 22,150 lower than the original 2025 quota of 117,600, while the ATCW allocation rises from about 90,200 to 113,200. This continues a shift, also seen in 2024, away from the tagged system and towards the untracked one.

Data note. The commercial and ATCW components sum to 208,650, not 207,800. The difference of 850 lies in the Western Grey figures (10,850 + 11,100 = 21,950 against a stated 21,100). The Loddon Mallee Western Grey quota of 8,700 sits beside a forecast ATCW take of 9,550, which may account for it.

Quota by shooting zone, 2026 (commercial and ATCW combined)

Table 1.7. Quota by shooting zone, 2026 (commercial and ATCW combined)

Zone	Eastern Grey	Western Grey	Total
Hume	77,100	—	77,100
Loddon Mallee	40,800	8,700	49,500
Grampians	27,300	11,200	38,500
Barwon South West	24,900	1,200	26,100
Gippsland	16,600	—	16,600
Total	**186,700**	**21,100**	**207,800**

January to March 2026

Commercial shooters killed 21,780 Kangaroos in Q1 2026, 19 per cent more than in Q1 2025 (18,311) and 22.8 per cent of the full-year commercial quota. Of 34,861 tags made available, 33,966 (97 per cent) were allocated and 21,780 (64 per cent of those allocated) were used.

Table 1.8. Commercial kill and shooters by zone, Q1 2026

Zone, Q1 2026	Kangaroos killed	Shooters allocated	Kills per shooter (derived)	Average value per shooter
Hume	9,632	59	163	$4,571
Loddon Mallee	4,079	34	120	$3,359
Barwon South West	3,387	36	94	$2,634
Grampians	2,964	47	63	$1,766
Gippsland	1,718	38	45	$1,266
Victoria	**21,780**	**214 allocations (163 shooters)**	**102**	**—**

Hume alone accounted for 44 per cent of the commercial kill. The average value figures imply about $28 per Kangaroo in every zone (derived), which values the quarter's commercial kill at roughly $610,000. Shooters can hold allocations in more than one zone, so the 214 zone allocations exceed the 163 authorised shooters.

Western Greys made up 2,711 of the Q1 kill (12.5 per cent). That is almost as many as the 2,750 Western Greys reported for the whole of 2025, and a quarter of the 2026 Western Grey commercial quota in three months.

From 2026 the Government has also changed how tags are handled. The maximum allocation for inactive harvesters falls from 50 to 25 tags, and unused tags are cancelled after three months and returned to the quota for active harvesters. The stated aim is to "improve the utilisation of tags", in effect concentrating the quota among the shooters most able to fill it.

1.7 Females, joeys and welfare conditions

About one in every four or five Kangaroos killed by the commercial industry in Victoria is a joey that does not appear in the commercial totals. The share of females in the kill, and so the number of dependent young killed with them, has risen since 2024.

Table 1.9. Females and joeys in the commercial kill

Period	Commercial kill	Females	Female share	Joeys killed (not in totals)	Joeys as share of all animals killed (derived)
Q1 2026	21,780	8,494	39.0%	6,481	23%
Q3 2025	13,985	7,061	50.5%	6,043	30%
2024 (full year)	81,160	27,314	33.7%	23,488	22%

In Q1 2026 the female share was highest among Eastern Greys in Barwon South West (46 per cent) and the Grampians (44 per cent). In 2024, 88 per cent of females killed in the third quarter also had a joey at foot killed. Joeys at foot, up to about 15 months old, are killed by blunt force trauma; pouch young are killed by decapitation or a blow to the head. The reported joey figures appear to cover young at foot only, so pouch young are likely omitted altogether.

These practices sit uneasily with the terms on which commercial shooting was introduced. Condition 7 of the 22 conditions of authorisation under section 28A of the *Wildlife Act 1975*, issued under the Kangaroo Harvest Management Plan 2021–2023, states: "Kangaroos with obvious dependent young must not be shot." When commercial shooting began, the public was assured that these conditions would not change. A kill in which females make up 39 to 50 per cent, and joeys a fifth to a third of all animals killed, is difficult to reconcile with that condition.

The ecological concern is as serious as the welfare concern. Kangaroos breed slowly, and the removal of breeding females together with their young takes out the next generation. Hylands reads the high female share in Q2 and Q3 2025 as an indicator that Kangaroo populations in the state have fallen sharply.

1.8 Public land, ATCW reporting gaps and policy shifts

The direction of Victorian policy since 2024 has been to move killing out of the reported commercial system and onto public land under ATCW permits, where nothing is counted.

All Kangaroo control on public land currently occurs through ATCW authorisations issued to public land managers. In February 2025 the Government stated that land managers may also opt into the KHP under "a separate quota, outside of the quota for the Kangaroo Harvest Program", described as "a direct replacement to control". This opens a route for commercial shooting in national and state parks. The scale of these separate quotas has not been published.

The effect on accountability is direct:

- **Commercial kills** are tagged, reported by sex and zone, and can be checked against quota. Their persistent shortfall (section 1.4) is the clearest available evidence about real abundance.
- **ATCW kills** are reported only as permits issued. In 2025 those permits authorised 174,022 Grey Kangaroos, more than double the commercial take, and the Government "does not have a clue about what actually happened", in Hylands' words.
- **Zone mergers** from seven to five zones in 2025 absorbed Central and Lower Wimmera. Those two zones produced 68 per cent of the commercial kill in 2024, so their disappearance breaks the most informative regional series.

Asked in 2024 for evidence of the damage Kangaroos cause, the Acting Deputy Secretary for Regional Development and Outdoor Recreation replied: "I am unaware of any national or state level statistics of

damage caused by wildlife, including Kangaroos, to property on private or public land." The stated rationale for ATCW control is thus unsupported by any published measure of damage.

Victoria's macropods

The record of the Kangaroo family in Victoria since British settlement shows what is at stake.

Table 1.10. Status of the Kangaroo family in Victoria since British settlement

Species	Status in Victoria
Toolache Wallaby, Eastern Hare Wallaby, Bridled Nailtail Wallaby, Rufous-bellied Pademelon, Rufous Bettong, Eastern Bettong, Woylie	Extinct (7 species since British settlement)
Brush-tailed Rock-wallaby	Endangered; 92,590 skins marketed by one company in 1908; fewer than 60 left in the wild in 2018
Eastern Wallaroo	Endangered; gone from 99 per cent of its former eastern range
Long-footed Potoroo	Endangered; declining
Long-nosed Potoroo	Threatened; declining
Red Kangaroo	Restricted to the far north-west, from about half the state; removed from the commercial list in 2019
Western Grey Kangaroo	Missing from almost half its historical range; shot commercially since 2014
Eastern Grey Kangaroo	Range fractured and fragmented; shot commercially since 2014
Red-necked Wallaby, Swamp Wallaby	Populations affected by the 2019–20 bushfires

Shading: orange, extinct or endangered or threatened; yellow, in decline or at risk.

1.9 Discussion and conclusions

The Victorian record from 2017 to Q1 2026 does not support the Government's claim that Kangaroo killing in the state is ecologically sustainable. Four lines of evidence point the same way.

1. **The estimates are not anchored to the counts.** Population estimates have risen through bushfire, flood and drought, and have moved against the raw survey counts at both of the last two surveys. The 2025 estimate that sets the 2026 quota was modelled without a survey.
2. **The verified record contradicts the estimates.** The one fully reported component, the commercial kill, has fallen short of quota every year by between 6,000 and 95,000 animals. An industry paid by the carcass would fill a quota if the animals could be found.
3. **The unverified record is growing.** ATCW permits made up 70 per cent of the claimed 2025 total and take the larger share of the 2026 quota. The Government has confirmed that their figures are maxima, not counts, so the claimed breach of the 10 per cent ceiling is itself unverified.
4. **The composition of the kill signals stress.** Females are 39 to 50 per cent of recent commercial kills, joeys excluded from the totals add a further fifth to a third, and Western Grey kills in Q1 2026 exceeded the whole of 2025.

The pattern resembles the longer history traced elsewhere in this Report: management justified by abundance that is asserted rather than measured, and a commercial industry that, once established, sustains demand for its own quota. As Hylands puts it, in Victoria "no matter how many they kill the population remains stable or increases, the probability for which is zero".

Questions for further research

- What raw counts, transects and detection corrections produced the 2024 estimate, and how many transects changed from 2022?
- On what basis was the 2025 estimate raised by 228,000 without a survey?

- How many Kangaroos were actually killed under the 174,022 ATCW authorisations in 2025?
- What separate quotas, if any, have been issued for commercial shooting on public land, and in which parks?
- How were 30,181 commercial kills recorded in Q4 2025 against a new quarterly quota of 5,200?
- How many pouch young are killed, and why are they excluded from reporting?
- Will the Q4 2026 survey use the same transects and methods as 2024, and will its raw data be published?

Recommendations

1. End the commercial Kangaroo trade in Victoria.
2. Require ATCW permit holders to report actual numbers killed, and control the issue of permits accordingly.
3. Restructure DEECA to separate wildlife protection from the management of killing programs and remove conflicts of interest.
4. Have Ministers test survey counts, survey methods and the biologically implausible growth rates they produce before quotas are approved.
5. Reduce the number of firearms in the community.

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CHAPTER 1 · ADDENDUM

Parks Victoria and the Victorian Government: Use of ATCWs and the Large-Scale Killing of Kangaroos in National Parks and Other Public Lands

ATCWs in the Mallee national parks, 1984–2025, and on other public land

Author	Peter Hylands
Prepared	October 2026
Data current to	April 2026 (DEECA final figures for 2025)

Summary

For four decades the Victorian Government has used Authorities to Control Wildlife (ATCWs) to shoot Kangaroos inside its national parks, most persistently in the Mallee parks of the north-west. This addendum extends Chapter 1 from farmland to public land, where accountability is weakest.

The principal findings are:

1. **Killing in the Mallee parks has run since 1984.** Between 2004 and 2022 Parks Victoria set targets totalling about 86,000 Kangaroos in Wyperfeld, Hattah-Kulkyne and Murray Sunset National Parks. A further 15,000 were killed there in 1990–1994, and more than 6,000 were removed across the Mallee in 2024–25.
2. **The Red Kangaroo has become the main target.** Red Kangaroos were 42 per cent of the parks target in 2013 and 73 per cent in 2017 and 2022. This is a species now confined to the far north-west of the state.
3. **Targets are consistently far above what can be found.** In 2016 Parks Victoria removed 44 per cent of its target, in 2017 31 per cent, and in 2021–22 36 per cent. Western Grey targets were met almost in full, but only 6 to 14 per cent of Red Kangaroo targets. The Government's own explanation, that animals had "moved on", is consistent with population estimates set far too high.
4. **Public land ATCWs are now a major part of the statewide kill.** In 2025, ATCWs authorised 16,344 Western Grey Kangaroos, of which 14,838 were in the Loddon Mallee zone and almost all on public land. In that zone commercial shooters took none.
5. **Information is withheld or not collected.** The department told Freedom of Information applicants that its systems could not distinguish ATCWs on public land from those on private land. Annual park reports since 2023 give no numbers, or a single rounded figure.

6. **The methods are brutal and their legacy is lasting.** Pouch young are killed by blunt trauma or decapitation. Carcasses from the 1990–91 killing were buried in pits beside Lake Lockie, and their fluids drained into a connected lake system from which the Hattah township draws its water.

1A.1 Scope, sources and access to data

The addendum covers Kangaroo killing on public land in Victoria, principally the three Mallee national parks: Wyperfeld, Hattah-Kulkyne and Murray Sunset. It sets the parks record against the statewide ATCW data for 2025.

Sources. The main source is Peter Hylands' paper *Unpleasant histories: Mass killing of Kangaroos in Victoria's National Parks* (Nature Knowledge Channel, 25 November 2023). It draws on Parks Victoria and Department of Environment, Land, Water and Planning (DELWP) reports and Freedom of Information responses, and on the eyewitness account of Peter Preuss, author of *The Red Sands of Hattah*. It is updated here with the Department of Energy, Environment and Climate Action's (DEECA) *Kangaroo Harvesting Program 2025 Annual Report* (April 2026), and with Parks Victoria's *National Parks Act Annual Reports* for 2023–24 and 2024–25. Figures marked *derived* are calculated from these sources.

Access to data

Obtaining park-level numbers has been difficult. In response to a Freedom of Information request for ATCW documents relating to "National and State Parks and other public lands", DELWP replied that:

> *"the department's electronic system does not distinguish between authorisations issued for control of wildlife on public or private land nor does it readily set out the reasons for the application of each ATCW. A manual review of each application for an ATCW would need to be undertaken."*

The department said its reporting system could produce only the species, the number of permits and the maximum number of animals authorised, by date, local government area or postcode. Requests made on that basis, including postcodes, produced what the author calls "silly results". Detailed internal reports on targets and kills in the parks were later found to exist. The data that follow therefore have gaps: no figures were located for 1995–2003, 2018–2019, 2021 or 2023, and the most recent annual park reports give no figures or a single rounded total.

1A.2 The Mallee parks

Wyperfeld, Hattah-Kulkyne and Murray Sunset are three of Victoria's largest semi-arid reserves and the last strongholds of the Red Kangaroo in the state. They are also where Victoria has killed Kangaroos on public land most intensively.

Table 1A.1. The Mallee parks and the Kangaroo management reported

Park	Setting	Kangaroo management reported
Wyperfeld National Park	Southern Mallee, north of Hopetoun	Shooting in 2021–22 and earlier years; "overabundant kangaroos" monitored 2023–25
Hattah-Kulkyne National Park	Murray River floodplain lakes, south of Mildura	Shooting since 1984; Red and Western Grey Kangaroos "subject to population management" in 2023–24
Murray Sunset National Park	Far north-west, including Lindsay Island	Shooting in 2021–22 and earlier years; "overabundant kangaroos" monitored 2023–25

Parks Victoria justifies the killing as part of a "total grazing management" program, a long-running effort to protect semi-arid woodland. The program combines the control of rabbits and feral goats

with the killing of native Kangaroos, and was renewed in 2025. Its targets are set by comparing aerial population estimates with a "designated carrying capacity" for each management area.

What is found on the ground does not match those estimates. On recent visits to all three parks, the author found no Kangaroos despite detailed searches. Rangers at Hattah-Kulkyne advised that the best place to see Kangaroos was the local airport, and said they did not believe the Government's population estimates for the parks. Along the boundary of Murray Sunset, angled exclusion fencing between the park and private land is designed to trap wildlife trying to leave the park.

1A.3 Four decades of kill targets, 1984–2025

In the years for which data could be found, Parks Victoria set kill targets totalling 86,105 Kangaroos in the three Mallee parks between 2004 and 2022 (derived). Since 2016 most of each target has been Red Kangaroos.

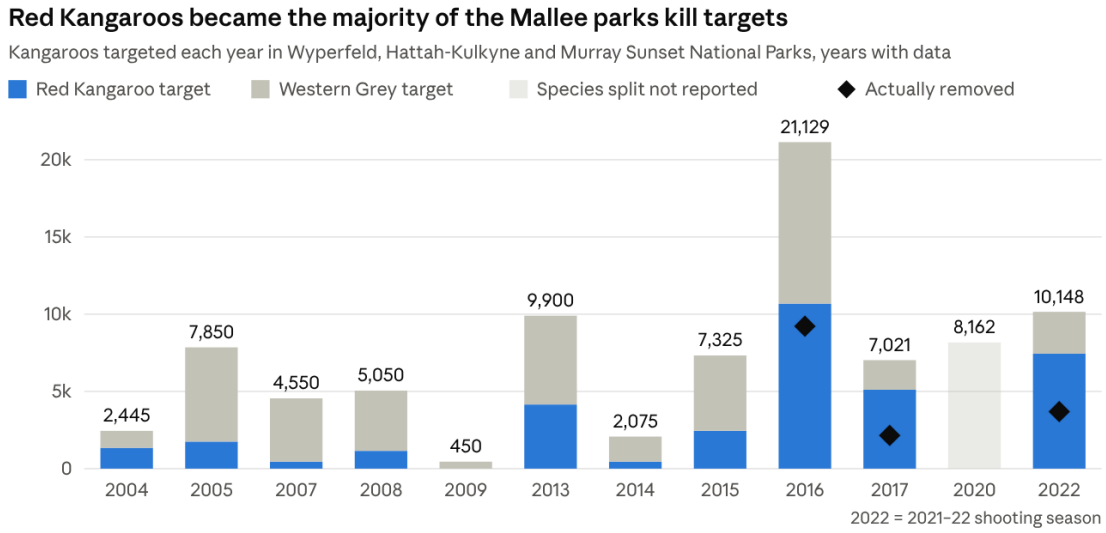


Figure 1A.1. Kangaroos targeted each year in Wyperfeld, Hattah-Kulkyne and Murray Sunset National Parks, years with data

Source: Parks Victoria and DELWP reports as compiled by Hylands (2023); Western Grey targets derived as total minus Red.

The Red Kangaroo share of the target rose from 42 per cent in 2013 to 51 per cent in 2016 and 73 per cent in both 2017 and 2022. Parks Victoria noted in 2022 that this "continued the trend since 2013, of high numbers of Red Kangaroos being identified for removal". The 2022 target of 10,148 (7,440 Red and 2,708 Western Grey) was authorised under ATCW permits 14973758, 14973813 and 14973795.

Table 1A.2. Chronology of Kangaroo killing in the Mallee parks

Period	What happened in the Mallee parks
1984	787 Western Grey Kangaroos killed; public outcry halts shooting until 1990
1990–1994	About 15,000 Kangaroos killed across the three parks
1994–1998	Severe drought; no killing recorded
1999–2003	No data located
2006, 2010–2012	Drought years; no killing appears to have taken place
2018–2019, 2021, 2023	No target data located
2024–25	"More than 6,000 kangaroos removed using professional shooters" (Parks Victoria)

The killing continued through the 2019–20 bushfires, the drought that preceded them and the floods that followed. Parks Victoria's 2024–25 report describes the total grazing management program as "multi-decadal", and it was renewed in 2025.

1A.4 Targets against outcomes

In every season for which results were reported, Parks Victoria killed well under half its target. The shortfall is almost entirely in Red Kangaroos.

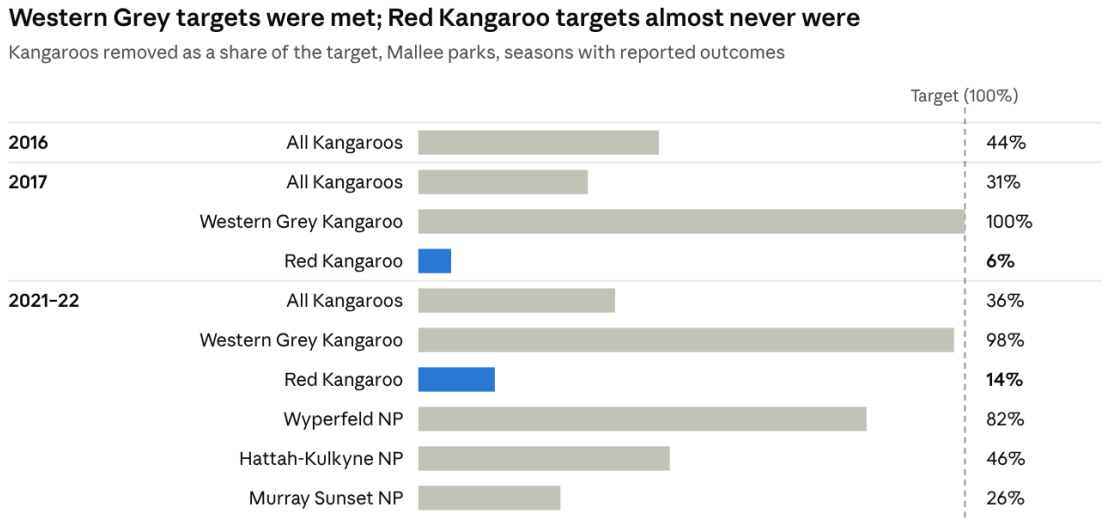


Figure 1A.2. Kangaroos removed as a share of the target, Mallee parks, seasons with reported outcomes

Source: Parks Victoria operational reports quoted in Hylands (2023). The 2017 Western Grey figure is reported only as "target achieved".

Parks Victoria's own reports describe the pattern:

- **2016:** "Parks Victoria removed a total of 9,216 Kangaroos from the North West parks over 30 nights between April and August. This accounted for 44 per cent of the overall target of 21,129."
- **2017:** 2,150 Kangaroos were removed over 12 nights in May, 31 per cent of the target of 7,021. "The target was achieved for Western Grey Kangaroos but only 6 per cent of the target was achieved for Red Kangaroos." The report attributed this to "significantly high target numbers", to animals that had "moved on to other areas" between survey and shooting, and to cold weather.
- **2021–22:** 3,693 Kangaroos were removed, 36 per cent of the target, which the report called "an improvement on the previous year's results". The Western Grey target was 98 per cent achieved and the Red Kangaroo target 14 per cent.

The pattern repeats season after season: Western Grey targets are filled, Red Kangaroo targets are not. The most likely explanation is that the aerial estimates greatly overstate the number of Red Kangaroos in the parks. Yet each new target has been set from the same kind of estimate, and the Red Kangaroo share of the target has grown.

The 2021–22 operation

Table 1A.3. The 2021–22 operation

Item	Detail
Dates	6 December 2021 to 9 February 2022 (two-week break at Christmas); Lindsay Island 4–8 April 2022
Parks	Wyperfeld, Hattah-Kulkyne and Murray Sunset National Parks
Nights of shooting	32.5 nights over nine weeks
Target	10,148 (7,440 Red, 2,708 Western Grey)
Removed	3,693 (36%): about 2,650 Western Grey and 1,040 Red (derived)
Cost	$189,120 excluding GST, about $51 per Kangaroo killed (derived)

Item	Detail
Parks Victoria staff time	110 person-days (840 hours) supporting contractors
Females inspected for pouch young	41, of which 68% carried a single pouch young
Aerial survey	Based in South Australia with South Australian aircraft, because of COVID-19 border restrictions

The programme was adapted to meet COVID-19 requirements, and it continued through a period of bushfire, drought and flood.

1A.5 ATCWs on public land statewide, 2025

DEECA's final figures for 2025, published in April 2026, show ATCWs authorising 174,022 Grey Kangaroos, more than twice the 76,363 taken commercially. The Western Grey Kangaroo ATCWs are concentrated in the Loddon Mallee zone, almost all of them on public land.

Table 1A.4. Commercial take and ATCWs approved by zone, 2025

Zone, 2025	Commercial take: Eastern Grey	Commercial take: Western Grey	ATCWs approved: Eastern Grey	ATCWs approved: Western Grey
Hume	28,651	—	68,351	—
Grampians	10,606	2,683	31,160	1,156
Loddon Mallee	18,933	0	24,991	14,838
Barwon South West	7,362	67	20,256	350
Gippsland	8,061	—	12,920	—
Total	**73,613**	**2,750**	**157,678**	**16,344**

Four features of the 2025 data bear directly on public land:

- **Western Greys in the Loddon Mallee are killed under permit, not commercially.** The zone accounted for 14,838 of the 16,344 Western Grey ATCWs statewide (91 per cent, derived), while commercial shooters there took none. DEECA reports that almost all of these ATCWs were for control on public land, often by public land managers under Kangaroo management plans to protect habitat from overgrazing. The zone includes Hattah-Kulkyne and Murray Sunset National Parks.
- **ATCWs are 70 per cent of the claimed total take.** DEECA reports a total take of 231,291 Eastern Greys (12.4 per cent of the population estimate) and 19,094 Western Greys (9.0 per cent). Of the combined 250,385, 174,022 are ATCW maxima (derived), which DEECA acknowledges may exceed what was actually killed. No actual ATCW figures are published.
- **Fire was followed by more killing.** After the 2025 fires in the Grampians (Gariwerd) and Little Desert National Parks, about 1,700 Kangaroos were euthanised on welfare grounds.
- **The door to commercial shooting on public land is open.** In February 2025 the Government stated that public land managers "can choose to access the Kangaroo Harvest Program". Any harvesting on public land would have "a separate quota, outside of the quota for the Kangaroo Harvest Program", as "a direct replacement to control". No such quotas have been published.

Data note. Chapter 1 and this addendum both use these final figures. They replace DEECA's preliminary December 2025 estimates of 77,960 commercial and 179,044 ATCW (total 257,004). The revision does not change the conclusions of Chapter 1.

1A.6 Methods, pouch young and carcass disposal

Killing in the parks follows the same procedures as on farmland, including the killing of dependent young. The disposal of carcasses has left its own damage.

Pouch young

Parks Victoria's report on the 2021–22 operation describes the treatment of young found in the pouches of shot females:

> *"When adult female Kangaroos were shot, any pouch young present were required to be euthanized immediately as per the COP euthanasia procedures… Furred pouch young being euthanized by a blunt trauma and unfurred pouch young being 'euthanized' by decapitation with a sharp blade after blunt trauma stunning. A total of 41 adult female Kangaroos were inspected for the presence of pouch young, of these animals, 68 per cent had a single pouch young present."*

The report records the inspection of only 41 females in an operation that removed 3,693 Kangaroos. If the same rate held across all females killed in the parks, the number of pouch young killed would be many times larger. Young at foot, which escape inspection altogether, are not counted at all.

The death pits of Hattah-Kulkyne

Peter Preuss witnessed the 1990–91 killing in Hattah-Kulkyne National Park. He records that the carcasses of thousands of Kangaroos were buried in pits beside Lake Lockie. The consequences he describes include:

Table 1A.5. Impacts of the 1990–91 killing in Hattah-Kulkyne National Park (after Preuss)

Impact	Description (after Preuss)
Habitat destruction	Pits were dug in one of the park's most active areas of natural regeneration and dune stabilisation, destroying regenerating River Red Gum, Black Box and Callitris
Soil damage	Earthmoving compacted the soil; the 1984 disposal pits were still compacted years later, with no restoration attempted
Weeds	Earthmoving equipment and shooters' vehicles introduced invasive weeds
Safety	Body fluids made the ground over the pits boggy; signs warned visitors not to drive on the surface
Water contamination	Fluids from the pits seeped into Lake Lockie, which connects in flood to Lakes Mournpall and Hattah. Lake Hattah supplies the Hattah township, and signs warned visitors not to drink or swim

> *"The slimy fluid oozing to the surface above the pit is being washed into Lake Lockie. In times of flood these Kangaroo death pits will be under Lake Lockie, which connects into Lake Mournpall and Lake Hattah, where people swim and sometimes drink the water." — Peter Preuss*

How the carcasses from more recent operations have been disposed of has never been disclosed. In particular, no answer has been given for the years since 2017.

The public message

Interpretive material in the Hattah-Kulkyne visitor centre links native Kangaroos with feral rabbits: "If we can just keep the rabbits and the roos down, it's quite possible that the recovery process could really keep going." The same pairing appears in Parks Victoria's annual reporting, where Kangaroos are listed alongside rabbits and goats as grazing pressures to be controlled. This conflation of a native species with introduced pests is central to the justification for killing in protected areas.

1A.7 Context: wildlife protection in Victoria

The killing of Kangaroos in national parks is one part of a wider pattern in which protected wildlife in Victoria is routinely authorised for destruction, while conservation commitments go unmet.

Table 1A.6. Indicators of the killing of protected wildlife in Victoria

Indicator	Position
Native species targeted under ATCWs	Around 100
Protected native animals targeted in 2025	About 1.1 million (Chapter 1)
Victoria's share of Australia's recreational waterbird kill	About 77 per cent
Threatened species without an action plan	About 1,500 (DEECA evidence to the Public Accounts and Estimates Committee)
Action plans developed over two years	About 100, after a 2021 Victorian Auditor-General's report found the department was not meeting its obligations under the *Flora and Fauna Guarantee Act 1988*
Independent Review of the *Wildlife Act 1975*	Delivered December 2021; Government response long delayed
Government response to the Parliamentary Inquiry into Ecosystem Decline	Due 2 June 2022; long delayed

Ellen Sandell MP summarised the position in the Public Accounts and Estimates Committee inquiry into the 2021–22 and 2022–23 financial and performance outcomes: "Labor has cut funding for biodiversity programs which means we have 1,500 threatened species with no action plans for their survival."

Against that background, Victoria's plans to open public land to commercial Kangaroo shooting (section 1A.5) would add new pressure in the places that should be the last refuge for these species. Hylands records that the killing rate rose fivefold once commercial shooting was fully introduced in late 2019.

1A.8 Conclusions and questions

The Mallee parks record shows the same failure documented for farmland in Chapter 1, in a more acute form. Targets are set from estimates that cannot be met on the ground, and the species least able to sustain the loss is targeted most heavily. All of it is carried out under a permit system that does not count what it kills.

1. **The Red Kangaroo is being targeted in its last Victorian stronghold.** It has made up 73 per cent of recent targets, yet only 6 to 14 per cent of those targets are ever reached. That gap points to populations far smaller than estimated, and to a species being driven towards extinction in Victoria.
2. **The estimates are not tested against outcomes.** Each season's failure to reach the Red Kangaroo target is explained away, and the next target is set from the same method.
3. **Public land is where accountability is weakest.** ATCWs on public land report only maxima, the department says it cannot readily separate public from private land in its records, and park reporting has become less specific.
4. **The policy direction is towards more killing, not less.** Total grazing management was renewed in 2025, more than 6,000 Kangaroos were removed in 2024–25, and public land has been opened in principle to commercial shooting.

The killing of protected native animals inside national parks, carried out under a system that withholds its own records, is difficult to reconcile with the purpose of those parks. As Hylands concludes, "the biggest lie of all is that wildlife in Victoria is protected".

Questions for further research

- What were the targets and outcomes for the Mallee parks in 2018–2019, 2021 and 2023–2025?
- How many of the more than 6,000 Kangaroos removed in 2024–25 were Red Kangaroos?
- What aerial estimates and carrying capacities were used to set each target, and have they ever been checked against outcomes?

- How many ATCWs were issued to Parks Victoria and other public land managers in 2025, for which parks, and how many animals were actually killed?
- How have carcasses been disposed of since 2017?
- Has any public land manager applied for a separate commercial quota under the Kangaroo Harvest Program?

Recommendations

1. End the shooting of Kangaroos in Victoria's national and state parks.
2. Remove the Red Kangaroo from all ATCW authorisations and assess its conservation status in Victoria.
3. Rule out commercial Kangaroo shooting on public land.
4. Require all ATCW holders, including public land managers, to report actual numbers killed, by species, sex and location, and publish the results annually.
5. Publish the full operational reports, targets, outcomes and costs of Parks Victoria's Kangaroo programs since 1984.

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CHAPTER 2

Commercial Exploitation of Kangaroos in South Australia

Population estimates, quotas, actual take and destruction permits, 2021–2026

Author	Peter Hylands
Prepared	October 2026
Data current to	March 2026 (DEW 2025 Harvest Report)

Executive summary

South Australia set a 2025 commercial quota of 805,800 Kangaroos and wallabies; the industry killed 124,192, or 15 per cent. For 2026 the quota is 600,400, still almost five times what has ever been taken in a recent year. This chapter sets the South Australian record against the State Government's own data, including the 2025 Harvest Report published by the Department for Environment and Water (DEW) in March 2026.

The principal findings are:

1. **Quotas bear no relation to what can be found.** From 2021 to 2025 the combined commercial quota was 2,876,300 animals and the actual kill 498,718, or 17 per cent. South Australia has the lowest ratio of actual take to quota in Australia.
2. **The population estimates are unstable.** The commercial-species estimate rose from 2.78 million in 2022 to 3.83 million in 2023 and 4.92 million in 2025, increases Hylands describes as biologically impossible. Then the Red Kangaroo estimate fell by 921,382 animals, or 31 per cent, in a single year. Even so, the 2026 Red Kangaroo quota of 373,700 is 18 per cent of the reduced estimate.
3. **Subsidies and bounties added little.** The Minister for Primary Industries claimed the 2025 drought measures would remove 50,000 to 100,000 additional Kangaroos. The total 2025 take was 17,689 higher than in 2024. Of 36,200 animals authorised under the drought permits, 1,485 were taken.
4. **Non-commercial killing is expanding and largely unreported.** Destruction permits authorised 183,655 animals in 2025, up 68 per cent from 109,497 in 2024. Kangaroos and wallabies made up 81 per cent of all native animals authorised for destruction in 2025, and the Western Grey Kangaroo was named on 88 per cent of permits. Across November 2024 to January 2026, 1,004,714 animals were targeted under commercial and destruction permits, and 145,014 were reported killed (14 per cent).
5. **The species on the commercial list need protection, not quotas.** The Euro harvest reached only 9 per cent of quota and Tammar Wallabies on Kangaroo Island 0 per cent. The Eastern Grey Kangaroo, the one species whose quota is nearly filled, is managed on a 2023 estimate.

No actual take figures for 2026 have yet been published: DEW reports the harvest once a year, and the 2026 Harvest Report is not expected before March 2027.

2.1 Introduction, context and data sources

South Australia has run a commercial Kangaroo industry for more than 40 years, longer than Victoria by three decades and on a far larger scale. Where Victoria is the industry's newest frontier (Chapter 1), South Australia shows where a long-established program leads.

The Government's position is set out in its standard statement on the program:

> *"The commercial kangaroo harvest has been run in South Australia for over 40 years and has been shown to be sustainable. Population estimates are developed from annual surveys and are used to set sustainable harvest quotas each year."*

This chapter tests that claim. Commercial and non-commercial killing are both regulated by permits under the *National Parks and Wildlife Act 1972*, under the *South Australian Commercial Kangaroo Management Plan 2025–2029*, which the Commonwealth has approved. Five species are on the commercial list.

Table 2.1. Species on the South Australian commercial list

Species	On the commercial list since	Where shot	2026 quota
Red Kangaroo	Long-standing	Pastoral and Eastern Agricultural regions	373,700
Western Grey Kangaroo (including the Kangaroo Island Sooty Kangaroo)	Long-standing; Kangaroo Island added 2020	All five harvest regions	152,500
Euro	Long-standing	Pastoral and Eastern Agricultural regions	42,900
Tammar Wallaby	2020	Kangaroo Island	19,200
Eastern Grey Kangaroo	2020	Lower South East	12,100

Since 2020 the industry's reach has been extended repeatedly: harvest areas have been expanded, new species added, shooting opened in national parks and reserves, and in 2025 drought subsidies paid to shooters. Despite these additions, the actual kill has not risen in step. Hylands (2026) identifies South Australia as the mainland state where Kangaroo populations have declined most. In 2025 the Parliament's Natural Resources Committee opened an *Inquiry into Kangaroo and Wallaby Populations in South Australia*, discussed in section 2.9.

Sources. The chapter draws on three papers by Peter Hylands for the Nature Knowledge Channel. These are *2026: Commercial exploitation of Kangaroos in South Australia* (with Andrea Hylands, 3 January 2026), *South Australian Government Kangaroo Inquiry* (13 September 2024) and *Kangaroo situation update* (August 2026). Those papers compile data from DEW and from correspondence with DEW and the Minister for Primary Industries. They are updated here with three DEW publications: the 2026 Quota Report (December 2025), the 2025 Harvest Report (March 2026) and the 2024 Harvest Report (March 2025). Figures marked *derived* are calculated from those sources.

2.2 Population estimates, 2021–2026

South Australia's population estimates have swung by millions of animals within a few years, far outside anything Kangaroo biology allows. Each estimate is labelled here by the quota year it sets.

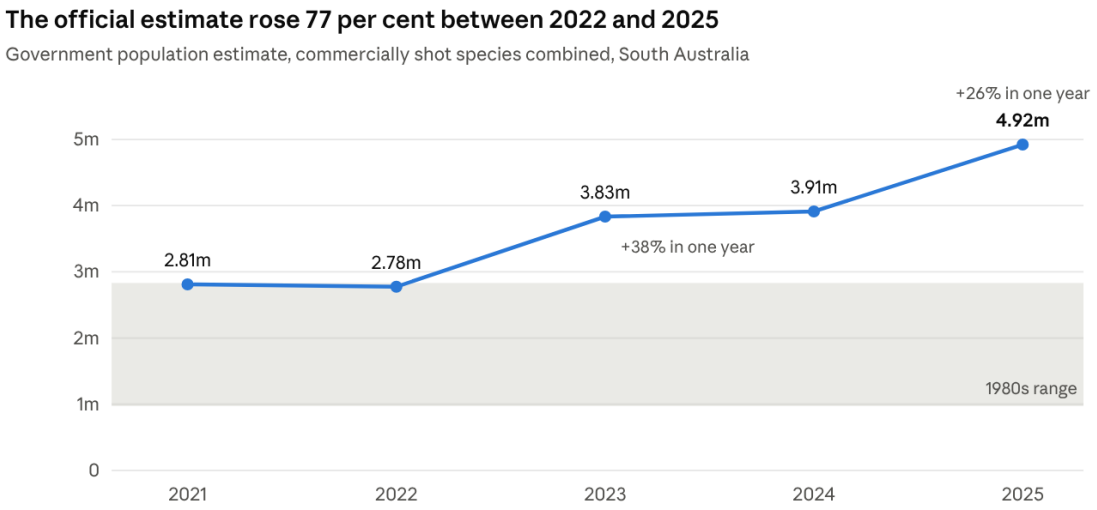


Figure 2.1. Government population estimate, commercially shot species combined, South Australia

Source: DEW population estimates as compiled by Hylands and Hylands (2026); 1980s range from DEW historical estimates (1982 high, 1985 low).

In the 1980s the Government's estimates ranged from 972,390 (1985) to 2,831,595 (1982). The widest swings have come in the past decade. Extensions of the harvest area and the addition of new species in 2020 explain part of the rise, but not increases of 38 per cent in 2023 and 26 per cent in 2025. Kangaroos produce at most one young a year, and many young do not survive to independence.

The 2026 estimates, from surveys flown between May and September 2025, reverse much of that rise.

Table 2.2. Population estimates setting the 2025 and 2026 quotas

Species	Estimate setting 2025 quota	Estimate setting 2026 quota	Change	Basis of 2026 figure
Red Kangaroo	2,975,551	2,054,169	−31%	2025 surveys
Western Grey Kangaroo (excluding Southern Agricultural)	938,598	806,396	−14%	2025 surveys
Western Grey Kangaroo (Southern Agricultural)	311,539	360,848	+16%	Only Hills and Fleurieu sub-region surveyed in 2025
Euro	460,774	401,596	−13%	2025 walking surveys, two sub-regions
Tammar Wallaby (Kangaroo Island)	384,671	384,671	0%	2022 survey
Eastern Grey Kangaroo (Lower South East)	121,539	121,539	0%	2023 estimate carried forward
Total, five species (derived)	**5,192,673**	**4,129,219**	**−20%**	

Three features of the 2026 estimates stand out:

- **The Red Kangaroo fell by 921,382 animals in a year.** DEW's own figures record this fall, on an estimate Hylands already considers inflated. It came during a severe drought in which the Government's advice to landholders includes fencing off water points.
- **Two species are managed on old data.** The Tammar Wallaby estimate dates from 2022, and the Eastern Grey estimate from 2023. The Tammar figure implies about 87 wallabies on every square kilometre of Kangaroo Island.
- **The one rising figure rests on a partial survey.** The Southern Agricultural Western Grey estimate rose 16 per cent, although only one sub-region was surveyed.

Hylands' series totals differ slightly from the five-species sum above, which includes Tammar Wallabies on the Government's species-level figures. Both bases show the same pattern.

2.3 Quotas and actual take, 2025–2026

The Government's 2025 Harvest Report confirms that the industry took 15 per cent of the 2025 quota. That is close to the Nature Knowledge Channel's estimate and well short of the 50,000 to 100,000 extra animals the drought measures were said to deliver.

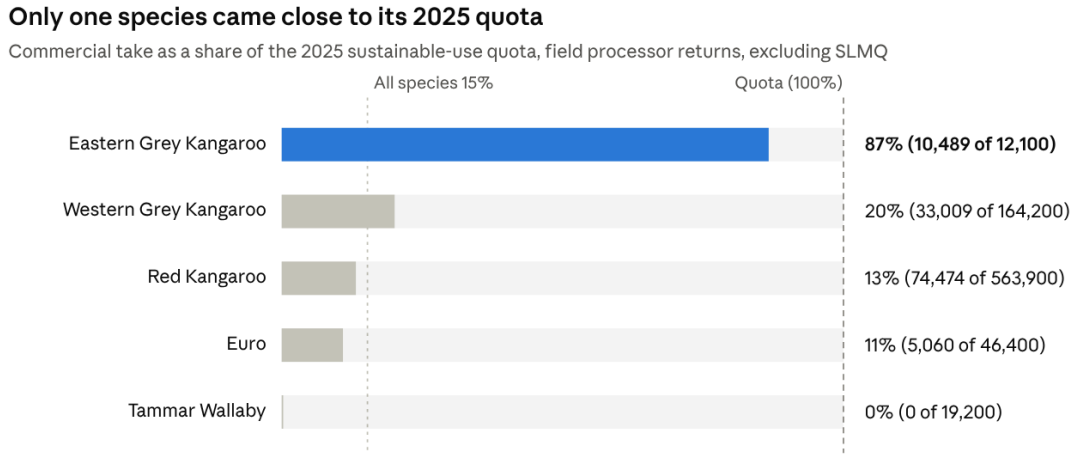


Figure 2.2. Commercial take as a share of the 2025 sustainable-use quota, by species
Source: DEW, 2025 Harvest Report (March 2026), regional tables; percentages derived.

The Eastern Grey Kangaroo in the Lower South East is the exception: its small quota was 87 per cent filled, with females making up 38 per cent of the kill. Its quota is still set from a 2023 estimate. For every other species, the take was a small fraction of a quota set from the estimates in section 2.2.

Actual take against quota, 2023–2026

Table 2.3. Actual commercial take against quota, 2023–2026

Year	Commercial quota	Actual commercial take	Share of quota	Source of actual
2026	600,400	Not yet published	—	2026 Harvest Report due early 2027
2025	805,800	124,192	15%	DEW 2025 Harvest Report, sustainable-use quota
2025 (including SLMQ)	883,500	129,063	15%	DEW, meat processor returns
2024	635,400	106,503	17%	DEW, meat processor returns
2023	576,300	100,594	17%	DEW, meat processor returns

The 2025 figure replaces the estimates available in January 2026. At that time DEW had reported 100,102 animals to the end of October and projected 119,892 for the year; Hylands estimated about 120,000. The final sustainable-use figure of 124,192 is 17 per cent above 2024, against a 20-year average of 117,503. In other words, a year of drought subsidies and expanded access produced a harvest only slightly above the long-run norm. A further 4,871 animals were taken under the Special Land Management Quota (SLMQ).

Over 2021–2025 the combined quota was 2,876,300 and the actual kill 498,718, plus an estimated 130,000 dependent young not counted in either figure. Removing the species added in 2020 lowers

the ratio of take to quota to about 15 per cent, and removing the effect of harvest-area extensions lowers it further.

The 2026 quota

Table 2.4. Commercial quotas by species, 2025 and 2026

Species	2025 quota	2026 quota	Change	2026 quota as share of estimate (derived)
Red Kangaroo	563,900	373,700	−34%	18%
Western Grey Kangaroo	164,200	152,500	−7%	13%
Euro	46,400	42,900	−8%	11%
Tammar Wallaby	19,200	19,200	0%	5%
Eastern Grey Kangaroo	12,100	12,100	0%	10%
Total	**805,800**	**600,400**	**−26%**	**15%**

Data note. Hylands and Hylands (2026) give the 2026 Red Kangaroo quota as 373,300. DEW's 2026 Quota Report gives 373,700, which is consistent with the published total of 600,400 and is used here.

If the 2026 quota were filled, an estimated 160,000 joeys would also die. They would be decapitated or bludgeoned, or would starve if they escaped. But the quota will not be filled. At the 2025 rate, the 2026 take would be roughly 20 per cent of quota, and with the Red Kangaroo estimate down by almost a million, probably less.

2.4 The Red Kangaroo harvest, 1975–2025

The Red Kangaroo has always been the mainstay of the South Australian industry, and its long record shows the decline most clearly. In 2023 Red Kangaroos made up 58 per cent of the commercial kill.

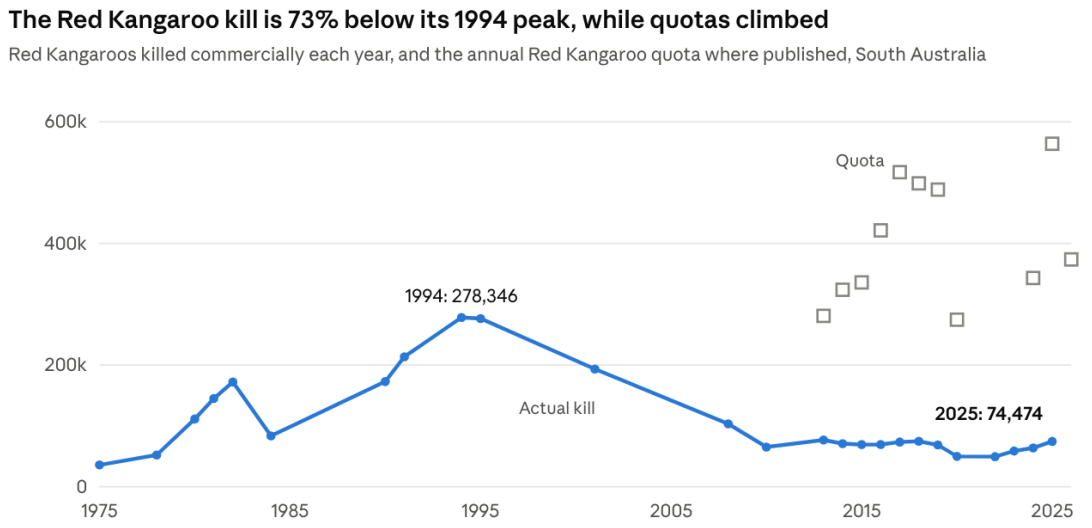


Figure 2.3. Red Kangaroos killed commercially each year, with the annual Red Kangaroo quota where published, South Australia

Source: DEW harvest data 1975–2024 as compiled by Hylands and Hylands (2026); DEW running record of harvest statistics (2013–2020 quotas); DEW 2024 and 2025 Harvest Reports and 2026 Quota Report.

The commercial kill grew through the 1980s and peaked in the mid-1990s, when more than 270,000 Red Kangaroos were shot in each of 1994 and 1995. Since 2010 it has rarely exceeded 75,000, despite quotas that rose above 500,000 in 2017 and reached 563,900 in 2025. Commercial shooters were

classed as an essential service during the COVID-19 restrictions of 2020, so that year's low take of 49,784 reflects scarcity, not lockdown.

In 2025 the Red Kangaroo kill was highest in the Western Pastoral region (32,100) and the Eastern Pastoral region (31,559). The Eastern Agricultural region, with a much smaller quota, recorded the highest take relative to quota at 34 per cent. In the pastoral regions shooters took 11 to 14 per cent of quota. The gap between quota and take has widened as the estimates have risen, the clearest sign that the estimates no longer describe the animals on the ground.

2.5 Females and joeys

One in four Kangaroos killed commercially in South Australia in 2025 was female: 31,101 animals. On Hylands' method of one dependent young per female, about 31,000 joeys also died. None of them appear in the harvest figures.

Table 2.5. Females in the commercial kill, 2024 and 2025

Species	Females 2024	Females 2025	Females killed 2025	Males killed 2025
Eastern Grey Kangaroo	40%	38%	3,940	6,549
Western Grey Kangaroo	32%	36%	11,870	21,127
Red Kangaroo	21%	20%	15,132	59,306
Euro	2%	3%	159	4,894
All species	**about 25%**	**25%**	**31,101**	**91,876**

The estimated joey toll was 25,950 in 2024 and about 31,000 in 2025 (derived). Across 2021–2025 it totals roughly 130,000. A further 1,130 females were taken under the Special Land Management Quota in 2025, most of them Western Greys in the Hills and Fleurieu. Dependent young are killed by decapitation or a blow to the head. Young at foot that escape are left to starve.

The share of females rose for Western Greys between 2024 and 2025, and remains close to 40 per cent for Eastern Greys. Both species were added to new harvest areas in 2020. Under the 2025 drought incentives, payments were made only for Kangaroos that were "fully furred", and every animal was to be shot "in line with existing standards". Images supplied by Primary Industries and Regions SA (PIRSA) as evidence for claims suggest that some joeys were nonetheless presented, raising the question of whether young animals are now being processed. DEW confirmed in 2025 that its harvest data do not include joeys.

2.6 Destruction permits, parks and public land

Non-commercial killing under Permits to Destroy Wildlife has trebled in three years. Permits authorised 61,489 animals in 2022 and 183,655 in 2025.

Table 2.6. Kangaroos and wallabies on Permits to Destroy Wildlife, 2022–2025

Species	Animals on permits 2022	2024	2025	Change 2022–2025
Western Grey Kangaroo (including Kangaroo Island)	46,161	73,910	116,367	+152%
Red Kangaroo	5,862	15,102	29,756	+408%
Euro	2,766	6,676	19,842	+617%
Tammar Wallaby	5,670	11,820	15,150	+167%
Eastern Grey Kangaroo	1,030	1,989	2,540	+147%
Total	**61,489**	**109,497**	**183,655**	**+199%**

Species	Animals on permits 2022	2024	2025	Change 2022–2025
Permits issued	1,123	1,584	1,740	+55%

As in Victoria, the permit figures are maxima. DEW publishes the number of animals authorised, not the number killed. The returns that do exist show how far the two diverge. Between 26 November 2024 and 20 January 2026:

Table 2.7. Animals targeted and reported killed, 26 November 2024 to 20 January 2026

Category, 26 Nov 2024 to 20 Jan 2026	Animals targeted	Animals reported killed	Share
Commercial quota (2025)	805,800	136,223	17%
Destruction permits (all species except Tammar)	182,164	8,211	5%
Destruction permits (Tammar Wallaby, Kangaroo Island)	16,750	580	3%
Total	**1,004,714**	**145,014**	**14%**

The commercial figure covers Red Kangaroos (80,949), Western Greys (38,001), Eastern Greys (11,938) and Euros (5,335). The permit data also include the Red-necked Wallaby, which is not on the commercial list. Landholders who say Kangaroos are overabundant are authorised to kill large numbers, yet report killing very few. The simplest explanation is that the animals are not there.

National parks and reserves

There are now no safe places for Kangaroos in South Australia. In 2025:

Table 2.8. Killing on public reserves, 2024 and 2025

Killing on public reserves	2024	2025
Commercial shooting (5 reserves)	1,989 (1,240 Red, 729 Western Grey, 20 Euro)	2,415 (1,504 Red, 910 Western Grey, 1 Euro)
Non-commercial culling	2,140 in 9 parks (1,685 Western Grey, 49 Red, 406 Euro)	2,749 in 11 reserves (1,410 Western Grey, 90 Red, 1,249 Euro)

Commercial shooting in reserves has more than doubled since 2023, when about 1,100 animals were taken. In 2024 half of all non-commercial culling on parks, 1,077 animals, took place in Gawler Ranges National Park. DEW describes the parks harvest as "a very small percentage of the overall harvest". It is nonetheless growing every year, and on land set aside to protect wildlife.

2.7 Permits to Destroy Wildlife, 2025: Kangaroos as the principal target

DEW's Permit to Destroy Wildlife report for 2025 lists every native species landholders and others were authorised to kill in South Australia that year. Kangaroos and wallabies dominate it. Of 229,505 native animals authorised for destruction, 186,255 (81 per cent) were Kangaroos or wallabies. The Western Grey Kangaroo alone accounted for 118,967, more than half of the total.

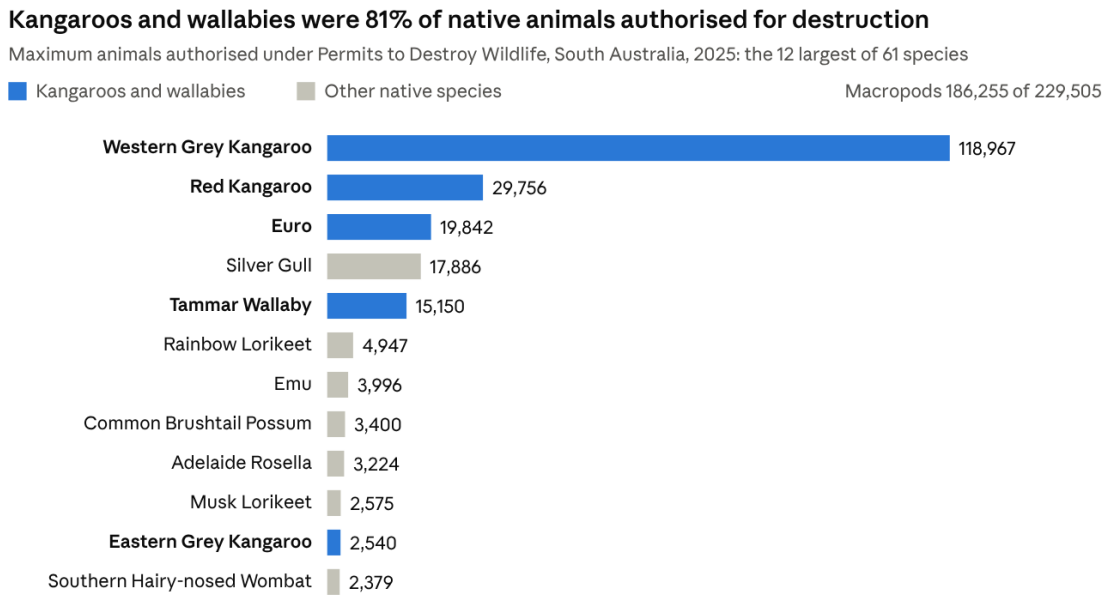


Figure 2.4. Maximum animals authorised under Permits to Destroy Wildlife, South Australia, 2025: the 12 largest of 61 species

Source: DEW, Permit to Destroy Wildlife report, 1 January to 31 December 2025 (January 2026); shares derived. Excludes 30 species listed only for airport safety with no stated number.

The report covers permits issued under section 53(1)(c) and (d) of the *National Parks and Wildlife Act 1972*. In all, 1,398 permits were issued covering 61 native species. For 30 of them, mostly birds near airports, no number is given. The figures are the maximum number of animals permitted, not the number killed.

Table 2.9. Animals authorised under destruction permits by species, 2025

Species	Animals authorised	Permits listing the species	Average per permit (derived)	Share of all animals authorised
Western Grey Kangaroo	118,967	1,236	96	52%
Red Kangaroo	29,756	229	130	13%
Euro	19,842	162	122	9%
Tammar Wallaby (Kangaroo Island)	15,150	57	266	7%
Eastern Grey Kangaroo	2,540	45	56	1%
Kangaroos and wallabies	**186,255**	**1,729 listings**	**108**	**81%**
All other native species (26 with a stated number)	43,250	598 listings	—	19%
Total	**229,505**	**1,398 permits**		**100%**

Four points stand out:

- **The Western Grey Kangaroo is named on 1,236 of the 1,398 permits issued (88 per cent).** The permit system is, in practice, a Kangaroo-killing system with other species attached.
- **Destruction permits now rival the commercial quota.** For the Western Grey, 118,967 animals were authorised for destruction against a commercial quota of 164,200 and an actual commercial take of 33,009. For the Tammar Wallaby, 15,150 were authorised for destruction on Kangaroo Island, where the commercial industry took none of its 19,200 quota.
- **The targeting is growing fast.** Macropods authorised under destruction permits rose from 61,489 in 2022 and 109,497 in 2024 to 186,255 in 2025, a threefold increase in three years.

- **Other native animals are caught up in the same system.** The report also authorises the destruction of 3,996 Emus and 2,379 Southern Hairy-nosed Wombats, South Australia's faunal emblem, as well as thousands of lorikeets, rosellas, possums and gulls.

Taken together, the commercial quota and destruction permits authorised the killing of a large share of each species' estimated population in 2025:

Table 2.10. Total killing authorised as a share of population estimates, 2025

Species	Commercial quota 2025	Destruction permits 2025	Total authorised	Population estimate	Share of estimate authorised (derived)
Western Grey Kangaroo	164,200	118,967	283,167	1,250,138	23%
Red Kangaroo	563,900	29,756	593,656	2,975,551	20%
Euro	46,400	19,842	66,242	460,774	14%
Eastern Grey Kangaroo	12,100	2,540	14,640	121,539	12%
Tammar Wallaby	19,200	15,150	34,350	384,671	9%
Total	**805,800**	**186,255**	**992,055**	**5,192,673**	**19%**

On the Government's own estimates, almost one Western Grey Kangaroo in four was authorised for killing in 2025. If those estimates are inflated, as the commercial shortfall suggests, the true share is far higher. Only a small fraction of these authorisations is ever carried out: about 5 per cent of permitted animals were reported killed in the period examined in section 2.6. That says less about restraint than about how few animals can now be found.

Data note. The PDW report gives 118,967 Western Grey Kangaroos and 1,398 permits. DEW's 2025 Harvest Report (Table 14) gives 116,367 Western Greys and counts 1,740 permits, because a permit naming several species is counted once for each. The macropod totals differ accordingly (186,255 against 183,655). Section 2.6 uses the Harvest Report figures for comparison with earlier years.

2.8 Bounties and drought subsidies

In 2025 the State Government spent public money to increase the kill. The result was an increase of about 18,000 animals on 2024, a fraction of what was promised.

Table 2.11. Government spending to increase the kill, 2025

Measure (2025)	Amount	Purpose	Reported outcome
Drought Support Package, Kangaroo allocation (from May 2025)	$900,000 of a $73 million package	Subsidies to new and existing field processors for operating costs; small grants	19 drought permits to field processors for 36,200 animals; 1,485 taken (4%)
Primary producer incentive (from October 2025)	$350,000	Payments to landholders to "remove starving Kangaroos" under their own permits	Not reported
Total	**$1.25 million**		

In July 2025 the Minister for Primary Industries and Regional Development, the Hon. Clare Scriven MLC, wrote to Hylands:

> *"Consecutive good seasons has meant Kangaroo numbers have boomed, and the current drought has left them with little to eat… Currently, it is estimated there are 5 million to 6 million Kangaroos in South Australia, with only approximately 100,000 harvested per year. The additional measures are estimated to remove between 50,000 to 100,000 additional Kangaroos."*

The 2025 Harvest Report allows that claim to be tested:

- The sustainable-use harvest rose from 106,503 in 2024 to 124,192 in 2025, an increase of 17,689. That is the most the measures could have added, before any allowance for seasonal conditions or industry demand, which DEW itself cites.
- Before the measures, the Nature Knowledge Channel forecast a 2025 kill of 94,500, later revised to 106,500. Hylands estimated that the bounty added between 7,455 and 20,000 animals. The final figure falls within that range, and far below the Minister's 50,000 to 100,000.
- If the full $1.25 million was spent, the subsidy amounts to roughly $70 for each additional Kangaroo killed (derived).

The incentives also carry costs beyond the animals. Subsidised shooters travel further into country where Kangaroo densities are already very low, adding diesel emissions in a low-value trade. Meanwhile government staff administered a Kangaroo bounty while a major algal bloom affected the State's coastline for months. The Arid Landscape Board and the ABC had reported Kangaroos so numerous they were "destroying the native landscape". When Hylands offered to send a film crew to record them, he was told there was nothing to see, as the Kangaroos had "dispersed".

2.9 The parliamentary inquiry and the language of management

South Australia's Parliament agreed in September 2024 to examine its Kangaroo program. By the time the State went to the polls in March 2026, no findings had been published, and the Government had expanded the killing in the meantime.

The inquiry

On a motion moved by the Hon. Tammy Franks MLC, as amended, the Legislative Council referred the matter to the Natural Resources Committee in September 2024. The Inquiry into Kangaroo and Wallaby Populations in South Australia called for submissions on 4 March 2025, closing on 18 April 2025. Its terms of reference cover:

1. the effect of commercial and non-commercial harvesting on Kangaroo and wallaby populations;
2. the adequacy and enforcement of the two national codes of practice for humane shooting;
3. the sustainability of current harvesting levels and their long-term impact;
4. the effects of harvesting on animal health and welfare, wildlife rescuers and carers, and First Nations peoples;
5. alternative strategies for humane treatment and conservation.

Hylands argued in 2024 that the *Commercial Kangaroo Management Plan 2025–2029* should not be approved before the inquiry reported. It was approved regardless. In January 2026 he described the inquiry as incomplete and "drag[ging] on without conclusion". While it was under way, the Government introduced the drought subsidies, a further incentive scheme and permits covering all five commercial species. We found no complete published report from the Committee, and inquiries generally lapse when Parliament is dissolved for an election. Its current status should be confirmed with the Committee.

Four myths

The case for large-scale killing rests on four claims about Kangaroo abundance since colonisation, each contradicted by the historical record:

Table 2.12. Claims about Kangaroo abundance and what the evidence shows

Claim	What the evidence shows
Artificial water points have increased Kangaroo numbers	Land clearing destroyed many natural water sources, and the Government now advises fencing water points off from wildlife
Improved pastures have increased numbers	Vast areas of habitat were cleared to create those pastures

Claim	What the evidence shows
Numbers rose because Aboriginal hunting ceased	Small seasonal hunts were replaced by industrial shooting with high-powered rifles, vehicles, chillers and national and international markets
Kangaroos now occupy a larger range	Historical records show range contraction, with macropods lost regionally and entirely across the landscape

South Australia has a long list of post-colonial extinctions and threatened species. Asked how the commercially shot species alone could have "exploded" while every other group declined, the Government could not answer.

The vocabulary

The language used about Kangaroos does much of the persuasive work. Terms to treat with suspicion include *overabundance*, *hyperabundant*, *booming*, *exploding*, *irruption*, *plague*, *pest*, *harvest*, *dressed in the field*, *humane*, *sustainable*, *conservation cull* and *grazing pressure*. South Australia's own formulation is that "Kangaroo over-abundance and over-grazing presents a threat to the condition and resilience of South Australia's landscapes, to Aboriginal cultural values, to the sustainability of the livestock grazing industry, and to conservation values". Hylands notes that none of these claims is supported by published measurement.

2.10 Discussion, conclusions and recommendations

South Australia's own data do not support its claim of a sustainable harvest. Four decades into the program, the State sets quotas it cannot fill, from estimates that move by millions of animals from year to year.

1. **The industry cannot find the animals the estimates describe.** Commercial take has been 15 to 17 per cent of quota every year since 2023. The Red Kangaroo kill is 73 per cent below its mid-1990s peak, even though the quota now sits at 373,700.
2. **The estimates are not credible.** A rise of 77 per cent between 2022 and 2025 was followed by a fall of 31 per cent in the Red Kangaroo estimate in a single year. Two species are still managed on surveys three and four years old.
3. **Every lever to increase the kill has been pulled, with little effect.** New species, new areas, national parks, drought subsidies and landholder incentives together added about 18,000 animals in 2025.
4. **Unreported killing is growing fastest.** Destruction permits authorised 183,655 animals in 2025, three times the 2022 level. Kangaroos and wallabies are 81 per cent of all native animals authorised for destruction, and together with the commercial quota, almost a quarter of the estimated Western Grey population was authorised for killing in 2025. Where returns exist, about 5 per cent of permitted animals are reported killed.
5. **The costs fall on breeding females and their young.** In 2025, 31,101 females were killed commercially, with an estimated 31,000 dependent young uncounted.

This is the pattern traced in Victoria (Chapter 1), and more advanced. South Australia shows what a commercial program looks like after 40 years: the quotas outlive the animals they were set for. As Hylands puts it, "there is no achievable ceiling to the killing because populations are overstated".

Questions for further research

- How many animals were actually killed under the 183,655 destruction-permit authorisations in 2025?
- What explains a 38 per cent rise in the combined estimate in 2023, and a 31 per cent fall in the Red Kangaroo estimate in 2025?

- Why are the Tammar Wallaby and Eastern Grey Kangaroo quotas still set from 2022 and 2023 estimates?
- How much of the $1.25 million in 2025 subsidies was paid out, to whom, and for how many animals?
- Are joeys being presented or processed under the drought incentive schemes?
- What became of the Natural Resources Committee inquiry, and will its evidence be published?

Recommendations

1. Remove the Euro from the commercial list immediately, together with the species added in 2020: the Kangaroo Island Sooty Kangaroo, the Tammar Wallaby and the Eastern Grey Kangaroo.
2. Commission an independent investigation into the status and future of the Red Kangaroo and Western Grey Kangaroo in South Australia.
3. Require holders of destruction permits to report the number of animals actually killed, and publish the results.
4. End public subsidies and bounties for killing Kangaroos.
5. Complete and publish the parliamentary inquiry, and review the *Commercial Kangaroo Management Plan 2025–2029* in light of its findings.
6. Given the public funds involved and the Commonwealth's approval of the plan, hold a federal inquiry into the South Australian program.

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CHAPTER 3

Commercial Exploitation of Kangaroos in New South Wales

Population estimates, quotas, actual take and licences to harm, 2023–2026

Author	Peter Hylands
Prepared	October 2026
Data current to	June 2026 (NSW harvest figures)

Executive summary

New South Wales runs one of Australia's two largest commercial Kangaroo industries. In 2025 it set a quota of 2,186,952 and its shooters killed 634,087, or 29 per cent. The 1,552,865 animals left unshot are more than the entire commercial take across mainland Australia that year. This chapter tests the State's estimates and quotas against its own data, including the NSW Government's 2025 Annual Report (April 2026) and harvest figures to June 2026.

The principal findings are:

1. **The population estimates swing by millions from year to year.** The State's estimate rose from 9.63 million in 2023 to 13.91 million in 2024, a 44 per cent increase. It then fell to 9.59 million in 2025. In the Griffith North zone the Red Kangaroo estimate rose almost tenfold in a year, from 39,344 to 381,298. At most, Kangaroo breeding could have added about 3,600.
2. **The survey method has changed repeatedly.** Changes were made in 2001, 2016, 2018, 2024 and again in 2025, when fewer observers were used. The commercial shooting zones have expanded at the same time, to 15 zones covering the whole State except the coastal strip.
3. **Quotas are never approached.** Commercial take was 37 per cent of quota in 2024 and 29 per cent in 2025. For 2026 the quota fell by a third to 1,453,025, and Western Grey shooting was suspended in the Bourke and Broken Hill zones.
4. **Non-commercial killing is rising fast.** Licences to harm authorised the killing of 485,668 native animals in 2025, double the 234,000 of 2023. Of 2,254 licence applications in 2024, only three were refused. Inside the commercial zones alone, licences authorised 439,620 Kangaroos in 2025.
5. **Together the two systems account for close to a million Kangaroos a year.** In 2025, 634,087 were taken commercially and up to 304,923 under non-commercial licences, before any dependent young are counted (derived).

In July 2026 a Legislative Council committee found the licence to harm system "out of date". It recommended that applicants be required to show evidence of damage, and that a public register of animals actually killed be created.

3.1 Introduction, context and data sources

New South Wales shows the commercial model at full scale. Shooting covers almost the whole State, and quotas run to millions a year. The State also maintains a parallel system of non-commercial licences that is growing faster than the commercial industry itself.

Table 3.1. Key features of the New South Wales commercial industry, 2025

Feature (2025)	New South Wales
Commercial shooting zones	15, covering the whole State except the coastal strip
Species on the commercial list	Red Kangaroo, Eastern Grey Kangaroo, Western Grey Kangaroo, Common Wallaroo
Licensed commercial harvesters	408
Population estimate setting the 2025 quota	13,915,315
Commercial quota / actual take	2,186,952 / 634,087 (29%)
Standard harvest rate	17% of the estimate for Red Kangaroos; 15% for Grey Kangaroos and Wallaroos
Annual cost of aerial surveys	About $400,000 to $500,000
Gross value of the commercial trade	About $12.25 million (2024 estimate)

The industry operates under the *NSW Commercial Kangaroo Harvest Management Plan 2022–2026*, approved by the Commonwealth as a Wildlife Trade Management Plan. It is administered through the NSW Kangaroo Management Program. Non-commercial killing is authorised through licences to harm under the *Biodiversity Conservation Act 2016*.

The costs of the trade fall partly on others. The survey and management bill, the costs to tourism and the human harms associated with shooting are not counted against the industry's $12.25 million gross value.

Sources. The chapter draws on two papers by Peter and Andrea Hylands for the Nature Knowledge Channel: *2026: Commercial exploitation of Kangaroos in New South Wales* (18 December 2025) and *Harms permits in New South Wales* (19 February 2026). These are updated with the NSW Government's *Kangaroo Management Program 2025 Annual Report* (April 2026), the *2026 Quota Report* (December 2025) and the monthly commercial take reports for 2026. They also draw on reporting of the Legislative Council Animal Welfare Committee's inquiry into licences to harm native animals. Figures marked *derived* are calculated from those sources.

3.2 Population estimates and survey methods

The State's population estimate for the four commercial species has moved by more than four million animals in each of the last two years. No population of large, slow-breeding mammals can change at that rate.

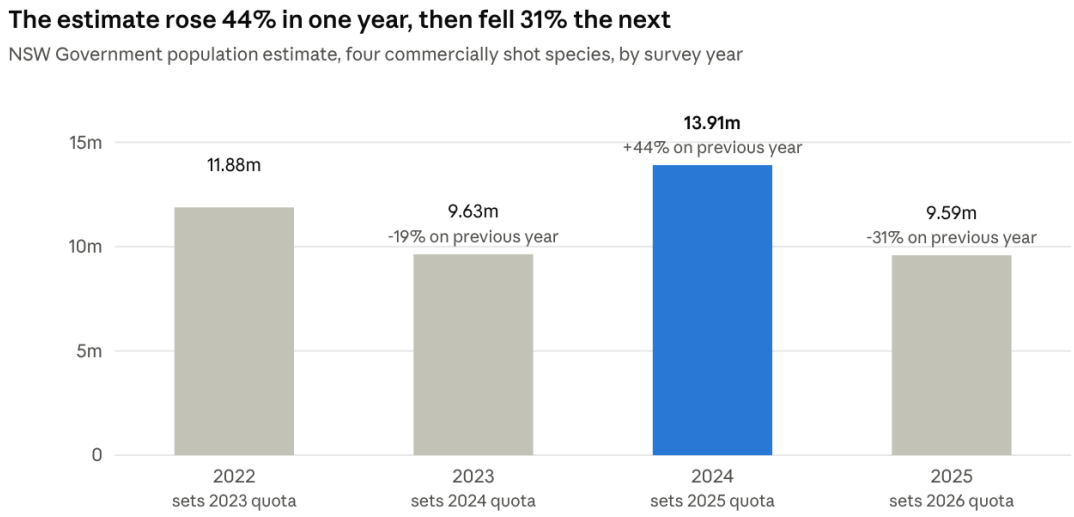


Figure 3.1. NSW Government population estimate, four commercially shot species, by survey year

Source: NSW Government quota reports as compiled by Hylands and Hylands (2025); percentage changes derived.

The 2024 estimate of 13.91 million implied an increase of 4,275,788 Kangaroos in twelve months. It set a 2025 quota of 2,186,952, up 702,880 on the year before. The 2025 survey then recorded a fall of 4,323,879, and the 2026 quota fell by 733,927. Neither movement was matched by any change in what shooters could actually find: commercial take rose steadily through both years (section 3.3).

A zone-level example: Griffith North

Table 3.2. Red Kangaroo estimates, Griffith North zone, 2023–2025

Survey year	Red Kangaroo estimate, Griffith North	Change	Density per km²
2023	39,344	−80%	0.6
2024	381,298	+869%	6.0
2025	241,178	−37%	3.8

Between 2023 and 2024 the Red Kangaroo estimate for Griffith North rose by 341,954. Even if every animal had survived and bred at the maximum possible rate, the population could have grown by about 3,600 (Hylands' estimate). The remaining 338,000 Kangaroos can only be an artefact of the survey or the model. Because the 2023 density fell to the closure threshold, the zone's 2024 Red Kangaroo quota was zero. By 2026 its quota was 41,000.

Changes in survey method

The NSW Government's own record lists five changes to survey design or analysis since 2001. Each one makes comparison across years less reliable.

Table 3.3. Changes to NSW survey methods since 2001

Year	Change to survey method
2001	100-metre correction factors introduced
2016–2017	Long east–west transects retained, but data collection and analysis changed to mark–recapture distance sampling (MRDS)
2018	Zigzag transects within randomly placed 50 × 20 km blocks, with MRDS
2024	Transects shortened and increased in number, following the CREEM review
2025	Fewer observers used in the Western Plains survey; MRDS retained

The 2026 quotas also rest on estimates of different ages. The Western Plains and Northern Tablelands were surveyed in 2025. The Central Tablelands estimate dates from 2023, and the South East Tablelands from 2024.

3.3 Quotas and actual take, 2018–2026

Commercial take in New South Wales has stayed between about 400,000 and 640,000 a year since 2018, while quotas have swung between 1.45 and 2.19 million. The quotas follow the estimates; the take does not.

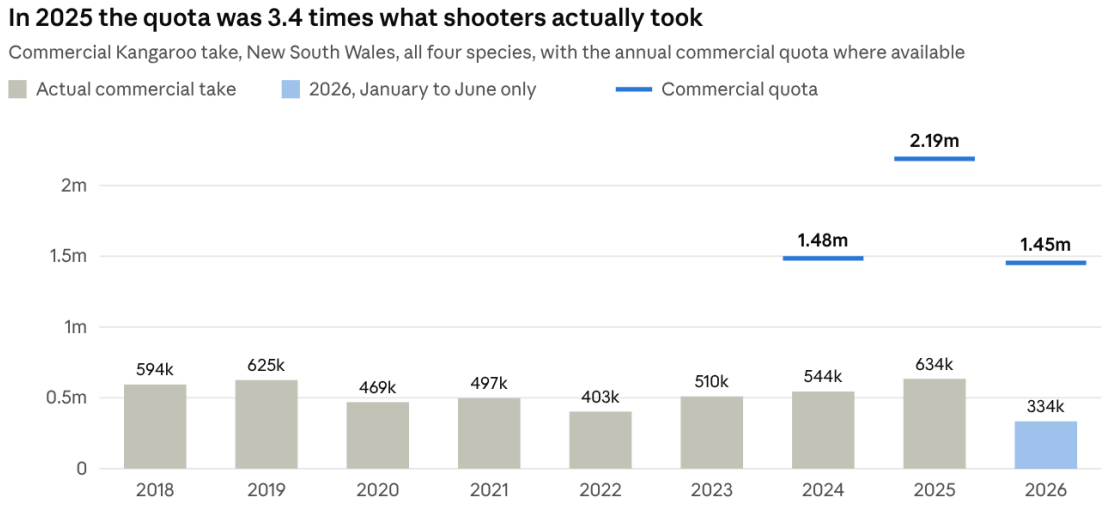


Figure 3.2. Commercial Kangaroo take, New South Wales, all four species, with the annual commercial quota where available

Source: NSW Government annual and monthly harvest reports; 2018–2023 as compiled by Hylands and Hylands (2026); 2024–2025 from the 2025 Annual Report; 2026 to 30 June from the June 2026 commercial take report.

2025 by species

Table 3.4. Population estimate, quota and actual take by species, 2025

Species	Population estimate	Quota	Actual take	Share of quota	Females in take
Eastern Grey Kangaroo	7,506,031	1,125,908	318,218	28%	15.5%
Red Kangaroo	5,017,282	852,938	269,810	32%	8.6%
Western Grey Kangaroo	1,026,386	153,264	34,826	23%	9.2%
Common Wallaroo	365,616	54,842	11,233	20%	0.3%
Total	**13,915,315**	**2,186,952**	**634,087**	**29%**	**11.9%**

The final 2025 take of 634,087 is higher than the Nature Knowledge Channel's estimate of about 570,000 made in February 2026. It is 16.5 per cent above the 2024 take of 544,317. Even so, it amounts to 4.6 per cent of the estimated population, against a quota set at 15 to 17 per cent. The unused quota of 1,552,865 exceeds the estimated commercial take for the whole Australian mainland in 2025 (about 1.35 to 1.5 million). No zone was reduced or suspended in 2025, and the special quota was not used.

The 2026 quota and first-half take

Table 3.5. Quota and first-half take by species, 2026

Species	2026 quota	Maximum special quota	Take, January to June 2026	Share of quota
Eastern Grey Kangaroo	839,463	87,475	189,661	23%
Red Kangaroo	533,736	47,095	128,103	24%
Western Grey Kangaroo	54,318	6,159	11,830	22%
Common Wallaroo	25,508	3,073	4,389	17%
Total	**1,453,025**	**143,802**	**333,983**	**23%**

The 2026 quota is a third lower than in 2025, after the estimate fell by 4.3 million. For 2026, shooting was also suspended or reduced on population grounds in several zones:

- Western Grey Kangaroos are suspended in the Bourke and Broken Hill zones, and reduced to 10 per cent of the estimate in Coonabarabran and Narrabri.
- Wallaroos are suspended in the Armidale zone, and reduced to 10 per cent in the Upper Hunter.

Take in January and February 2026 (99,473) was 6,766 higher than in the same months of 2025 (92,707). By the end of July, 502,225 tags had been allocated, 35 per cent of the annual quota. At the first-half rate, the 2026 take would be about 670,000 (derived), roughly matching 2025 on a quota a third smaller and a population estimate 31 per cent lower. A take that holds steady while the estimate swings by four million animals either way is further evidence that the estimates, not the Kangaroos, are what is moving.

Data note. Hylands and Hylands (2026) give the 2024 take as 532,415; the Government's 2025 Annual Report gives 544,317, which is used here. The 2026 species quotas including special quota are Red 580,831, Eastern Grey 926,938, Western Grey 60,477 and Wallaroo 28,581.

3.4 Shooting zones

The commercial kill is concentrated in a handful of western and Riverina zones. Five of the fifteen zones produced almost two-thirds of the 2025 take.

Table 3.6. Commercial take by zone, 2025 and January to June 2026

Zone	Take 2025	Share of NSW take 2025	Take Jan–Jun 2026	Share of 2026 zone quota taken by June
Broken Hill (02)	118,531	18.7%	41,661	22%
Lower Darling (04)	80,524	12.7%	41,605	48%
Coonabarabran (10)	72,374	11.4%	31,737	45%
Griffith South (18)	71,640	11.3%	52,627	60%
Griffith North (17)	66,730	10.5%	39,638	36%
Five zones	**409,799**	**64.6%**	**207,268**	
Lowest: Cobar (06)	9,447	1.5%	—	—

Three zone-level patterns stand out:

- **Broken Hill is being worked out.** It was the largest zone in 2025, with 88,181 Kangaroos taken in the first nine months alone. For 2026 Western Grey shooting there is suspended on population grounds.
- **The Riverina zones are now carrying the industry.** Griffith South had taken 60 per cent of its 2026 quota by June, and 85 per cent of its tags had been allocated by the end of July. This is the zone next to Griffith North, where the Red Kangaroo estimate rose almost tenfold in 2024.

- **Closures follow intensive shooting.** Western Grey shooting is suspended in Bourke and Broken Hill, and Wallaroo shooting in Armidale. These are signs, in the Government's own decisions, of local populations falling below the levels at which shooting can continue.

Until September 2025, 568,600 commercial tags had been issued, 26 per cent of the 2025 quota, leaving 1,618,352 unallocated. Shooters do not apply for tags they cannot use.

3.5 Females and joeys

The NSW commercial kill is heavily male: 88 per cent of animals taken in 2025 were male. Even so, about 75,000 females were shot (derived), and neither their dependent young nor the young of other animals killed appear in the harvest data.

Table 3.7. Females in the commercial take by species, 2025

Species, 2025	Actual take	Females in take	Females shot (derived)
Eastern Grey Kangaroo	318,218	15.5%	about 49,300
Red Kangaroo	269,810	8.6%	about 23,200
Western Grey Kangaroo	34,826	9.2%	about 3,200
Common Wallaroo	11,233	0.3%	about 30
Total	**634,087**	**11.9%**	**about 75,000**

Hylands and Hylands estimate that at least 420,000 joeys were killed in the commercial trade between 2023 and 2025, and at least 660,000 between 2018 and 2022. These estimates are considerably higher than a count based only on the reported share of females would give. The source does not set out its method; the difference may reflect allowance for young at foot and for under-reporting of females. On either basis, the toll on dependent young is very large and entirely unreported.

A kill so heavily biased towards large males also matters ecologically. Removing the largest breeding males year after year changes the age and sex structure of populations, a pressure that population estimates based on counting heads do not capture.

3.6 Licences to harm

Alongside the commercial trade, New South Wales issues licences to harm native animals, almost always to kill them. The number of animals authorised doubled between 2023 and 2025, to 485,668. Kangaroos make up most of them.

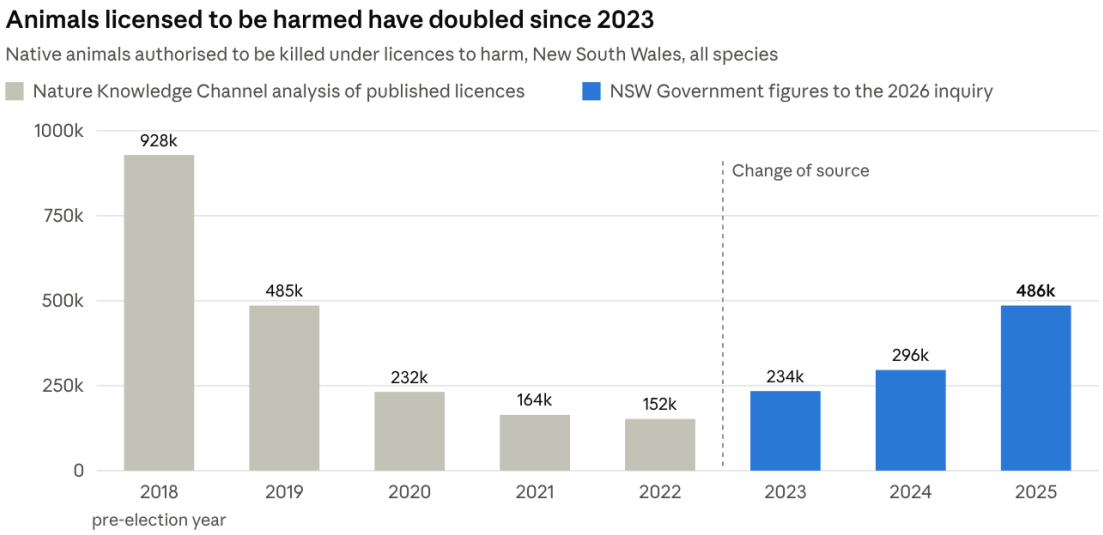


Figure 3.3. Native animals authorised to be killed under licences to harm, New South Wales, all species

Source: 2018–2022: Nature Knowledge Channel analysis of licences published by the NSW Government (Hylands and Hylands, 2026); 2023–2025: NSW Government figures reported to the Legislative Council inquiry into licences to harm native animals. The two series are not strictly comparable.

The licence system is close to automatic. In 2024, 2,254 licence applications were made, and three were refused. The peak of 928,361 animals in 2018 came in the year before the 2019 State election. Hylands attributes it to a Government seeking votes in regional communities by promoting the killing of wildlife, with Kangaroos the main casualty in 2018 and 2019.

Kangaroos under non-commercial licences, 2025

The 2025 Annual Report gives the scale of non-commercial Kangaroo killing inside the commercial zones:

Table 3.8. Non-commercial Kangaroo licences in the commercial zones, 2025

Non-commercial Kangaroo licences, commercial zones, 2025	Kangaroos
Authorised under licences	439,620
Reported culled	187,220
Authorised under licences with no return lodged	up to 117,703
Maximum killed (reported plus unreported)	**304,923**
of which Eastern Grey Kangaroo	241,906
of which Red Kangaroo	34,075
of which Western Grey Kangaroo	21,011
of which Common Wallaroo	7,931

Three points follow:

- **Kangaroos appear to dominate the licence system.** If the 439,620 Kangaroos authorised in the commercial zones are counted on the same basis as the 485,668 native animals authorised statewide, Kangaroos are about nine in every ten animals licensed to be harmed (derived). This mirrors South Australia, where Kangaroos and wallabies were 81 per cent of animals on destruction permits (Chapter 2).
- **Many licences go unreported.** Licences covering up to 117,703 Kangaroos had no return lodged, so what happened under them is unknown.

- **Combined, close to a million Kangaroos were killed or could have been.** The 634,087 taken commercially and up to 304,923 taken under licence give a maximum of 939,010 Kangaroos in 2025, before dependent young (derived). Adding all native animals licensed to be harmed, Hylands estimates that about 1.2 million protected animals were killed at Government behest in New South Wales in 2025, including joeys.

These figures do not include the numbers of animals killed by road strike, land clearing, mining and development, which no permit system counts.

3.7 Parliamentary inquiries and public reporting

New South Wales has held two parliamentary inquiries bearing on Kangaroo killing in five years. Both found serious failings, and both were followed by more killing, not less.

Table 3.9. New South Wales parliamentary inquiries, 2021 and 2026

	2021 inquiry	2026 inquiry
Subject	Health and wellbeing of kangaroos and other macropods in NSW	Licences to harm native animals
Committee	Legislative Council Portfolio Committee No. 7 (chair: Cate Faehrmann MLC)	Legislative Council Animal Welfare Committee
Reported	15 October 2021; 405 submissions, 23 recommendations	July 2026
Key findings	Doubts over the modelling used to set quotas; troubling evidence on the killing of joeys; an industry that "lacks transparency, it lacks monitoring and compliance"	The licence to harm system is "out of date and should be reviewed and updated"
Key recommendations	Review of population modelling by the Natural Resources Commission; an independent panel of ecologists; collection and publication of data on all joey deaths; stronger welfare monitoring; no new harvest plan until the recommendations were considered	Non-lethal management first; evidence of damage before a licence is granted; a public register of animals actually killed, reasons and methods; proactive compliance inspections and audits of licence returns
What followed	Harvest Management Plan 2022–2026 approved; survey transects changed in 2024 after the CREEM review; no joey data published; 2025 quota raised to 2.19 million	Government response pending; licence functions partly moved to the new Biodiversity and Heritage Regulator

The 2021 recommendation to publish data on joey deaths has not been implemented: the 2025 Annual Report gives sex ratios but no figures for dependent young. The current Harvest Management Plan expires at the end of 2026, so the 2026 inquiry's recommendations bear directly on its successor.

The ABC and "exploding" Kangaroos

Public understanding is shaped by reporting that repeats the claim of abundance. When the State's 2023 estimate showed a significant fall, the ABC reported that "Kangaroo numbers in the state's west are exploding, and farmers aren't able to get harvesters out to shoot enough of them". According to Hylands, it has not reported the fall of 4.3 million in the 2025 estimate. Hylands describes five decades of such stories, in which claims of plagues are repeated each year regardless of the Government's own figures.

3.8 Discussion, conclusions and recommendations

The New South Wales record repeats, at the largest scale, the pattern found in Victoria and South Australia. Estimates move by millions while the actual kill barely changes, quotas are set far above what can be found, and a second, less accountable licence system grows alongside the commercial one.

1. **The estimates are not credible.** A rise of 4.3 million followed by a fall of 4.3 million, and a tenfold rise in one zone in a single year, cannot describe real populations. Five changes of survey method since 2001 make the series harder still to interpret.
2. **The verified record contradicts the estimates.** Commercial take has stayed between 400,000 and 640,000 a year since 2018, whatever the estimate. Only 29 per cent of the 2025 quota was taken, and unused tags ran to more than 1.6 million.
3. **Local decline is now visible in the Government's own decisions.** Western Grey shooting is suspended in Bourke and Broken Hill, and Wallaroo shooting in Armidale. Broken Hill was the largest commercial zone in 2025.
4. **Licensed killing outside the trade is growing fastest.** Animals authorised under licences to harm doubled between 2023 and 2025, and Kangaroos appear to make up most of them. Combined with the commercial take, close to a million Kangaroos were killed or authorised to be killed in 2025.
5. **Parliament's warnings have not been acted on.** Joey deaths are still unreported five years after the 2021 inquiry asked for them. The 2026 inquiry found the licence system out of date.

Hylands asks how, after a substantive inquiry, the Commonwealth continues to approve the program. With the current Harvest Management Plan ending in 2026, that question now falls due.

Questions for further research

- What explains the rise of 341,954 Red Kangaroos in the Griffith North estimate between 2023 and 2024?
- How do the survey changes of 2024 and 2025, including fewer observers, affect comparability with earlier estimates?
- How many Kangaroos were authorised and killed under licences to harm outside the commercial zones?
- What happened under licences covering up to 117,703 Kangaroos for which no return was lodged?
- How many dependent young are killed each year in the commercial and non-commercial systems?
- How will the Government respond to the 2026 inquiry, and will the next Harvest Management Plan await that response?

Recommendations

1. Do not approve a new Commercial Kangaroo Harvest Management Plan until an independent review of population estimates and survey methods has reported.
2. Close commercial shooting in any zone where the population estimate has moved by more than is biologically possible, until the estimate is verified.
3. Implement the 2021 recommendation to collect and publish data on all joey deaths.
4. Implement the 2026 recommendations in full, including evidence of damage before a licence is granted and a public register of animals actually killed.
5. Require returns for every licence to harm, and refuse further licences to holders who do not lodge them.
6. Account for commercial and non-commercial killing together when setting quotas.

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CHAPTER 4

Commercial Exploitation of Kangaroos in Queensland

The commercial harvest and Damage Mitigation Permits, 2001–2026

Author	Peter Hylands
Prepared	October 2026
Data current to	7 October 2026 (DETSI harvest update)

Executive summary

Queensland sets the largest Kangaroo quotas in Australia. In 2025 the commercial quota was 2,941,550 and shooters took 609,842, or 21 per cent. For 2026 the quota is 2,850,900, and by 7 October 504,071 had been taken. This chapter sets the Queensland record against the State's own data, including the Department of the Environment, Tourism, Science and Innovation's (DETSI) 2025 Annual Report (February 2026) and its Damage Mitigation Permit (DMP) records from 2014.

The principal findings are:

1. **The commercial take has fallen by three-quarters since 2006, while quotas have risen.** Take peaked at 2,000,085 in 2006 and fell to 516,847 in 2024. In 1992–1993 quotas of about 2.3 million produced takes of 1.6 to 1.7 million. In 2025 a quota of 2.94 million produced 609,842.
2. **Official estimates have halved since 2001, yet are still implausibly high.** The Government's estimate for the three commercial species fell from 37.6 million in 2001 to 19.3 million in 2025. The Nature Knowledge Channel estimates the true 2025 population at about 6.3 million.
3. **Local estimates rise and fall at biologically impossible rates.** The 2025 survey recorded a 94 per cent rise in Eastern Greys at Taroom and a 34 per cent rise in Red Kangaroos across zone 3. It also recorded falls of 88 per cent at Thargomindah and 35 per cent in Wallaroos statewide. The Government attributes these swings to animals moving across the landscape.
4. **Killing under DMPs has collapsed, but the DMP quota keeps growing.** DMP take fell from 419,358 in 2015 to 47,120 in 2025, a fall of 89 per cent. Over the same period the DMP allowance rose to 386,164 for 2026.
5. **Across both systems, four out of five authorised kills are never carried out.** In 2025 the commercial quota and DMP allowance together authorised 3,316,786 Kangaroos. The recorded kill was 656,962 (20 per cent, derived).
6. **The Whiptail Wallaby shows where this leads.** Its commercial take peaked at 53,908 in 1979, and by 2002 it had fallen to 190. A quota of 25,000 was kept for years while the take approached zero.

Queensland also authorises the killing of many other native species under DMPs: about 299,000 animals in 2023. It publishes no register of permits and no count of animals actually killed, except for Kangaroos and flying-foxes.

4.1 Introduction, context and data sources

Queensland has run Australia's largest commercial Kangaroo industry for decades. Through the 1990s and early 2000s it routinely killed more than 1.5 million Kangaroos a year. Its record therefore offers the longest view of what sustained commercial killing does to Kangaroo populations.

Table 4.1. Key features of the Queensland commercial industry

Feature	Queensland
Species on the commercial list	Red Kangaroo (*Osphranter rufus*), Eastern Grey Kangaroo (*Macropus giganteus*), Common Wallaroo (*Osphranter robustus*)
Commercial shooting zones	5 (since 2023; previously Central, Eastern and Western zones)
Licensed harvesters / dealers (2025)	935 / 89
Population estimate setting the 2026 quota	19,308,148
2026 commercial quota	2,850,900
2026 Damage Mitigation Permit allowance	386,164
Harvest rates	10 to 20% of the estimate, by species and zone
DMP limit	2% of the estimate for each species in each zone

The industry operates under the *Nature Conservation (Macropod) Conservation Plan 2017* and a Commonwealth-approved Wildlife Trade Management Plan. Non-commercial killing of the same species is authorised through Damage Mitigation Permits. These are Queensland's equivalent of the harms permits in New South Wales (Chapter 3) and the ATCWs in Victoria (Chapter 1). They may be granted where a protected animal "is causing, or may cause, damage or loss", or threatens human health or wellbeing.

The Government's position is that harvesting has no long-term detrimental effect:

> *"Long-term trend data relating to population size since 1992… demonstrates there has been no consistent increase or decline in the populations of Red Kangaroos, Eastern Grey Kangaroos or Eastern Wallaroos in Queensland… Thus, current harvest rates can be viewed as not having a long-term detrimental impact on populations." (Queensland Government, 2024)*

This chapter tests that statement against the Government's own population, harvest and permit data.

Sources. The chapter draws on *2026: Commercial exploitation of Kangaroos in Queensland* by Peter and Andrea Hylands (Nature Knowledge Channel, 14 November 2025). It is updated with DETSI's *Macropod Management Program Annual Report 2025* (February 2026) and the *2026 Quota Submission*. Further updates come from the Government's online harvest update (data to 7 October 2026) and DMP quota records for 2014–2026. Data on DMPs for other species come from Humane Society International's *Overview of Licences to Kill in Queensland* (October 2024). Figures marked *derived* are calculated from those sources.

4.2 Population estimates, 2001–2025

By the Government's own figures, Queensland's three commercial Kangaroo species have lost more than 18 million animals since 2001. The Government nonetheless maintains that there has been "no consistent increase or decline".

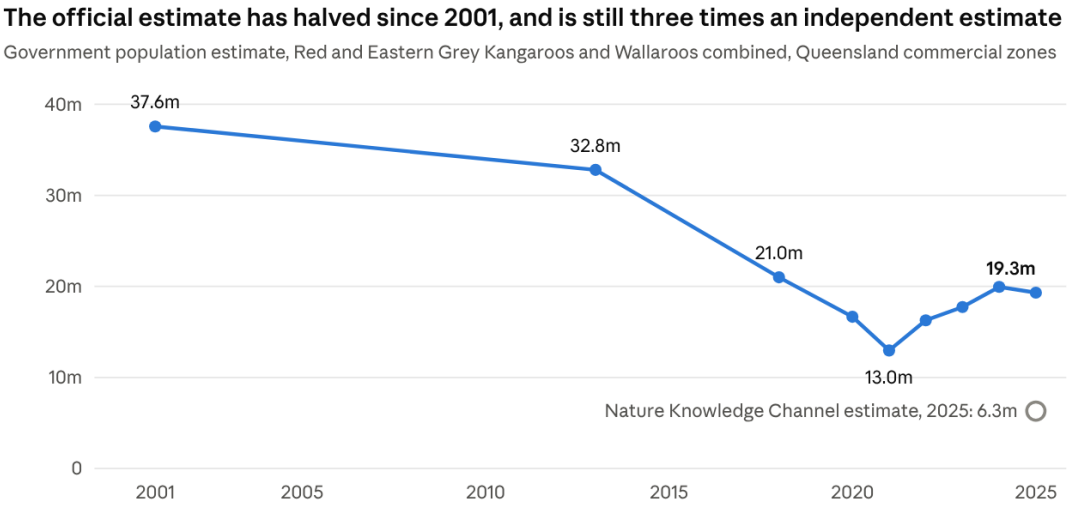


Figure 4.1. Government population estimate, Red and Eastern Grey Kangaroos and Wallaroos combined, Queensland commercial zones

Source: Queensland and Commonwealth Government population estimates as compiled by Hylands and Hylands (2025); years with published estimates only.

The estimate fell from 37.6 million in 2001 to 13.0 million in 2021. It then rose to 19.9 million by 2024, an increase of 54 per cent in three years, during which commercial shooting continued at around 600,000 a year. The Nature Knowledge Channel's own estimate for 2025 is 6.3 million, about one-third of the official figure.

The 2025 estimates by species

Table 4.2. Population estimates by species, 2024 and 2025, with 2026 quotas and DMP allowances

Species	Estimate 2024	Estimate 2025	Change	2026 commercial quota	2026 DMP allowance
Eastern Grey Kangaroo	10,672,400	11,169,185	+4.7%	1,394,250	223,384
Red Kangaroo	7,467,150	6,956,329	−6.8%	1,301,000	139,127
Common Wallaroo	1,809,250	1,182,634	−34.6%	155,650	23,653
Total	**19,948,800**	**19,308,148**	**−3.2%**	**2,850,900**	**386,164**

Local swings

The statewide totals conceal movements at survey sites and zones that no breeding population could produce.

Table 4.3. Reported changes at survey sites and zones, 2025

Location (2025 survey)	Species	Reported change on 2024
Taroom	Eastern Grey Kangaroo	+94%
Zone 3	Red Kangaroo	+34.2% (the only zone to rise)
Charleville	Red Kangaroo	Density doubled after March–April rain
Zone 4	Common Wallaroo	+27.8%
Barcaldine	Red Kangaroo	−58.7%
Quilpie	Eastern Grey Kangaroo	−48%
Thargomindah	Eastern Grey Kangaroo	−88%
Statewide	Common Wallaroo	−34.6%

The Government attributes these changes to "movement of animals at the landscape scale". It argues that falls at some sites are offset by rises at others in the same zone. It describes Wallaroo estimates as subject to the largest fluctuations because of "characteristically low detection rates". Large-scale movement is hard to reconcile with the extensive exclusion fencing now built across western Queensland, which Kangaroos cannot cross. Low detection, meanwhile, is a reason to doubt the estimates, not to set quotas from them.

Two zones are already at their limits. Eastern Grey numbers in zone 2 remain below the trigger point, so that zone's quota stays halved. In zone 1, at the western edge of the species' range, no Eastern Greys were seen in recent surveys, and no quota is set.

4.3 Quotas and actual take, 1991–2026

Queensland's commercial take has fallen from about 1.6 to 2.0 million a year in the 1990s and early 2000s to around 600,000 now. Over the same period the quotas have risen above what they were when the take was three times higher.



Figure 4.2. Commercial Kangaroo take, Queensland, all commercial species, with the commercial quota where available

Source: Queensland Government harvest data as compiled by Hylands and Hylands (2025); 2025 from DETSI Annual Report 2025; 2026 from DETSI harvest update (data to 7 October 2026). 1998–1999 include Whiptail Wallaby.

The take peaked at 2,000,085 in 2006 and reached its lowest point, 514,144, in 2020. In 1992 and 1993, quotas of about 2.3 million produced takes of 1.6 and 1.7 million, around 70 per cent of quota. In 2025 a quota of 2,941,550 produced 609,842. Hylands asks why, if the take keeps falling, the quotas keep going up.

2025 by species

Table 4.4. Quota and actual take by species, 2025

Species	Quota 2025	Actual take 2025	Share of quota	Share of estimated population	Share of 2024 quota taken
Eastern Grey Kangaroo	1,333,000	286,939	22%	2.7%	19%
Red Kangaroo	1,377,500	265,271	19%	3.6%	22%
Common Wallaroo	231,050	57,632	25%	3.2%	26%
Total	**2,941,550**	**609,842**	**21%**	**3.1%**	**21%**

No special quotas were used in 2025. The harvest was concentrated in Maranoa and Longreach shires, each with about 13 per cent of the total. The highest take relative to quota anywhere was the Wallaroo in zone 4, where 82 per cent of the zone quota was taken.

2026 to date

Table 4.5. Commercial quota and take to 7 October 2026

Species	2026 commercial quota	Take to 7 October 2026	Share of quota
Eastern Grey Kangaroo	1,394,250	244,600	18%
Red Kangaroo	1,301,000	204,044	16%
Common Wallaroo	155,650	55,427	36%
Total	**2,850,900**	**504,071**	**18%**

At the rate recorded to early October, the 2026 take will reach about 650,000 (derived), slightly above 2025 and above the Nature Knowledge Channel's forecast of 500,000 to 600,000. The Wallaroo stands out. Its estimate fell by a third in 2025, yet 36 per cent of its quota had been taken by October, and 75 per cent or more in zones 3 and 4.

Data note. The Government's online harvest update lists some zone quotas that differ from the 2026 Quota Submission: zone 1 Red Kangaroo 17,650 against 74,850, zone 1 Wallaroo 1,300 against 12,300, and zone 5 Eastern Grey 742,100 against 473,500. Some of its percentage figures are also inconsistent. Whether these reflect mid-year revisions or errors is not stated. Shares above use the Quota Submission figures. The harvest update also notes that its figures "may differ from the actual harvest". Hylands and Hylands (2025) give the 2025 Wallaroo share as 20 per cent; the Government's figures give 25 per cent.

4.4 Damage Mitigation Permits (harms permits)

Damage Mitigation Permits allow landholders to kill commercially shot species outside the commercial trade. Queensland is unusual in publishing the take under these permits, and the record is stark. The DMP take has fallen from 419,358 Kangaroos in 2015 to 47,120 in 2025, while the allowance has risen every year since 2022.

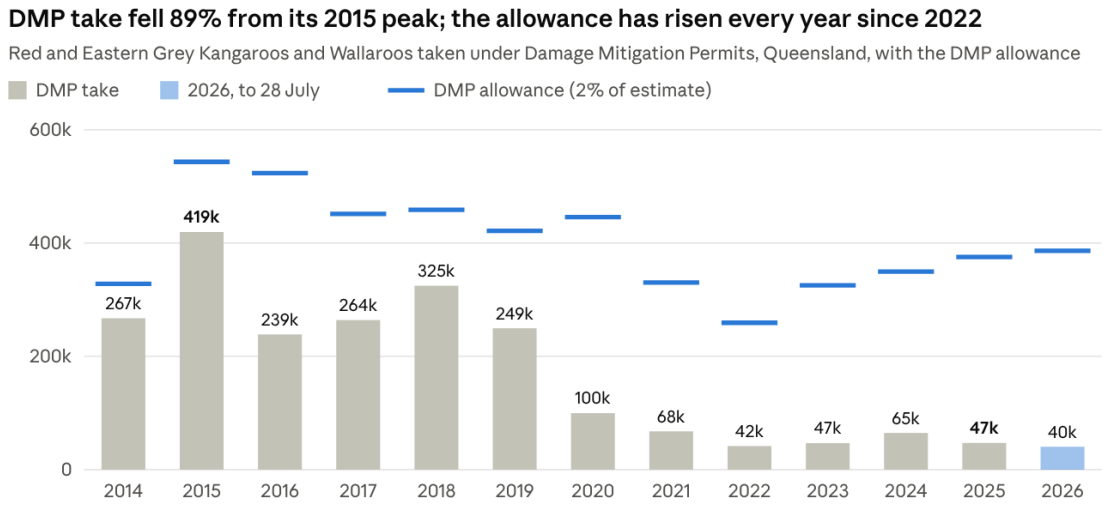


Figure 4.3. Kangaroos taken under Damage Mitigation Permits, Queensland, with the DMP allowance

Source: DETSI, Harvest macropod damage mitigation permit quota information (statewide 2014–2021; zone records 2022–2026, summed); 2026 allowance from the 2026 Quota Submission. Totals derived.

The DMP allowance is set at 2 per cent of each species' estimated population in each zone. From 2014 to 2019 between 46 and 81 per cent of it was used each year. Since 2020 the figure has been 13 to 22 per cent, falling to 12.6 per cent in 2025. The allowance is set from the population estimates, and most of it is no longer used. Hylands points to the fall from 419,354 in 2015 to 46,701 in 2023 as an indicator of decline.

Table 4.6. Damage Mitigation Permit take by species, 2015–2026

DMP take by species	2015	2019	2021	2025	2026 to 28 July
Eastern Grey Kangaroo	248,719	179,849	38,019	30,235	24,882
Red Kangaroo	103,393	48,142	17,150	12,230	11,710
Common Wallaroo	67,246	21,473	12,450	4,655	3,870
Total	**419,358**	**249,464**	**67,619**	**47,120**	**40,462**

Data note. DETSI's records label these figures "authorised", while its Annual Report describes the same series as take. Totals from 2022 are summed from DETSI's zone records (derived).

Commercial and DMP killing combined, 2025

Table 4.7. Commercial and DMP killing combined, 2025

2025	Authorised	Taken	Share taken
Commercial quota	2,941,550	609,842	21%
Damage Mitigation Permits	375,236	47,120	13%
Total	**3,316,786**	**656,962**	**20%**

For 2026 the combined authorisation is 3,237,064: a commercial quota of 2,850,900 and a DMP allowance of 386,164. On present rates about 700,000 will be taken (derived).

DMPs for other native species

Kangaroos are not the only animals killed under DMPs. Through a Right to Information request, Humane Society International found that Queensland authorised the killing of about 299,346 native animals under DMPs in 2023.

Table 4.8. Native animals authorised under DMPs, 2023

Native animals authorised under DMPs, Queensland, 2023	Number	Share
Native rats	210,000	70%
Macropods (Eastern Grey and Red Kangaroos, Wallaroos, Agile Wallabies)	55,002	18%
Native birds (including ibis, corellas, cockatoos, lorikeets, swallows and martins)	27,340	9%
Grassland melomys	5,000	2%
Black and little red flying-foxes	1,402	0.5%
Total (including other species)	**299,346**	**100%**

Queensland publishes no register of DMPs, no count of permits issued, and no total of animals actually killed under them, except for the commercial Kangaroo species and flying-foxes. Holders must lodge a return within 10 business days of a permit expiring, but there is no requirement to report non-target animals harmed. HSI was told it is "not known how many animals are reported as being killed under DMPs in any given year". From 1 July 2026, DMPs for shooting flying-foxes to protect crops are no longer available.

4.5 Females and joeys

Queensland's commercial kill is overwhelmingly male. Even so, about 61,800 females were shot in 2025 (derived), and the dependent young that died with them are not counted.

Table 4.9. Females in the commercial take by species, 2025

Species, 2025	Actual take	Females in take	Females shot (derived)
Eastern Grey Kangaroo	286,939	10.8%	about 31,000
Red Kangaroo	265,271	11.6%	about 30,800
Common Wallaroo	57,632	0.1%	about 60
Total	**609,842**	**10.1%**	**about 61,800**

Hylands and Hylands estimate that the 2025 commercial kill caused the deaths of a further 56,000 joeys by blunt force trauma or decapitation. The Government's harvest data say nothing about dependent young. The DMP figures in section 4.4 likewise count only adult animals, so the young of females killed under permit are also unrecorded.

The heavy male bias reflects the market preference for large animals. Year after year it removes the largest breeding males, changing the structure of populations in ways that counts from the air cannot detect. Young that survive the death of their mother face high natural mortality. The Government itself notes that joeys are vulnerable to foxes and Wedge-tailed Eagles.

4.6 The Whiptail Wallaby: a precedent

Queensland has already run one commercial macropod harvest to exhaustion. The Whiptail Wallaby (*Macropus parryi*) was shot commercially on the assumption that there were millions of them. Within two decades of its peak, the take had all but disappeared.

Table 4.10. The collapse of the Whiptail Wallaby harvest

Year	Whiptail Wallaby commercial take	What happened
1979	53,908	Peak commercial take
1991	Collapsed	Twelve years after the peak, the take had "fallen off a cliff"
1998–1999	Included in total take	Still recorded within Queensland's commercial take
2002	190	Commercial killing of the species abandoned

Throughout the decline a quota of about 25,000 was maintained, for a decade or more, while the actual take fell towards zero. As Hylands asks, was that quota ever sustainable, even as the take dwindled to zero? The pattern is the one now visible for the Red and Eastern Grey Kangaroos and the Wallaroo, on a larger scale: a quota held far above the take, and a take that falls year after year.

The Whiptail Wallaby was removed from the commercial list only when there was almost nothing left to shoot. It shows what "sustainable" has meant in practice.

4.7 Floods, fencing and other mortality

Kangaroos in Queensland face pressures beyond shooting, and the Government's own account of 2025 raises questions about how many animals were there to be affected.

Table 4.11. Pressures on Kangaroos beyond shooting, 2025

Pressure	Government account for 2025	Comment
Flooding	Widespread floods in March–April 2025 hit Longreach, Quilpie, Thargomindah and Windorah. Significant livestock losses were reported, but "no significant Macropod losses were reported" to DETSI	If Kangaroos were present in the numbers estimated, flood losses would be expected. An absence of reported losses suggests very few were there
Survey response	An out-of-rotation aerial survey was flown at Quilpie after the floods	Eastern Greys at Quilpie fell 48 per cent; Red Kangaroos rose 15 per cent
Drought	No shire was drought-declared at 1 July 2025	Prolonged drought reduces forage, breeding success and survival
Disease	No significant disease mortality recorded in 2025	Monitored with Wildlife Health Australia
Predation	Joeys are vulnerable to foxes and Wedge-tailed Eagles	Adds to the toll on orphaned young
Exclusion fencing	Not addressed in the population analysis	Large-scale fencing across western Queensland blocks Kangaroo movement. It contradicts the explanation that local swings in the estimates reflect animals moving across the landscape

Hylands argues that the combined weight of past killing, floods, heat events and fencing makes the Government's estimates of near-stable populations implausible. The Government continues to set quotas as if none of these pressures existed. Its only adjustments are for the zones that fall below trigger points.

4.8 Discussion, conclusions and recommendations

Queensland holds the longest record of any state, and it contradicts the Government's claim of "no consistent increase or decline". On the Government's own figures, the estimate has halved, the commercial take has fallen by three-quarters and the DMP take by nearly nine-tenths.

1. **The verified record shows long-term decline.** Commercial take fell from 2,000,085 in 2006 to 516,847 in 2024. DMP take fell from 419,358 in 2015 to 47,120 in 2025. These are counts of animals shot, not estimates.
2. **Quotas have moved the wrong way.** Quotas of about 2.3 million in the early 1990s produced takes of 1.6 to 1.7 million. Quotas of 2.9 million now produce about 600,000. The quota has risen as the animals available to shoot have fallen.
3. **The estimates are not credible.** Local swings of plus 94 and minus 88 per cent in a year, and a statewide rise of 54 per cent between 2021 and 2024, are attributed to movement across a fenced landscape. An independent estimate puts the true population at about a third of the official figure.
4. **The Wallaroo is under particular pressure.** Its estimate fell 35 per cent in 2025, yet it is the species with the highest share of quota taken in 2026, with three-quarters of the quota taken in two zones.
5. **Non-commercial killing is poorly documented.** About 299,000 native animals of many species were authorised under DMPs in 2023, with no public register and no published count of what was killed.
6. **The Whiptail Wallaby is the warning.** A quota held far above a dwindling take ended only when the species was effectively gone from the trade.

As Hylands puts it, most numerate people would not believe Australia's Kangaroo population estimates. The Queensland data, read as counts of animals actually killed, tell the story the estimates do not.

Questions for further research

- What explains the 54 per cent rise in the official estimate between 2021 and 2024, while commercial take stayed near 600,000?
- How is "movement at the landscape scale" reconciled with the extent of exclusion fencing in western Queensland?
- Why do the online 2026 harvest quotas for zones 1 and 5 differ from the 2026 Quota Submission?
- How many animals of each species were actually killed under DMPs in 2023–2025, and how many DMPs were issued?
- What is the true joey toll from commercial and DMP killing?
- Should the Wallaroo quota be reduced or suspended, given the 35 per cent fall in its estimate?

Recommendations

1. Commission an independent review of Queensland's population estimates, comparing them with the long-term record of actual take.
2. Set quotas from verified trends in actual take as well as aerial estimates, and reduce them when take falls.
3. Suspend the commercial harvest of the Common Wallaroo pending review.
4. Publish a register of all Damage Mitigation Permits for all species, with the number of animals actually killed.
5. Report the deaths of dependent young in both the commercial and DMP systems.
6. Account for commercial and DMP killing together in a single cap for each species and zone.

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CHAPTER 5

Commercial Exploitation of Kangaroos in Western Australia

Population estimates, quotas and take, 1970–2025

Author	Peter Hylands
Prepared	October 2026
Data current to	2024 harvest and 2025 quota (latest published)

Executive summary

Western Australia's commercial Kangaroo industry is a fraction of what it was. The Red Kangaroo take has fallen from about 300,000 a year around 1970 to 14,831 in 2024. The 2025 quota for both commercial species was 182,390, the lowest in the period covered here. Even so, shooters have taken only about a quarter to a third of quota in recent years.

The principal findings are:

1. **The verified take shows long-term collapse.** The State's Red Kangaroo program began in 1971 with a quota of 225,000. In 2024 shooters took 14,831 Red Kangaroos, 17 per cent of a quota of 89,330. The combined take for both species has stayed around 78,000 to 100,000 a year since 2016, whatever the quota.
2. **The population estimate has fallen by two-thirds since 2019.** It peaked at 4.25 million in 2019 and was 1.30 million for 2025. The rises of 2016 to 2019, which Hylands describes as biologically impossible, were followed by six consecutive falls.
3. **The 2025 quota rests on estimates no one surveyed.** No aerial surveys were flown in 2024. The estimates that set the 2025 quota were calculated by adjusting earlier surveys for rainfall and harvest offtake.
4. **Harvest suspensions are now routine.** 2025 was the fourth consecutive year of Western Grey suspensions across most of the South-East zone. Red Kangaroo rates were cut in the Central and Northern zones, and the Northern zone is close to the no-harvest threshold.
5. **The Euro has gone from the trade.** Commercial shooting of Euros stopped in 2003–2006 and again from 2010 because of low and fragmented populations.
6. **Females make up a large share of the Western Grey kill.** About 39 per cent of the Western Greys shot in 2024 were female, and an estimated 26,000 joeys died with the 2023 commercial kill.

Of the mainland states, Hylands considers Western Australia the most cautious in estimating its Kangaroo populations. It has suspended shooting in parts of its zones in each of the last four years in

response to its own surveys. WA's 2026 quota submission and 2025 harvest report had not been published online at the time of writing.

5.1 Introduction, context and data sources

Western Australia is the largest shooting state by area: its four Kangaroo zones cover much of a State that is 32.9 per cent of Australia's landmass. It is also the clearest example of an industry in retreat, with a falling take, a closed processing plant and repeated suspensions.

Table 5.1. Key features of the Western Australian commercial industry

Feature	Western Australia
Species on the commercial list	Red Kangaroo, Western Grey Kangaroo; Euro (no commercial harvest 2003–2006 or since 2010)
Population monitoring zones (PMZs)	Northern (Red); Central (Red, Western Grey); South-West (Western Grey); South-East (Red, Western Grey)
Population estimate setting the 2025 quota	1,304,090
2025 commercial quota	182,390
Harvest rates	17% (Red) and 15% (Western Grey), reduced to 10% where densities are low
Suspension rule	Western Grey harvest suspended where density falls to 0.80 per km² or below
Survey method	Fixed-wing aerial surveys along fixed lines since 1981; no regular ground surveys

The harvest is managed by the Department of Biodiversity, Conservation and Attractions (DBCA) under a Commonwealth-approved *Management Plan for the Commercial Harvest of Kangaroos in Western Australia*. The current plan runs from 2024 to 2028.

This chapter brings forward the record to 2025 and complements the longer historical account in *The Persecution of Kangaroos in Western Australia: A History*, elsewhere in this Report.

Sources. The chapter draws on *2026: Commercial exploitation of Kangaroos in Western Australia* by Peter and Andrea Hylands (Nature Knowledge Channel, 17 January 2026), which compiles DBCA data from 2002 onwards. It is updated with DBCA's *2025 Commercial Kangaroo Harvest Quota Submission* (January 2025) and *2024 Annual Report on the Commercial Harvest of Kangaroos* (July 2025). DBCA's 2026 quota submission and 2025 annual report were not available online when this chapter was prepared, so 2025 actual take is not yet known. Figures marked *derived* are calculated from these sources.

5.2 Population estimates, 2002–2025

Western Australia's estimates have ranged between 1.2 and 4.25 million since 2002. Hylands identifies six years in which the reported increase was biologically impossible, including the climb to a peak of 4.25 million in 2019. Six consecutive falls have followed.

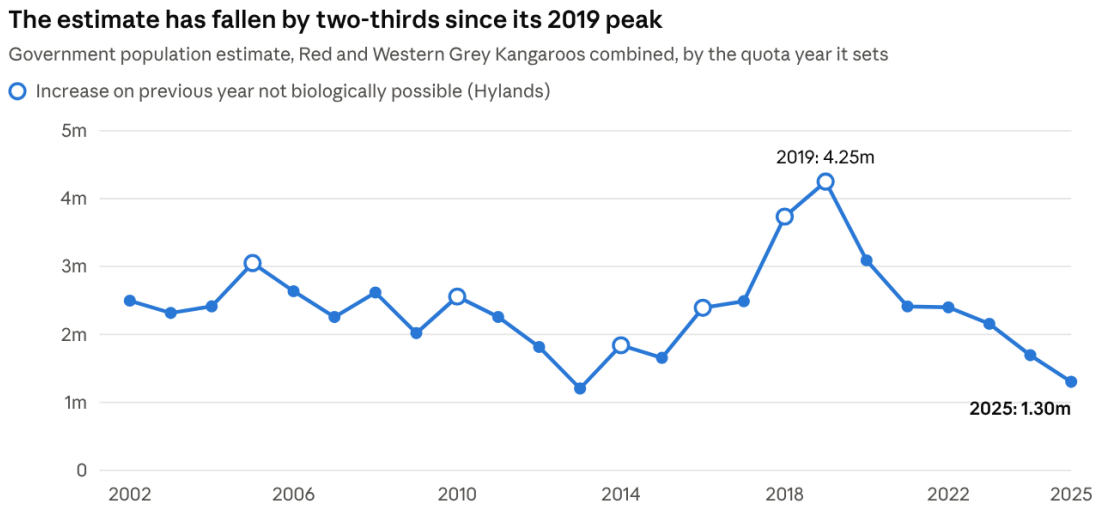


Figure 5.1. Government population estimate, Red and Western Grey Kangaroos combined, by the quota year it sets

Source: DBCA quota submissions as compiled by Hylands and Hylands (2026); each estimate is derived from surveys in the previous year.

The 2019 estimate of 4,249,560 set a quota of 673,940, against which shooters took 88,472, or 13 per cent. By 2025 the estimate had fallen to 1,304,090. That is lower than in any year since 2013.

The estimates behind the 2025 quota

Table 5.2. Population estimates setting the 2025 quota, by species and zone

Species	Zone	Estimate setting 2025 quota	Last full aerial survey
Red Kangaroo	South-East	247,565	August 2023
Red Kangaroo	Central	161,235	September 2022
Red Kangaroo	Northern	119,050	August 2022
Red Kangaroo	**Total**	**527,850 (down from 609,155)**	
Western Grey Kangaroo	South-West	523,645	October 2023 (monitor blocks)
Western Grey Kangaroo	Central	171,150	September 2022
Western Grey Kangaroo	South-East	81,445	August 2023
Western Grey Kangaroo	**Total**	**776,240 (down from 1,086,235)**	
Both species		**1,304,090 (down from 1,695,390)**	

No aerial surveys were flown in 2024. Surveys planned for the Central and South-West zones were postponed after pastoral lessees raised safety concerns about mustering aircraft. The estimates that set the 2025 quota were instead calculated by adjusting the most recent surveys, some of them three years old, for rainfall and harvest offtake. A quota for a protected species was therefore set from a model, not a count.

Within the South-East zone, Western Grey densities in 2024 were 0.73 per km^2 in the South Eastern Agricultural area and 0.45 in the Nullarbor. Elsewhere they were 0.10 in Dundas, 0.07 in Leonora–Eastern Goldfields and 0.03 in Coolgardie. All five areas are below the 0.80 per km^2 suspension threshold set in the 2019–2023 management plan. Even so, harvesting continued in 2025 at the full rate in the South Eastern Agricultural area and at a reduced rate in the Nullarbor. DBCA notes that 2023 was the driest year on record across many zones, a drought it expected to have "a detrimental impact on Kangaroo populations in Western Australia within the next six to twelve months".

5.3 Quotas and actual take, 2016–2025

In every year since 2016, Western Australian shooters have taken between 66,000 and 101,000 Kangaroos. Quotas over the same years ranged from 182,390 to 673,940. The take does not respond to the quota.

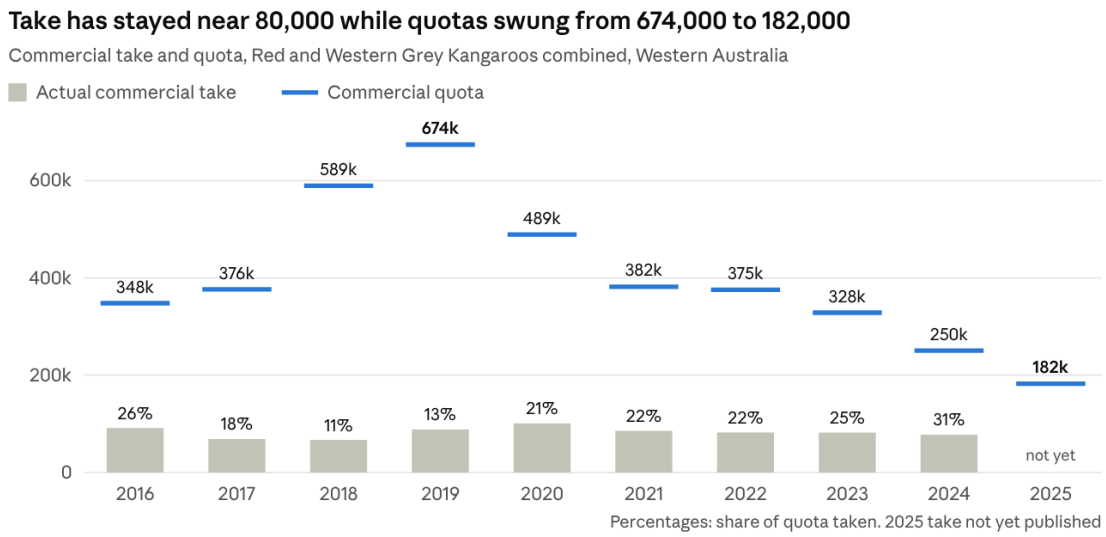


Figure 5.2. Commercial take and quota, Red and Western Grey Kangaroos combined, Western Australia

Source: DBCA data as compiled by Hylands and Hylands (2026); 2024 take from DBCA 2024 Annual Report; 2025 quota from DBCA 2025 Quota Submission. Totals derived from species figures.

Take by species

Table 5.3. Quota and take by species, 2016–2025

Year	Red Kangaroo: quota	Red: take	Red: share	Western Grey: quota	Western Grey: take	Western Grey: share
2025	70,115	not yet published	—	112,275	not yet published	—
2024	89,330	14,831	17%	161,100	62,852	39%
2023	125,225	17,210	14%	203,240	64,728	32%
2022	207,340	19,660	9%	168,070	62,554	37%
2020	217,360	30,022	14%	271,770	70,871	26%
2019	310,370	28,546	9%	363,570	59,926	16%
2018	248,900	19,044	8%	340,540	47,720	14%
2017	185,000	17,844	10%	191,325	50,993	27%
2016	131,500	22,236	17%	216,400	68,985	32%

In the years shown, the Red Kangaroo quota was never more than 17 per cent filled. In 2024 the Western Grey take came overwhelmingly from the South-West zone (52,849 of 62,852). The Red Kangaroo take was spread across the South-East (7,356), Northern (5,336) and Central (2,139) zones.

Suspensions and reductions, 2025

Table 5.4. Harvest suspensions and reductions, 2025

Zone	Species	2025 measure	Reason
South-East	Western Grey Kangaroo	Suspended except in the South Eastern Agricultural area (full rate) and Nullarbor (reduced rate); fourth consecutive year	Densities below threshold

Zone	Species	2025 measure	Reason
Northern	Red Kangaroo	Rate reduced to 10%	Density 0.37 per km², very close to the no-harvest threshold; the zone "may close in future years"
Central	Red Kangaroo	Rate reduced to 10%	Density in the 0.40–0.57 per km² band

The 2025 quota of 182,390 is 27 per cent below 2024 and 73 per cent below the 2019 peak. Even at that level, a take of around 80,000 would fill well under half of it. Hylands forecasts a 2026 estimate of 1.5 to 2 million, a quota of about 250,000 and a commercial kill of about 80,000.

Data note. Hylands and Hylands (2026) give the 2024 take as 80,306 (15,597 Red, 64,709 Western Grey). DBCA's 2024 Annual Report gives 77,683 (14,831 and 62,852), which is used here. The 2024 quota was set at 263,935 and reduced to 250,430 in February 2024.

5.4 The long decline of the Red Kangaroo harvest

The Red Kangaroo was the original target of the Western Australian trade. It is now a small and shrinking part of it.

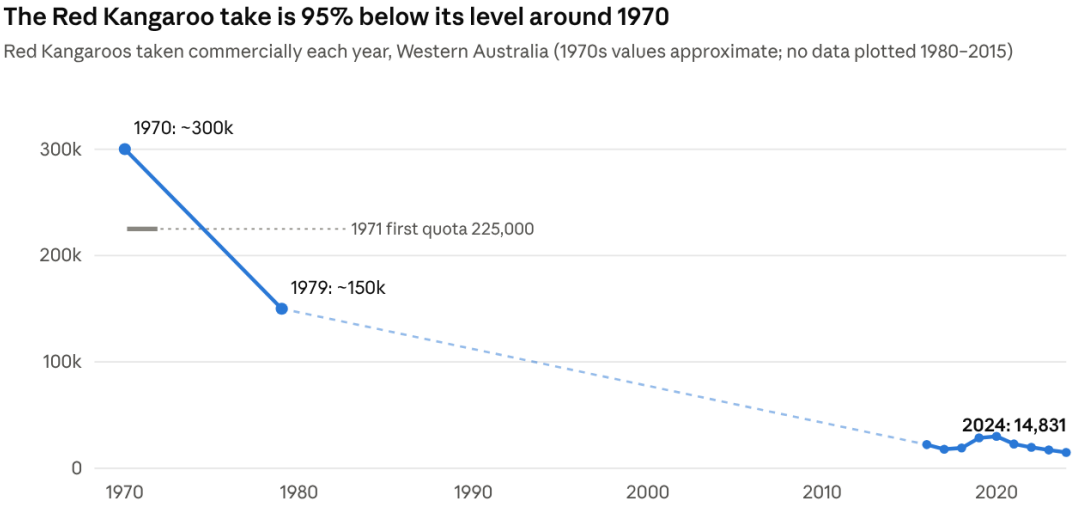


Figure 5.3. Red Kangaroos taken commercially each year, Western Australia

Source: 1970s figures as reported in Hylands and Hylands (2026); 2016–2023 DBCA data as compiled there; 2024 DBCA Annual Report.

A "frenzy of killing" in 1969 and 1970, under regulations dating from 1952, prompted the State to introduce its Red Kangaroo management program in 1971. In its first year, 57 licensed shooters were given a quota of 225,000. The program was a response to fears that indiscriminate slaughter would drive Australia's largest living marsupial to extinction in the State. Over the following decade the take fell from a short-term average of about 300,000 to about 150,000 by 1979. An increase in 1979 was "entirely due" to the shooting of more females, and with them their joeys.

Since 2016 the Red Kangaroo take has ranged between about 15,000 and 30,000 a year. It fell below 20,000 in 2022 and reached 14,831 in 2024. The decline is visible in the animals themselves as well as the numbers: Hylands reports that the average carcass weight of Red Kangaroos in the Northern zone has fallen significantly over the past 50 years.

5.5 Females, joeys and carcass weights

Western Australia shoots a far higher share of females than the eastern states: around 35 to 40 per cent of Western Greys in recent years, against about 10 to 12 per cent in Queensland and New South Wales. In 2024 about 27,200 females were shot (derived), and their dependent young are not counted.

Table 5.5. Females in the take and estimated joeys killed

Year	Red Kangaroo: females in take	Western Grey: females in take	Estimated joeys killed (Hylands)
2024	17%	39%	—
2023	19%	40%	about 26,000 (3,000 Red, 23,000 Western Grey)
2022	24%	35%	—
2021	28%	34%	about 19,000 Western Grey
2020	25%	35%	—
2019	22%	27%	—
2018	22%	25%	—
2017	20%	20%	—
2016	18%	33%	—

The share of females in the Western Grey kill has risen from 20 to 27 per cent in 2017–2019 to 39 to 40 per cent in 2023–2024. In Victoria (Chapter 1), Hylands treats a rising female share as an indicator of population decline. The same pattern is now visible in Western Australia.

Carcass weights

Table 5.6. Average carcass weights, 2021–2024

Average carcass weight (kg)	2021	2022	2024
Red Kangaroo, male	25.0	25.4	24.9
Red Kangaroo, female	15.4	15.2	15.7
Western Grey Kangaroo, male	29.6	29.5	29.3
Western Grey Kangaroo, female	17.8	17.7	18.1

Females are small and of little commercial value. In 2021 Hylands estimated a gross value of about $13 for each female Western Grey and $11.40 for each female Red Kangaroo. For that return, the mother and her young are killed: furred young by a blow to the head, unfurred pouch young by decapitation, and young at foot left to starve.

5.6 Damage licences

Non-commercial killing of Kangaroos in Western Australia is small in scale compared with the eastern states. Nonetheless the records that exist show licences issued with no means of checking what was killed.

Table 5.7. Non-commercial licences to kill Kangaroos, 2020–2022

Year	Licences issued	Kangaroos authorised	Returns
2020	28	5,519 (3,519 Western Grey, 2,000 Red)	Issued manually for one year; no real mechanism to collect returns
2021	20	2,470 (2,445 Western Grey, 25 Red)	Issued through the online licensing portal, mostly for three-year terms; no returns yet due
2022	10	1,774 (1,324 Western Grey, 450 Euro)	As for 2021

The number of licences and the number of animals authorised both fell sharply over these three years. The decline matches the falling commercial take over the same period. Euros, no longer shot commercially, may still be killed under licence on farmland and pastoral leases where they damage primary production.

Because most licences since 2021 run for three years, returns for the 2021–2022 licences would only have fallen due from 2024. No published figures for actual kills under damage licences, or for licences issued since 2022, were found for this chapter. Western Australia, like the other states, does not publish a public register of animals actually killed under non-commercial licences.

5.7 History, markets and public reporting

The Western Australian trade has passed through several phases, from dried skins to pet food, and through the closure of its main processor. At each stage the official explanation has been weak demand, while the evidence points to declining supply.

Table 5.8. Phases of the Western Australian Kangaroo trade

Year	Event
1870	Legislative Council debates the destruction of Kangaroos as competitors with sheep and cattle; Mr Monger warns that east of York "the natives lived upon them"
Before the 1950s	Trade in dried Kangaroo and wallaby skins
Mid-1950s	Demand for dried skins collapses; the trade shifts to pet food, and skins are discarded
1969	Skins sold again; WA Government researcher R. Prince warns that habitat destruction is "the most important factor" for the Western Grey Kangaroo
1969–1970	"Frenzy of killing" of Red Kangaroos
1971	Red Kangaroo management program introduced: 57 shooters, quota of 225,000
1973	United States bans Kangaroo skin imports; Commonwealth bans exports of Kangaroo products
2016	VIP Pet Foods closes its Perth processing plant
2016	Department of Parks and Wildlife stops using Kangaroo meat as the bait for 1080 poison at Murujuga
2022	Red Kangaroo take falls below 20,000

Demand or supply?

DBCA attributes the low take to the market: "Limited demand for carcasses from processors continues to contribute to the significant reduction in active shooting of Kangaroos for commercial purposes." The processor's own explanation for closing its Perth plant in 2016 points the other way. VIP Pet Foods' chief executive, David Grant, said "declining numbers of Kangaroos in WA coupled with an underutilisation of the company's processing plant" were the driving factors. The company would instead source Eastern Grey Kangaroos from the eastern states. As Hylands puts it, a low take against quota "does not mean there are no shooters… it means there are no Kangaroos".

Kangaroo meat as poison bait

Kangaroo meat is used across Australia, including in national parks, to carry 1080 poison. The poison is indiscriminate, banned in most countries, and often dropped from helicopters. In 2016 the Western Australian Department of Parks and Wildlife reported that it had stopped using Kangaroo meat for baits at Murujuga, the World Heritage-listed rock art site, and now uses beef there instead.

Public reporting

Media coverage has repeatedly described Western Australia's Kangaroos as booming. In October 2019 the ABC reported that "Western Grey Kangaroo numbers have doubled since 2014 while the Red

Kangaroo population has quadrupled". In October 2022 it asked whether, with the population "booming", Australians should be eating more Kangaroo. At the time, the official estimate had already fallen by more than 1.8 million from its 2019 peak. The official estimate for 2021, for all commercially shot species nationally, was 30.6 million, against the 50 million the ABC cited.

For people living among the shooting, the experience is different. A resident of the Chittering Valley wrote in 2005: "I have come to dread the nights, waiting for the guns to go off as more and more Kangaroos are exterminated, and of course all the non-target species sorely affected as ever."

5.8 Discussion, conclusions and recommendations

Western Australia shows the late stage of a commercial Kangaroo industry. Its estimates are falling, its quotas are shrinking, its suspensions are routine and its main processor has gone. Even the more cautious estimates of this state remain well above what shooters can find.

1. **The Red Kangaroo trade has collapsed.** The take has fallen about 95 per cent since around 1970, to 14,831 in 2024. The Northern zone is close to closing, and no Red Kangaroo quota in recent years has been more than 17 per cent filled.
2. **The take is fixed at about 80,000, whatever the quota.** Quotas between 182,390 and 673,940 since 2016 have produced takes between 66,000 and 101,000.
3. **The estimates swing beyond biological limits, then fall.** The climb to 4.25 million in 2019 was followed by six consecutive falls, to 1.30 million. The 2025 estimates were modelled without any new survey.
4. **The Western Grey is suspended across most of the South-East zone for the fourth year running.** Densities throughout the zone are below the threshold, yet shooting continues in two areas.
5. **The Euro has already gone from the trade,** because of the low and fragmented populations left by earlier killing.
6. **Females are a growing share of the Western Grey kill,** at about 40 per cent in 2023–2024, with tens of thousands of joeys killed each year.

The history Hylands traces runs from the colonial Parliament's debates of 1870 through the 1969–70 slaughter to the closure of the processing industry. Over that period the State has repeatedly been forced to cut back only after populations fell. In Hylands' words, the question of when it will stop has one likely answer: "when there are no Kangaroos left to shoot".

Questions for further research

- What are the 2026 population estimates and quotas, and what was the actual take in 2025?
- How were the 2024 estimates modelled without surveys, and how accurate did the adjustments prove when surveys resumed?
- Why does harvesting continue in the South Eastern Agricultural area and the Nullarbor at densities below 0.80 per km^2?
- How many damage licences have been issued since 2022, and how many Kangaroos have been reported killed under them?
- What has happened to Red Kangaroo carcass weights and age structure in the Northern zone over the long term?

Recommendations

1. Close the commercial harvest of Red Kangaroos in the Northern and Central zones, where densities are at or near the no-harvest threshold.
2. Suspend Western Grey harvesting throughout the South-East zone until densities exceed the threshold everywhere in it.

3. Do not set quotas from modelled estimates in years when no surveys are flown.
4. Publish annual figures for damage licences, including the number of animals actually killed.
5. End the use of Kangaroo meat as a bait for 1080 poison.

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CHAPTER 6

Exploitation of Kangaroos and Wallabies in Tasmania

Property Protection Permits, game licences and commercial use outside the Commonwealth framework

Author	Peter Hylands
Prepared	October 2026
Data current to	2024 permit returns (received August 2025)

Executive summary

Tasmania kills native macropods on a scale far out of proportion to its size, under a permit system that sits almost entirely outside the Commonwealth's commercial Kangaroo framework. In 2024 landholders reported killing 633,953 protected animals under Property Protection Permits (PPPs). Most were Bennett's Wallabies and Tasmanian Pademelons. A share of the carcasses is passed into commercial use, including the Forester Kangaroo, the State's only Kangaroo and its largest marsupial.

The principal findings are:

1. **Tasmania has no commercial Kangaroo management plan, yet it runs a commercial trade.** Animals are killed under damage-mitigation permits or recreational game licences. Carcasses can then pass to holders of commercial licences for processing, largely into pet food. Commonwealth approval is needed only for exports out of Tasmania.
2. **The Forester Kangaroo is killed at several times the recommended ceiling.** In 2001 assessors recommended culling no more than 10 per cent of the population. Landholders reported killing 35,664 between 2015 and August 2019, and 24,108 from August 2019 to early 2022. In 2024, 5,238 were reported killed and 11,840 authorised, against a 2024 survey estimate of 27,617. Hylands estimated in 2023 that about 4,500 a year enter commercial use.
3. **The numbers killed under PPPs are enormous and unlimited.** Bennett's Wallabies, pademelons and Brushtail Possums are covered by a single five-year permit with no quota. About 2.8 million native animals were killed under permits between 2019 and mid-2022, and 633,953 in 2024 alone.
4. **Recreational licences add an uncounted toll.** About 7,500 wallaby licences may be held in a year, with no limit on the number killed.
5. **The Government's own surveys now show steep falls.** The 2024 spotlight surveys recorded the lowest pademelon density since 2002, less than half the 2023 figure. They recorded the lowest Bennett's Wallaby density ever in the North East, and the third-lowest Brushtail Possum density. The Government still describes all three populations as "stable or increasing".

6. **Oversight is minimal.** In 2024 there was one proactive compliance inspection of PPP holders, and five investigations of alleged unlawful killing, none resulting in action under wildlife legislation.

Tasmania belongs in this Report because it is part of the same system. As the mainland supply of Kangaroos falls, Tasmanian wallabies are increasingly sent to mainland pet food markets.

6.1 Introduction: outside the Commonwealth framework

On the mainland, the commercial Kangaroo industry operates under state management plans approved by the Commonwealth. They set quotas from population surveys and report the take each year (Chapters 1 to 5). Tasmania has no such plan. Its native macropods are killed under State permits issued for damage mitigation or recreation, and some of the dead animals are then passed into commercial use. The Commonwealth becomes involved only when products are exported.

Five species of the Kangaroo family remain in Tasmania:

Table 6.1. Species of the Kangaroo family in Tasmania

Species	Status in Tasmania	Killed under permit	Commercial use
Forester Kangaroo (*Macropus giganteus tasmaniensis*)	Protected; range reduced to about 10 per cent of its pre-European extent	Yes, under tagged PPPs	Yes, through transfer of permit kills
Bennett's Wallaby	Protected; partly protected game species	Yes, unlimited under PPPs and game licences	Yes
Tasmanian Pademelon	Protected; partly protected game species	Yes, unlimited under PPPs and game licences	Yes
Eastern Bettong	Protected	No	No
Long-nosed Potoroo	Protected	No	No

Tasmania's record with wildlife is shaped by the extinction of the Thylacine, hunted under a government bounty. Hylands argues that the attitudes behind that history persist, and that in Tasmania the word "protected" has little meaning for the species covered by property protection permits. In August 2021 the Government announced a *Wildlife Impact Action Plan*, stating that it sought "to get the balance right in supporting farmers, foresters and land managers in managing the impact of browsing wildlife".

Sources. The chapter updates *Snapshot: Exploitation of Kangaroos and Wallabies in Tasmania* by Peter and Andrea Hylands (Nature Knowledge Channel, 30 October 2023). It draws on 2024 permit returns compiled by Hylands in *Tasmania: Watt's what and Watt's not* (30 November 2025), from Government data received by 12 August 2025. It also uses the Department of Natural Resources and Environment Tasmania's (NRE) *2024 aerial survey of Forester Kangaroos* and *Annual State-wide Spotlight Surveys 2024/25*. Other sources are NRE's Property Protection Permits guidance, HSI's 2024 *Licence to Kill* report as reported in *The Examiner*, and Parliamentary and media records. Figures marked *derived* are calculated from these sources.

6.2 The permit systems

Tasmania uses several overlapping permit systems to authorise the killing and use of native animals. None of them requires the kind of annual quota, set from a population estimate, that governs the mainland commercial trade.

Table 6.2. Tasmanian permit and licence systems

Permit or licence	Issued by	Purpose	Species	Limits	Reporting
Property Protection Permit (PPP), formerly Crop Protection Permit	NRE (Game Services Tasmania)	To prevent damage to stock, crops, equipment or infrastructure; allows shooting, trapping and poisoning, including 1080	Bennett's Wallaby, Tasmanian Pademelon, Brushtail Possum (combined five-year permit); Forester Kangaroo; wombat; native birds; fallow deer	**No quota** for wallabies, pademelons and possums. Forester Kangaroo permits carry tags; wombat and bird permits run 12 months or less	Annual take return within 28 days of expiry, including zero take; further permits withheld until returns are lodged
Game licence (recreational)	NRE	Recreational hunting	Bennett's Wallaby, Tasmanian Pademelon, deer, ducks, quail, pheasant, shearwater	About 7,500 wallaby licences may be held a year; no limit on numbers killed	Not published
Commercial licence	NRE	To buy, process and sell wildlife products	Animals taken under PPPs or game licences	Not quota-based	Not published
Wildlife export permit (State)	NRE	Export of live animals or wildlife products (meat, fur, skins)	Various	Case by case	Not published
Approved Wildlife Trade Operation (Commonwealth)	Commonwealth Environment Minister, under section 303FN of the *EPBC Act*	Required to export native wildlife products overseas	Bennett's Wallaby, Tasmanian Pademelon; a Brushtail Possum proposal was lodged in 2024	Set in each approval	Under the approval's conditions

In 2024 there were 4,278 active PPPs, covering 32 combinations of species. In the 2023–24 financial year 1,373 new PPPs were issued.

From damage permit to pet food

The route by which protected animals enter commercial use is indirect:

1. A landholder obtains a PPP on the grounds that wildlife is damaging crops, pasture or infrastructure.
2. The landholder, or agents shooting under the permit, kill the animals. For wallabies, pademelons and possums there is no limit on how many.
3. Carcasses are sold to holders of commercial licences, who process them, mainly for pet food. Some go to the mainland, where Tasmanian wallaby products are sold in pet food shops in Melbourne and New South Wales.
4. Products for overseas export require Commonwealth approval of a Wildlife Trade Operation.

The Forester Kangaroo follows the same route. Tags are allocated to the landholder, not to the hunters operating under the permit, and permit periods are described only as "various". Because the killing is authorised as damage mitigation, it does not have to meet the sustainability tests of a commercial harvest plan. Yet a large share of the animals is sold.

6.3 Reported take under Property Protection Permits

In 2024 landholders reported killing 633,953 protected animals under PPPs. Of these, 503,164 were Bennett's Wallabies, pademelons or Forester Kangaroos (79 per cent, derived). These are the animals reported. Kills under recreational game licences, and any not returned, are additional.

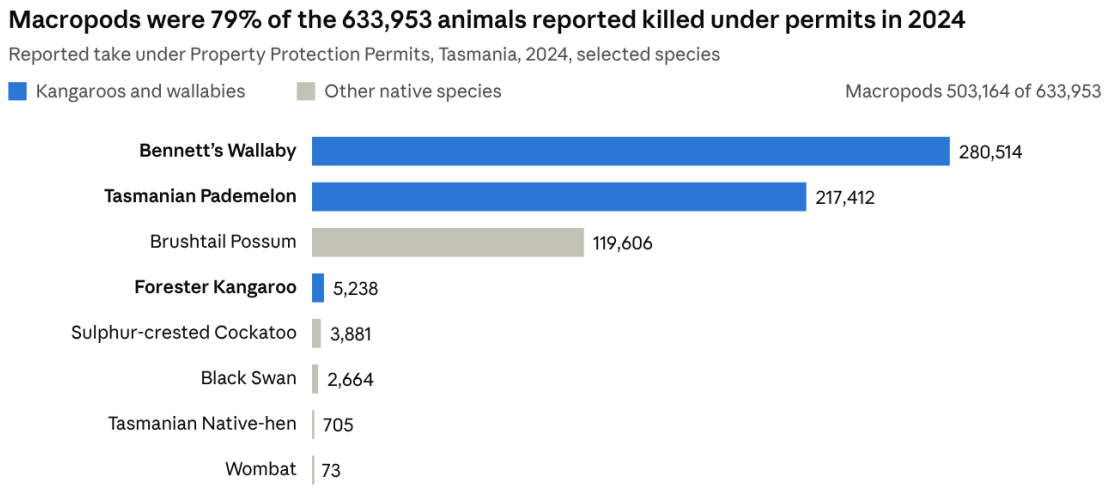


Figure 6.1. Reported take under Property Protection Permits, Tasmania, 2024, selected species

Source: NRE Tasmania permit returns as compiled by Hylands (2025), data received to 12 August 2025; shares derived.

Table 6.3. Animals reported killed under Property Protection Permits, 2024

PPPs, 2024	Permits	Animals reported killed
Bennett's Wallaby and Tasmanian Pademelon (combined permits)	109	497,926 (280,514 Bennett's; 217,412 pademelon)
Brushtail Possum	170	119,606
Forester Kangaroo	125	5,238 (11,840 authorised)
Wombat	26	73
Native birds (19 species)	varies	including Sulphur-crested Cockatoo 3,881, Black Swan 2,664, Native-hen 705
All active PPPs	**4,278**	**633,953**

The record since 2015

Table 6.4. Animals reported killed under PPPs since 2015

Period	Animals reported killed under PPPs	Notes
2024	633,953	All species
2023	675,640	All species (HSI, *Licence to Kill*)
2021	859,304	All native species
July 2019 to June 2022	about 2.8 million	Including 1,176,002 Bennett's Wallabies, 1,088,117 pademelons and 530,487 Brushtail Possums
2015 to mid-2019	1,857,000	Wallabies and possums (RTI release reported in Parliament)
2015	1,085,835	Bennett's Wallaby, pademelon and possum; 2,835 permits

At the 2023 rate, nearly 2,000 native animals a day were being killed under permits in Tasmania. Annual returns for 2016 to 2019 (556,090, 156,606, 43,863 and 14,565 to August 2019) appear far lower. That is probably because five-year permits report only on expiry, not because fewer animals were killed. The totals for 2019–2022 confirm the scale.

The Government's response to these figures has been consistent: "Long-term wildlife population monitoring indicates that the species subject to property protection permits have stable or increasing populations." Its own 2024 surveys now contradict that claim (section 6.6).

6.4 The Forester Kangaroo

The Forester Kangaroo is Tasmania's only Kangaroo and its largest marsupial. It survives in about 10 per cent of its former range, and is being killed under damage permits at several times the rate its own managers once recommended.

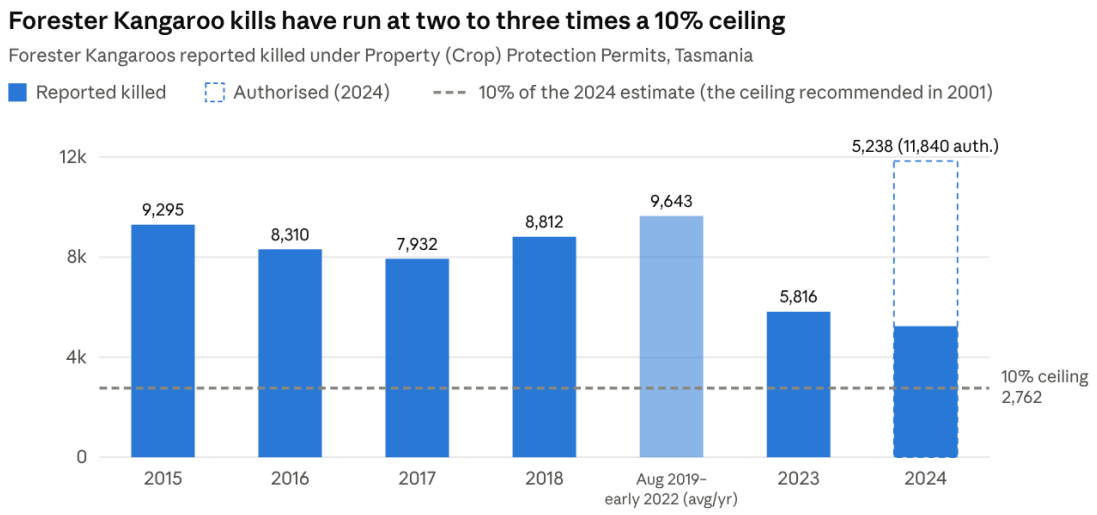


Figure 6.2. Forester Kangaroos reported killed under Property (Crop) Protection Permits, Tasmania

Source: Landholder returns as compiled by Hylands and Hylands (2023) and Hylands (2025); 2023 from HSI as reported in The Examiner (2024); population estimate from NRE (2024). The 2019–2022 bar is the annual average of 24,108 over about 2.5 years (derived).

A 2001 report on the management of Forester Kangaroos estimated the population at 26,000 and recommended that no more than 10 per cent of each regional population ever be culled. At that time about 600 were culled each year in the Midlands and 60 in the North East. Since 2015 the reported kill has been between 5,000 and more than 9,000 a year.

Table 6.5. Forester Kangaroos reported killed under permits

Period	Reported killed	Permits	Note
2024	5,238	125	11,840 authorised
2023	5,816	—	HSI
Aug 2019 to early 2022	24,108	—	About 9,600 a year (derived)
2015 to Aug 2019	35,664	—	About 21,000 used commercially (Hylands)
2014 to 2019	51,000 authorised	—	Under crop protection permits (RTI, cited in Parliament, 2019)
2000 to 2004	about 660 a year	—	Midlands about 600, North East about 60

In September 2019 Dr Rosalie Woodruff MP told Parliament that 51,000 Forester Kangaroos had been authorised to be killed since 2014, "nearly twice the number of the total estimated population". The Government could not say when the last comprehensive survey had been done.

Population estimates

Table 6.6. Forester Kangaroo population estimates

Year	Estimate	Source
2024	27,617 (±21%) across the survey area; 26,070 in the area also surveyed in 2019	NRE aerial survey
2019	30,327 (±23%); 24,948 in the overlap area	NRE aerial survey

Year	Estimate	Source
2005	about 26,000, of which no more than 18,000 mature; North East about 2,000	Commonwealth Threatened Species Scientific Committee
2001	26,000	Management report

The population has been estimated at about 26,000 for a quarter of a century. Over the same period the reported kill rose from about 660 to between 5,000 and 9,000 a year. NRE describes the change between 2019 and 2024 as "an insignificant difference". If the estimates are right, killing at this rate implies a population that replaces a fifth to a third of itself every year. If they are wrong, the species is being driven down. Hylands considers the 2019 figure overstated, given the scale of killing. The statewide spotlight surveys record too few Forester Kangaroos to calculate a density at all: 77 were counted in 2024.

Why the Forester Kangaroo is not listed

In 2005 the Commonwealth Threatened Species Scientific Committee found the Forester Kangaroo ineligible for listing as threatened. It concluded that the population had been increasing since the early 1990s and was "being actively managed to ensure its population numbers remain stable". At that time the annual cull was about 660. Since then the cull has risen roughly tenfold, the species has been passed into commercial use, and it has never been reassessed. It is not listed under Tasmania's *Threatened Species Protection Act 1995*. Hylands argues that it should be listed as threatened, not sold as pet food.

6.5 Wallabies, pademelons and the commercial trade

Bennett's Wallabies and Tasmanian Pademelons are killed in Tasmania in greater numbers than any other native animals. A commercial trade in their carcasses has fallen and risen over four decades, and is growing again as mainland Kangaroo supplies decline.

Table 6.7. Chronology of wallaby and pademelon killing in Tasmania

Year	Event
1984	Commercial trade in Tasmanian wallabies about 300,000 animals
1999	Commercial trade down to about 21,000
2005–2009	On Flinders and King Islands, commercial quotas of 87,750 wallabies; with non-commercial quotas, 217,500
2007–2008	State withdraws its export quota submission "when it became apparent that there was a lack of export market demand"; domestic commercial harvesting continues
2014	Farmers and game meat suppliers call for an expanded wild meat industry, citing an "explosion in Wallaby numbers"
June 2017	Commonwealth Environment Minister approves the commercial harvest and export of wallaby products from Tasmania as a Wildlife Trade Operation
2021	Government advises that about 500,000 wallabies are killed each year, about 10 per cent of them passed to commercial use
April 2023	New Wildlife Trade Operation for the harvest and export of wallaby, in force to 25 April 2026
2024	Wildlife Trade Operation proposal lodged for Tasmanian Brushtail Possum

Scale of the commercial share

The Government's 2021 advice implies about 50,000 wallabies a year entering commercial use (derived). Hylands expects that share to have risen since, as processors turn to Tasmania to replace mainland Kangaroo supplies. Tasmanian wallaby products are now sold in pet food shops in Melbourne, and New South Wales is another market. No current figures for the commercial take are published.

Recreational licences

On top of the PPP kill, Bennett's Wallabies and pademelons are game species that can be hunted under recreational licences. Media reports suggest that about 7,500 people may hold a wallaby licence in any year, with no limit on the number of animals killed. Hylands estimates the combined toll of permits and licences at 900,000 to 1 million wallabies and pademelons a year. He estimates that around 2 million native animals of all species are killed each year by primary industry in Tasmania. These estimates rely on media reports; no official figures for the recreational take are published.

Methods

NRE advises landholders on three methods for killing wallabies: shooting, "as part of an integrated browsing management approach"; trapping, which it notes is effective only for pademelons; and 1080 poison, "as a limited tool for the initial knock-down to get back on top of browser numbers". Section 6.7 discusses the use of 1080.

6.6 Population monitoring

The Government's justification for unlimited killing is that "long-term wildlife population monitoring indicates that the species subject to property protection permits have stable or increasing populations". Its most recent monitoring, the 2024 statewide spotlight surveys, recorded sharp falls in all three species killed in the largest numbers.

Table 6.8. Spotlight survey density indices, 2023 and 2024

Species	Density index 2023 (per km²)	Density index 2024 (per km²)	What the 2024 survey found
Tasmanian Pademelon	67.4	30.8	Lowest since 2002, less than half the 2023 figure; lowest ever recorded in the North East, North West and South East; second lowest in Central region
Brushtail Possum	53.3	22.7	Third lowest since 2002; lowest recorded in the North West and South East
Bennett's Wallaby	—	25.9	Below the average since 2002; North East lowest ever recorded, at 9.55, about a quarter of its 2023 value
Forester Kangaroo	not calculated	not calculated	Too few animals seen to estimate density; 77 counted statewide

NRE still describes the long-term trends for pademelons and Bennett's Wallabies as statewide "stable", though it records declines for pademelons in the Central region, the South East and Flinders Island. It attributes part of the 2024 fall in Bennett's Wallabies to reduced detectability in warm conditions and higher vegetation growth. The report itself cautions that the density index tracks trends and "should not be used to estimate population size".

In the same year as these falls, landholders reported killing 280,514 Bennett's Wallabies, 217,412 pademelons and 119,606 possums under permits that set no limit on numbers. The surveys are said to be used "to ensure take is sustainable". Yet no mechanism links a fall in the survey index to any reduction in what may be killed.

The Forester Kangaroo is surveyed separately, from the air, together with fallow deer (section 6.4). The 2019 and 2024 aerial surveys used the same flying height and speed. Forester and Bennett's Wallaby counts had to be pooled for part of the analysis because observers sometimes disagreed on which species they had seen.

6.7 Oversight, compliance and 1080

Thousands of permits authorise the killing of hundreds of thousands of animals each year, yet the system is policed by almost no inspection at all. A 2025 Right to Information release sets out the compliance record for 2024.

Table 6.9. Compliance and enforcement of PPPs, 2024

PPP compliance, 2024	Number
Active Property Protection Permits	4,278
Proactive compliance inspections of PPP holders	1 (found compliant)
PPPs using 1080 poison that are audited	10%
Investigations into alleged unlawful taking of wildlife linked to a PPP	5, all following complaints
Outcomes	1 letter of caution (under the *Dog Control Act 2000*, not wildlife law); 2 educational outcomes; 2 no further action for insufficient evidence

Permit holders must lodge annual returns, including nil returns, and further permits are withheld until returns are received. But returns are self-reported, and the combined wallaby and possum permit sets no limit. Applicants are not required to prove damage or to try non-lethal measures first, a point HSI makes about the Tasmanian system generally. The Tasmanian Farmers and Graziers Association, by contrast, has called for fewer restrictions. It wants access to sound suppressors and thermal imaging.

1080 poison

Tasmania permits the use of 1080 poison against native browsing animals under PPPs, and HSI notes it is the only Australian jurisdiction to do so. NRE describes 1080 as a tool for "initial knock-down" of browsing wildlife. The poison is indiscriminate: non-target wildlife is at risk from baits and from poisoned carcasses. In 2005 the Commonwealth's scientific committee considered that baits "are usually not of sufficient dosage to kill Forester Kangaroos". It did not consider the wider effects of baiting on the ecosystems in which the Forester Kangaroo lives.

Illegal killing

Hylands records high rates of illegal killing of wildlife in Tasmania, including the killing of Forester Kangaroos for sport. With one proactive inspection in a year, there is little prospect of detecting it.

6.8 Discussion, conclusions and recommendations

Tasmania operates a commercial trade in native macropods without the quotas, population thresholds or annual reporting that govern the mainland industry. Its animals are killed as pests and then sold as products. Because the killing is classed as damage mitigation, it escapes the tests that would apply to a harvest.

1. **The Forester Kangaroo is the clearest case.** Its population has been estimated at about 26,000 for 25 years. Reported kills have risen from about 660 a year in the early 2000s to between 5,000 and 9,600, at least twice the 10 per cent ceiling once recommended. Many of the carcasses enter commercial use. It has not been reassessed for threatened status since 2005.
2. **The killing of wallabies and pademelons is unlimited.** A single five-year permit with no quota covers Bennett's Wallabies, pademelons and possums. Close to 500,000 macropods were reported killed under permits in 2024, before recreational hunting is counted.
3. **The Government's monitoring now shows decline.** Pademelon density in 2024 was the lowest since 2002, and Bennett's Wallabies in the North East the lowest ever recorded. No mechanism links these results to what may be killed.

4. **Oversight is negligible.** One proactive inspection was made across 4,278 permits in 2024, and no investigation led to action under wildlife law.
5. **Tasmania is now part of the national supply chain.** As mainland Kangaroo supplies fall, Tasmanian wallabies are processed for mainland pet food markets, under Commonwealth export approvals when sent overseas.

Hylands calls for Australia-wide standards for permits and reporting to the Commonwealth, so that the national scale of the killing can be measured. Tasmania, where the largest numbers are killed with the least oversight, shows why.

Questions for further research

- How many Forester Kangaroos, Bennett's Wallabies and pademelons killed under PPPs are passed to commercial licence holders each year?
- What quantities were exported under the 2023–2026 Wildlife Trade Operation, and has a new approval been sought?
- How many animals are killed each year under recreational wallaby licences?
- Why has the Forester Kangaroo not been reassessed for listing since 2005, given the tenfold rise in the cull?
- How will the Government respond to the 2024 spotlight survey falls in pademelons, Bennett's Wallabies and possums?

Recommendations

1. Nominate the Forester Kangaroo for assessment under the *Threatened Species Protection Act 1995* and the *EPBC Act*, and suspend its killing under PPPs pending assessment.
2. Prohibit the transfer of animals killed under damage-mitigation permits into commercial use.
3. Replace the unlimited five-year permit with permits carrying species quotas, linked to the spotlight survey results.
4. Publish annual take returns for all permits and licences, including the recreational take and the number of animals passed to commercial use.
5. Require evidence of damage and of non-lethal measures before a permit is issued, and fund a programme of proactive compliance inspections.
6. End the use of 1080 poison against native wildlife.
7. Establish national standards for the reporting of all state-authorised killing of protected wildlife to the Commonwealth.

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CHAPTER 7

The Killing of Kangaroos in the ACT and Canberra

The reserve kill in Canberra, 2015–2026, and rural killing under licence

Author	Peter Hylands
Prepared	October 2026
Data current to	2026 cull

Executive summary

The ACT Government, in the "bush capital", shoots Kangaroos inside its own nature reserves every winter, and describes the program as conservation. In 2026 it killed 3,562 Eastern Grey Kangaroos and 1,290 pouch young, the largest kill since 2019, together with 344 wallabies. The Government states that "there are no commercial Kangaroo harvesting arrangements in the ACT".

The principal findings are:

1. **The reserve cull has doubled in two years.** The target rose from 1,336 in 2024 to 2,981 in 2025 and 3,633 in 2026. From 2015 to 2026, 27,452 adult Kangaroos were shot in Canberra's reserves.
2. **Including pouch young, about 37,000 Kangaroos have been killed in the reserves since 2015 (derived).** Females were 49 to 58 per cent of the kill from 2022 to 2026, and each year the Government recorded 66 to 74 pouch young killed for every 100 females shot.
3. **The reserves are not where most Kangaroos are killed.** The 2024 independent review records that rural culling under licence affects about 9,100 Kangaroos a year. Together with the reserve cull, the ACT kills well over 12,000 Kangaroos in a typical year.
4. **"Non-commercial" does not mean no use.** Most carcasses are buried in pits or left where they fall. Some are made into baits for the 1080 poisoning of foxes and wild dogs, and some go to Indigenous cultural use. The 2026 cull extended into Googong in New South Wales.
5. **The conservation benefit has not been measured.** Asked for baseline and annual data on the threatened species the cull is meant to protect, the Government replied: "The ACT Government does not hold the specific data you are requesting."
6. **Official and independent counts differ widely.** In 2022 citizen scientists counted 4,074 Kangaroos across 37 nature parks, while the Government estimated 16,823 across 15 reserves.

The ACT program sits outside the commercial framework examined in Chapters 1 to 5. But its scale, the share of females killed, and its use of Kangaroo carcasses as poison baits place it firmly within the national pattern this Report describes.

7.1 Introduction, context and data sources

Canberra presents itself as the "bush capital", and the Eastern Grey Kangaroo as its emblem. In 2025 the Royal Australian Mint issued a coin celebrating "the city's emblematic Eastern Grey Kangaroo" as "a familiar sight in Canberra's parks and reserves". That winter the Government closed 16 of those reserves to shoot nearly 3,000 of them.

Table 7.1. Key features of Kangaroo management in the ACT

Feature	Australian Capital Territory
Responsible agency	Environment, Planning and Sustainable Development Directorate (EPSDD), through the ACT Conservator of Flora and Fauna
Legislation	*Nature Conservation Act 2014*
Management plan	*Eastern Grey Kangaroo Controlled Native Species Management Plan 2017*; a draft successor, the *Buru (Eastern Grey Kangaroo) Controlled Native Species Management Plan*, was released for consultation in 2025
Independent review	Professor Sarah Legge, March 2024; 34 recommendations
Stated purpose of culling	Protection of critically endangered Natural Temperate Grassland and Box-Gum Grassy Woodland, and the species that depend on them
Who shoots	EPSDD Conservation Officers, with some support from contractors
Season	Winter (June to July in 2022–2026); the Government says culling between March and July reduces the orphaning of older young
Commercial harvesting	None, according to the Government

Only four macropod species remain naturally present in the ACT: the Eastern Grey Kangaroo, the Wallaroo, the Red-necked Wallaby and the Swamp Wallaby. The Brush-tailed Rock-wallaby, now the ACT's mammal emblem, was last seen in the wild at Tidbinbilla in 1959. In August 2025 six were flown in from Victoria for a breeding program. The Government's own management plan opens by recording that the ACT once supported a far richer macropod fauna.

The ACT program differs from those in the states. It is run directly by the Government on public conservation land, and justified as habitat protection, not pest control or harvest. Its annual kill sits alongside a separate, larger system of licensed culling on rural leases (section 7.4).

Sources. The chapter draws on three papers by Peter Hylands for the Nature Knowledge Channel: *Here is what happened: Kangaroo killing ACT nature reserves 2024* (7 July 2024), *Capital punishment: Cruelty, Canberra and Kangaroos in 2025* (with Andrea Hylands, 5 June 2025) and *Heartbreak House: Kangaroos killed by ACT Government in 2025 (actual)* (1 August 2025). These are updated with the ACT Government's Kangaroo Management Program data for 2022–2026, its media release on the 2026 program and the *Independent Review* by Professor Legge (2024). Figures marked *derived* are calculated from these sources.

7.2 The conservation cull, 2015–2026

The ACT has been shooting Kangaroos in Canberra's nature reserves since 2009. The series below runs from 2015, the first year for which targets and kills are available. After falling to 1,041 in 2023, the cull has more than tripled in three years.

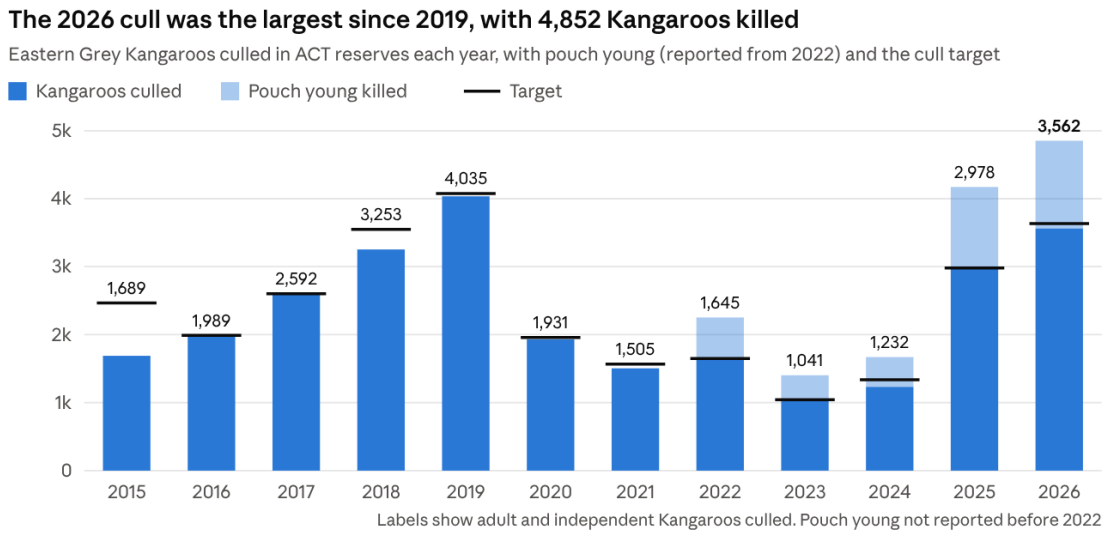


Figure 7.1. Eastern Grey Kangaroos culled in ACT reserves each year, with pouch young (reported from 2022) and the cull target

Source: ACT Government Kangaroo Management Program data (2022–2026); 2015–2021 as compiled by Hylands (2024, 2025).

Table 7.2. Reserve cull targets and numbers culled, 2015–2026

Year	Target	Culled	Share of target	Reserves closed	Pouch young killed
2026	3,633	3,562	98%	15 (plus Googong, NSW)	1,290
2025	2,981	2,978	99.9%	16	1,194
2024	1,336	1,232	92%	7	438
2023	1,042	1,041	99.9%	6	362
2022	1,650	1,645	99.7%	9	608
2021	1,568	1,505	96%	—	not reported
2020	1,958	1,931	99%	—	not reported
2019	4,076	4,035	99%	—	not reported
2018	3,550	3,253	92%	—	not reported
2017	2,603	2,592	99.6%	—	not reported
2016	1,991	1,989	99.9%	—	not reported
2015	2,466	1,689	68%	—	not reported
2015–2026	**28,854**	**27,452**	**95%**		**3,892 reported**

Unlike the commercial industry, which in every state falls far short of its quotas, the ACT meets its targets almost exactly. Hylands questions this: "As someone who looks at and analyses a lot of numbers, I struggle with the clinical and near 100 per cent accuracy of the actual 2025 kill against target." The 2024 cull ended early, on 1 July, with 104 fewer killed than planned at Mt Ainslie and Mt Majura. The Government said staff were diverted to the response to avian influenza.

Where the 2026 cull took place

Table 7.3. The 2026 cull by Kangaroo Management Unit

Kangaroo Management Unit, 2026	Target	Culled	Females	Pouch young
Ainslie Majura	600	600	307	237
Googong West (NSW)	577	577	243	185
Pinnacle	500	500	294	208
West Jerrabomberra	411	410	169	132

Kangaroo Management Unit, 2026	Target	Culled	Females	Pouch young
Mulligans Flat	375	367	163	115
East Jerrabomberra	247	247	153	127
Gungaderra	204	204	122	93
Crace	219	186	90	61
Red Hill	190	185	81	49
Farrer Ridge	178	154	61	40
Goorooyarroo	79	79	43	33
Mulanggari	53	53	20	10
Total	**3,633**	**3,562**	**1,746**	**1,290**

The Government justified the 2026 increase by reporting that 72 per cent of grassland monitoring polygons had grass below the 5–12 cm target range, up from 44 per cent the year before. In 2024 it had described the target range as 5 to 15 cm. The 2026 cull also extended across the border into the Googong reserves in New South Wales, where 577 Kangaroos were shot.

7.3 Females and pouch young

The ACT kills females at a far higher rate than the commercial industry in the eastern states. Since 2022 just over half of all Kangaroos shot in Canberra's reserves have been female. For every 100 females shot, about 70 pouch young have been killed.

Table 7.4. Sex of Kangaroos culled and pouch young killed, 2022–2026

Year	Culled	Males	Females	Female share	Pouch young killed	Pouch young per 100 females
2026	3,562	1,816	1,746	49%	1,290 (459 furred, 831 unfurred)	74
2025	2,978	1,245	1,733	58%	1,194	69
2024	1,232	575	657	53%	438	67
2023	1,041	508	533	51%	362	68
2022	1,645	722	923	56%	608	66
2022–2026	**10,458**	**4,866**	**5,592**	**53%**	**3,892**	**70**

Hylands describes the 2025 female kill of 1,733 as the largest since 2019. The 2026 cull killed slightly more again, at 1,746. In some units females were a large majority: 182 of 228 at Kama in 2025, and 98 of 130 at Aranda–Painter. In 2024, at Gungaderra, almost two females were shot for every male.

Pouch young were not reported before 2022. Applying the reported ratios to earlier years, Hylands estimates that about 8,523 dependent young were killed from 2015 to 2025. Adding the 1,290 killed in 2026 brings the total since 2015 to about 9,800. With the 27,452 adults and independent young, **about 37,300 Kangaroos have been killed in the ACT's reserves since 2015** (derived). Young at foot are counted among the "independent" Kangaroos, so the true number of dependent young killed is higher.

The Government says that confining culling to winter, "between March and July only", reduces the risk of orphaning young of 8 to 12 months, which "have a high milk demand but are sufficiently mobile enough to escape if their mother is shot". The ratio of pouch young to females killed has not fallen, rising from 66 per 100 in 2022 to 74 in 2026. In 2026, 831 of the 1,290 pouch young were unfurred. Under the national code, unfurred pouch young are killed by decapitation and furred young by a blow to the head. The 2024 review recommended that the term "euthanasia" be replaced by "humane killing" when describing this.

7.4 Rural culling and the full scale of killing

The reserve cull is the visible part of the ACT's Kangaroo killing. The 2024 independent review records a second, larger system: culling on rural leases under licences issued by the Conservator of Flora and Fauna, which affects about 9,100 Kangaroos a year on average.

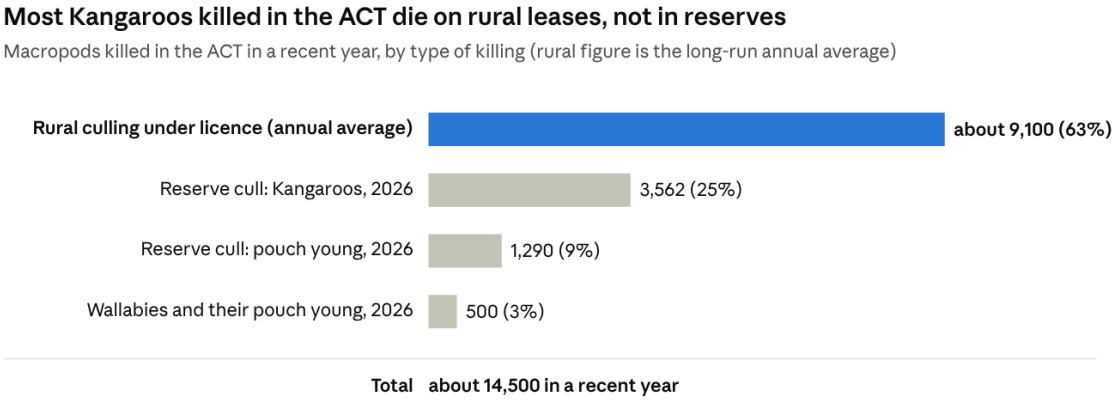


Figure 7.2. Kangaroos killed in the ACT each year: rural leases compared with reserves

Source: Rural average from the Independent Review (Legge, 2024); reserve and wallaby figures from ACT Government Kangaroo Management Program data, 2026. Shares derived; the rural figure is an average across years and may include animals authorised as well as shot.

Rural landholders must obtain annual authorisation from the Conservator and pass a competency test every two years. The review reports that the numbers authorised and shot on rural land rose from 1997 to 2018–19 and have since fallen. It found the economic justification for rural culling hard to assess, because data on Kangaroo densities and pasture on rural land are limited. Only "a small fraction" of rural carcasses are used, for domestic purposes.

The review estimates the ACT's total Eastern Grey Kangaroo population at about 122,000, with about 26 per cent on rural lands and government horse paddocks. On that estimate, a rural kill of about 9,100 a year would remove close to 30 per cent of the rural population annually (derived). The review describes its population figures as very approximate.

Annual rural figures are not published. The ACT Government's online program data cover only the conservation culls, and its stated reason for having no commercial industry is "the relatively low number of Kangaroos being culled". Counting rural killing, the reserve kill and the pouch young killed with both, the ACT is killing well over 12,000 Kangaroos in a typical recent year, and close to 14,000 in 2026, before wallabies are counted (derived).

Roads add to the toll. The review estimates the cost of Kangaroo–vehicle collisions in the ACT at $2.5 million to $8 million a year and found that the plan's objective of reducing collisions was not being met. Poor planning is a major contributor.

7.5 Wallabies

The ACT's culling extends beyond Eastern Grey Kangaroos to two of the three other macropods still found in the Territory. Red-necked and Swamp Wallabies are shot inside Mulligans Flat Woodland Sanctuary, a fenced reserve established to protect wildlife, and in 2026 also in Goorooyarroo Nature Reserve.

Table 7.5. Wallabies culled in the ACT

Year	Location	Red-necked Wallaby	Swamp Wallaby	Pouch young	Total killed
2026	Mulligans Flat and Goorooyarroo	219	125	156	500
2025	Mulligans Flat	90	35	34	159
2024	Mulligans Flat	252	68	not reported	320+

In 2024, 210 wallabies were shot at Mulligans Flat in a single week in June, according to Freedom of Information documents reported by Yahoo News. In 2025, 40 per cent of the adult wallabies shot were female. In 2026, 186 of the 344 adults were female (54 per cent), and 150 of their 156 pouch young were unfurred.

The Government has also used soft-jaw ("soft paw") traps, whose use was prohibited in the ACT. In July 2025 the rules were amended to allow their use to continue.

The ACT's treatment of its smaller macropods contrasts with its efforts for one of them. The Brush-tailed Rock-wallaby, named the ACT's mammal emblem in 2018, has been absent from the wild in the Territory since 1959. In August 2025 six were flown in from Victoria, where fewer than 60 remain in the wild, to join a breeding program at Tidbinbilla.

7.6 Population estimates: official and independent

The ACT sets its cull targets from Kangaroo density estimates for each reserve, measured against habitat thresholds. Independent counts suggest that far fewer Kangaroos remain in the reserves than the official figures imply.

Table 7.6. Kangaroo density estimates used to set cull targets

Estimate	Area	Kangaroos	Source
Whole ACT, all tenures	ACT	about 122,000 ("very approximate")	Independent Review, 2024
Reserves culled in the previous five years	Canberra Nature Park, managed reserves	11,250	Independent Review, as reported by Hylands
Reserves not managed	Canberra Nature Park and other reserved land	20,300	Independent Review, as reported by Hylands
15 reserves	Canberra Nature Park	16,823	ACT Environment Directorate, 2022
37 accessible nature parks, direct count	Canberra Nature Park	4,074 seen	Robinson and Grace, 2022

The review distributes its ACT total as follows: about 43 per cent in Namadgi, Tidbinbilla and the Cotter; 26 per cent on rural land and horse paddocks; 26 per cent in Canberra Nature Park and other conservation land; 5 per cent on Commonwealth land; and 1 per cent in plantations. It cautions that density data for rural land and the large protected areas are scarce.

In May 2022 Jane Robinson and John Grace reported the results of an eight-month search: "after an extensive, systematic search of all 37 accessible nature parks on multiple occasions, we directly observed 4,074 Kangaroos remaining in Canberra nature reserves". That is a quarter of the Directorate's estimate for 15 reserves the same year.

The 2026 cull of 3,562 Kangaroos equals about 32 per cent of the review's estimate of 11,250 in the managed reserves (derived), although the 2026 cull included Googong in New South Wales. Hylands estimated that the much smaller 2024 kill had removed 20 to 30 per cent of the Kangaroos remaining in the reserves.

What the kill is measured against

The program aims to keep grass within a target height, which the Government gave as 5 to 15 cm in 2024 and 5 to 12 cm in 2026. Kangaroo densities are managed against those targets, and the older yardstick of about one Kangaroo per hectare is no longer applied uniformly. Lower grass after a dry season produces a larger cull: in 2026, 72 per cent of monitoring polygons were below the target height, against 44 per cent a year earlier, and the target rose to 3,633. The cull is driven by grass height, not by any measure of the Kangaroo population's own viability.

7.7 Is the ACT program non-commercial?

The ACT Government insists that no Kangaroos killed in the Territory enter the commercial trade:

> *"There are no commercial Kangaroo harvesting arrangements in the ACT. Given the relatively low number of Kangaroos being culled, and the high costs of establishing, administering and monitoring a commercial operation, it is currently not cost-effective for the ACT Government to enter the commercial industry."*

On the narrow question of sale, that appears to be true. But the statement rests on cost, not principle, and "non-commercial" does not mean that the carcasses go unused.

Table 7.7. What happens to Kangaroos culled in the ACT

What happens to Kangaroos culled in the ACT	Source
Most carcasses are buried in pits or left where they fall	Independent Review, 2024
"A proportion of the Kangaroo meat is processed into baits for use within the ACT Government wild dog and fox control programs"	ACT Government
A very small number feed native carnivores in wildlife facilities	Independent Review, 2024
"Where possible, carcasses, or parts thereof, are made available for Indigenous cultural use"; some skins go to local Indigenous people	ACT Government; Independent Review
On rural leases, farmers use "a small fraction" for domestic purposes	Independent Review, 2024

The review itself called the waste of carcasses "a concern" and recommended that alternatives be explored. The use that does occur is one Hylands finds hardest to accept: a protected native species shot as a conservation measure, then turned into bait to poison other animals. As he wrote before the 2025 kill: "They actually think that turning a protected native species into a vector for poison baits is a good thing?"

Cost and delivery

The 2025 cull across 16 reserves was reported to cost about $350,000. The program is delivered mainly by Conservation Officers of the Environment, Planning and Sustainable Development Directorate, with some support from contractors. In 2026 it extended beyond the Territory, to the Googong reserves in New South Wales.

Where Kangaroos have been removed, grass grows. Canberra pioneered what Hylands calls "ecological grazing": removing native Kangaroos, then bringing cattle into the reserves to eat down the grass. Frankie Seymour of Save Canberra's Kangaroos has described the overgrowth of biomass "since the slaughter has reduced kangaroo numbers too low for the remaining kangaroos to be able to manage it" as one cause of the reserves' degradation.

The national image

The contradiction extends beyond the Territory. The Royal Australian Mint's 2025 *Bush Capital* coin celebrates Canberra's Eastern Grey Kangaroo. The Australian Government's $130 million tourism

campaign is fronted by an animated Kangaroo, "Ruby the Roo". Meanwhile the Kangaroos of the national capital are culled in rising numbers.

7.8 Evidence and accountability

The cull is justified as protection for critically endangered grassy ecosystems and the threatened species that depend on them. Yet when asked for the evidence, the Government conceded that it does not hold data on whether those species have benefited.

The species the cull is meant to protect

The Government names six threatened species that rely on an intact grassy layer: the Grassland Earless Dragon, Striped Legless Lizard, Pink-tailed Worm Lizard, Perunga Grasshopper, Hooded Robin and Brown Treecreeper. It notes that Natural Temperate Grassland is "probably the most threatened ecosystem in Australia", with only 0.5 per cent remaining in good condition.

In 2024 Hylands asked for baseline data on each species before the killing began, and for the annual measurements since. After two replies that did not provide them, the Government answered:

> *"The ACT Government does not hold the specific data you are requesting. The ACT's lowland native grassy ecosystems and the threatened species that reside within them are impacted by multiple, complex interacting factors."*

It nonetheless concluded that "it is clear to say the program has had a positive impact on threatened species". This rests on the claim that the program had improved the status of Natural Temperate Grassland, as measured by grass height. Hylands understands that the Grassland Earless Dragon was upgraded from endangered to critically endangered in 2023, after more than a decade of killing. Frankie Seymour of Save Canberra's Kangaroos made the same point: the Government "failed to produce any data compiled before it commenced its annual slaughter of kangaroos, on any aspect of the status of any species living there".

The independent review

Professor Sarah Legge's 2024 review found that culling kept Kangaroo densities close to targets and grass structure within thresholds. It described the program as an outstanding example of adaptive management, and found that culling operations exceeded the national code for non-commercial shooting. It also found that the objective of reducing vehicle collisions was not being met, and that the economic case for rural culling could not be assessed. It made 34 recommendations, including trials of non-lethal methods. A draft successor plan, the *Buru (Eastern Grey Kangaroo) Controlled Native Species Management Plan*, went to public consultation in 2025.

Fertility control

Table 7.8. GonaCon fertility control, 2022–2026

GonaCon fertility control	2022	2023	2024	2025	2026
Kangaroos treated or vaccinated	59	59	75	151	101

Fertility control began in 2022 at a handful of small sites. In 2026, 101 Kangaroos were treated against 3,562 shot. Treated animals carry large ear tags so that they are not shot during the cull.

The politics

The ACT Greens, part of government for much of the program's history, have supported the kill. In June 2025 the party's deputy leader and animal welfare spokesperson, Jo Clay, wrote to Hylands that "if evidence says that animal management is essential to protect our environment or other animals,

then we have a duty to undertake that". She cited the Legge review and the Greens' role in introducing GonaCon. She also noted that she had written to the Environment Minister seeking assurance that the mass killing was still necessary. Hylands regards the party as "a persistent driver, enabler and promoter of the killing".

7.9 Discussion, conclusions and recommendations

The ACT shows that a government can kill Kangaroos on a large scale, year after year, without a commercial industry. It does so under a conservation rationale that is not tested against the species it claims to protect. The absence of a commercial trade has not limited the killing; it has only removed the reporting that a commercial trade would require.

1. **The reserve kill is growing fast.** Targets rose from 1,042 in 2023 to 3,633 in 2026, the largest cull since 2019. About 37,300 Kangaroos, including dependent young, have been killed in the reserves since 2015.
2. **The heaviest killing is out of sight.** Rural culling under licence, averaging about 9,100 Kangaroos a year, exceeds the reserve cull but is not reported annually. In a typical year the ACT kills well over 12,000 Kangaroos.
3. **Breeding females and their young bear the cost.** Females were 49 to 58 per cent of the reserve kill from 2022 to 2026, and pouch young killed per 100 females rose from 66 to 74.
4. **The conservation benefit is asserted, not measured.** The Government holds no baseline or annual data on the threatened species the cull is meant to protect. One of them, the Grassland Earless Dragon, is reported to have been uplisted to critically endangered during the cull.
5. **"Non-commercial" means waste and poison.** Most carcasses are buried or left. Some become baits for 1080 poisoning programs.
6. **Independent counts are far below official estimates.** Citizen scientists saw 4,074 Kangaroos across 37 parks in 2022, against an official estimate of 16,823 for 15 reserves.

In 2024 Hylands warned that, with the loss of large numbers of females, "the probability of a collapse in the Eastern Grey Kangaroo population should not be underestimated". The killing has since nearly tripled.

Questions for further research

- How many Kangaroos have been authorised and actually killed under rural licences in each year since 1997?
- What are the baseline and current population data for each of the six threatened species the cull is meant to protect?
- How were the 2025 and 2026 targets met with near 100 per cent accuracy, and how are kills verified?
- How many carcasses are used as 1080 bait each year, and where are those baits laid?
- On what authority, and under what NSW approvals, was the 2026 cull extended to Googong?
- How will the 34 recommendations of the 2024 review be reflected in the final Buru plan?

Recommendations

1. Suspend the reserve cull until baseline and trend data for the threatened species it is meant to protect are published.
2. Publish annual rural culling figures, by licence, number authorised and number killed.
3. Count dependent young, including young at foot, in all targets and reports.
4. End the use of Kangaroo carcasses as bait for 1080 poison.
5. Commission independent population counts of the reserves, using methods agreed with community observers.

6. Expand non-lethal management, including fertility control and virtual fencing on roads, as the primary tools.

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CHAPTER 8

Kangaroos and Wallabies in the Northern Territory

A jurisdiction without a commercial industry: permits, populations and access to information

Author	Peter Hylands
Prepared	October 2026
Data current to	May 2026

Executive summary

The Northern Territory has no commercial Kangaroo industry. That is not because it protects its Kangaroos better than the states. It is because, on the Government's own analysis, there are too few of them to make shooting pay. Kangaroos and wallabies are nonetheless killed under permit. In 2023 permits authorised the killing of 14,892 macropods, 69 per cent of all native animals licensed to be killed in the Territory.

The principal findings are:

1. **Kangaroo densities are too low for a commercial industry.** In 2008 the NT Government concluded that "sustainable commercial harvest of kangaroos in the Northern Territory is not feasible at this time". Red Kangaroo densities across most of the south were below 1 per km^2, against the 2 to 3 per km^2 at which commercial shooters stop.
2. **Where they were counted, Red Kangaroos fell sharply.** On the Burt Plain north of Alice Springs, the extrapolated Red Kangaroo population fell from 210,015 in 1999–2001 to 67,780 in 2006, a decline of two-thirds. No more recent Territory-wide estimate has been found.
3. **Macropods are the main target of permit killing.** HSI's analysis of 2023 licences found 14,892 macropods authorised, mainly Agile Wallabies and Red Kangaroos, against 6,630 native birds. The NT publishes no annual permit data.
4. **The Agile Wallaby is in decline, according to the Government's own website, yet it is still culled on farms.** On one research farm, wallaby densities of up to 205 per km^2 were recorded and culled under a damage mitigation permit.
5. **The NT has already lost three macropods.** The Central Hare-wallaby and Crescent Nailtail Wallaby are extinct, as is the inland Burrowing Bettong. The Mala and Brush-tailed Bettong are extinct in the wild in the Territory, and the Nabarlek of the Victoria River District is possibly extinct.
6. **Information is hard to obtain.** Permit details emerge mainly through questions in Parliament, and the Government's public pages give no figures.

The Northern Territory belongs in this Report as the place where the commercial model never took hold. Even here, Kangaroos are killed under permit with little public accounting, and several macropod species have already been lost.

8.1 Introduction, context and data sources

The Northern Territory covers 1.35 million km^2, about one-sixth of Australia. It runs from the monsoonal Top End and Arnhem Land through the Victoria River District and Barkly Tableland to the arid Centre around Alice Springs. Aboriginal people own about half of its land under the *Aboriginal Land Rights (Northern Territory) Act 1976*, and pastoral leases cover most of the rest.

The Territory has never had a commercial Kangaroo industry. It has no Commonwealth-approved wildlife trade management plan for macropods, no commercial quotas and no processors. In the material it supplied to the Nature Knowledge Channel (Hylands 2022), the NT Government said commercial exploitation would "likely be culturally unacceptable". It also noted that shooters cease harvesting at 2 to 3 Kangaroos per km^2, densities rarely reached in the Territory.

The absence of an industry does not mean Kangaroos and wallabies are not killed. They are killed under permit as "problem" animals, for damage mitigation on farms and by Aboriginal people exercising traditional harvest rights. Many more die on roads. This chapter sets out what can be established about each source of mortality.

Data sources and their limits

The evidence base for the Northern Territory is far thinner than for any state in this Report. The NT Government publishes no annual return of animals killed under permit. It has published no Territory-wide Kangaroo population estimate since the 2000s, and its web pages give no figures. Table 8.1 lists the sources used and what each can and cannot tell us.

Table 8.1. Principal data sources for this chapter

Source	Content	Limitations
Neave (2008), DNRETA	Red Kangaroo and Euro status, aerial survey densities 1981–2006, commercial feasibility	Now 18 years old; no Euro estimates
NT Government material (Hylands 2022)	Species, policy position, cultural considerations	Narrative only; no numbers killed
NT threatened species classification (2020)	Conservation status of all macropods	Status only
HSI, *Licence to Kill* (2024)	Numbers licensed to be killed in 2023	Licensed, not actual kills; one year
MLA report B.AHE.0303 (2017)	Agile Wallaby densities and culling at Douglas Daly	One property
Fitzsimons et al. (2010); Woinarski et al.	Mammal decline in northern Australia	Not macropod-specific counts
NT Legislative Assembly written questions (2026)	Details of individual permits	Only what MLAs ask for

Where figures are derived or estimated in this chapter, they are marked as such. Where no data exist, the chapter says so rather than filling the gap.

8.2 Macropods of the Northern Territory and their status

The NT Government's kangaroo and wallaby page lists ten species as currently occurring in the Territory. All are protected under the *Territory Parks and Wildlife Conservation Act 1976* (TPWC Act), and a permit is needed to kill or take any of them. The Government states that feral cats, foxes and wild dogs have caused local extinctions, including around Uluru.

Table 8.2 sets out the Territory classification of macropods and their close relatives under Schedule 1 of the TPWC Act, as revised in 2020.

Table 8.2. NT conservation status of macropods and bettongs (TPWC Act Schedule 1, 2020)

Species	NT status	Notes
Central Hare-wallaby (Lake Mackay Hare-wallaby, Kuluwarri)	Extinct	Last specimen 1932
Crescent Nailtail Wallaby	Extinct	Last reliable records mid-20th century
Burrowing Bettong (inland subspecies)	Extinct	
Brush-tailed Bettong	Endangered	Extinct in the NT
Mala (Rufous Hare-wallaby)	Endangered	Extinct in the wild in the NT; reintroduced to fenced Newhaven
Nabarlek (Victoria River District)	Critically Endangered	Possibly extinct
Nabarlek (Top End)	Endangered	
Spectacled Hare-wallaby	Near Threatened	Declining
Northern Nailtail Wallaby	Near Threatened	Uncertain trend
Black-footed Rock-wallaby (MacDonnell Ranges race)	Near Threatened	
Short-eared Rock-wallaby (western and eastern)	Least Concern	
Agile Wallaby	Least Concern	Government says numbers are decreasing
Antilopine Wallaroo	Least Concern	"Some decline" reported in Kakadu
Black Wallaroo	Least Concern	Restricted to western Arnhem Land
Common Wallaroo (Euro)	Least Concern	No reliable population estimate
Red Kangaroo	Least Concern	Southern NT; declines after drought

Three of the Territory's macropod and bettong taxa are extinct. Two more are extinct in the wild in the NT, and one is possibly extinct. Only the large species and the Agile Wallaby are classed as Least Concern. Even so, the Government itself reports that Agile Wallaby numbers are falling, and declines in the Antilopine Wallaroo have been recorded in Kakadu (Fitzsimons et al. 2010).

The species that are killed

The species killed under permit are the large, common ones: the Agile Wallaby in the Top End and the Red Kangaroo and Euro in the south. The Antilopine Wallaroo, Australia's only tropical kangaroo of the savannas, is also listed among species in conflict with pastoralism. Table 8.3 summarises what is known of each.

Table 8.3. Macropods subject to killing in the Northern Territory

Species	Range in NT	Main reason given for killing	Population estimate
Agile Wallaby	Top End coast and river floodplains	Crop and pasture damage on farms	None published
Red Kangaroo	Arid south (Barkly, Burt Plain, Finke)	Pasture competition on stations	About 102,000 (1981); no later Territory-wide figure
Common Wallaroo (Euro)	Ranges and rocky country, widespread	Pasture competition	None
Antilopine Wallaroo	Northern savannas	Pasture competition	None

8.3 Why the Northern Territory has no commercial industry

In 2008 the NT Department of Natural Resources, Environment and the Arts (DNRETA) assessed whether a commercial harvest of Red Kangaroos and Euros could be established. Its answer was

direct: "sustainable commercial harvest of kangaroos in the Northern Territory is not feasible at this time" (Neave 2008).

The reason was density. Research in New South Wales had found that commercial shooters stop harvesting when Kangaroo densities fall to about 2 to 3 per km², because below that they cannot shoot enough animals in a night to cover costs. A viable industry needs densities well above 5 per km². Figure 8.1 sets the NT survey results against those thresholds.

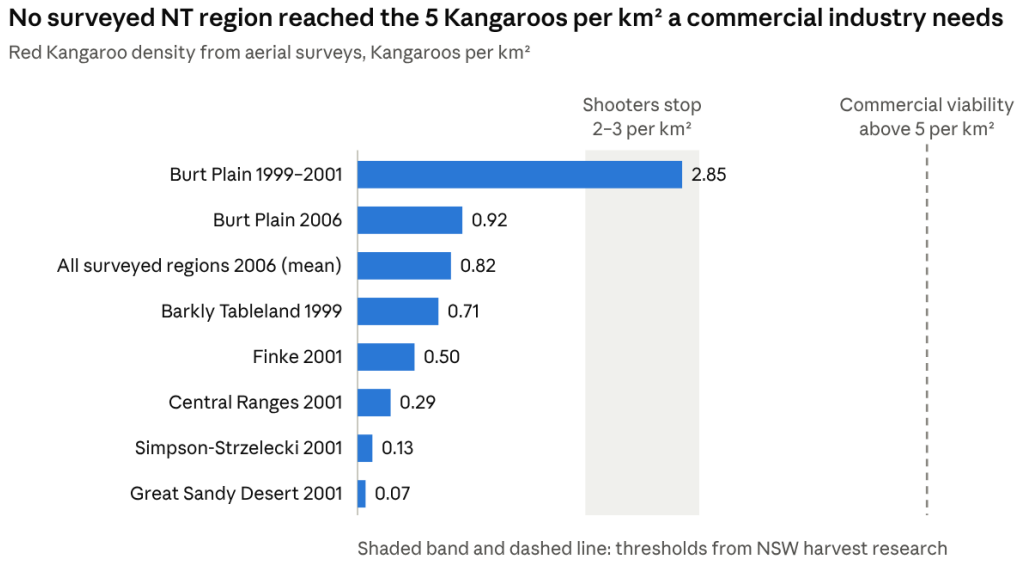


Figure 8.1. Red Kangaroo density from aerial surveys, by area and year, against commercial harvest thresholds

Source: Neave (2008), DNRETA, aerial surveys 1999–2006 · thresholds as cited in Neave (2008) and NT Government material (Hylands 2022).

Only one survey result, Burt Plain in 1999–2001, came close to the level at which shooters give up. By 2006 the same bioregion had fallen to under 1 per km², and the mean across all regions surveyed in 2006 (40,801 km²) was 0.82 per km². In the far south-west the Great Sandy Desert held just 0.07 Kangaroos per km².

A falling population

The surveys also show decline where they were repeated. Table 8.4 sets out the extrapolated Red Kangaroo populations reported by Neave (2008).

Table 8.4. Red Kangaroo population estimates, Northern Territory

Area and year	Density (per km²)	Extrapolated population
Whole NT, 1981	–	about 102,000
Barkly Tableland and surveyed bioregions, 1999	0.71	459,402
Burt Plain, 1999–2001	2.85	210,015
Burt Plain, 2006	0.92	67,780
Change, Burt Plain	−68%	−142,235 (derived)

On the Burt Plain, north of Alice Springs, the population in 2006 was 32 per cent of the earlier figure. Neave linked the fall to drought around Alice Springs. No later Territory-wide survey has been published, so it is not known whether Red Kangaroos recovered. The 1999 Barkly figure is an extrapolation across bioregions at low density and carries wide error (±0.11 per km² on the density alone).

Data note. The three estimates use different areas and methods and cannot be added or compared as a single Territory trend.

Other reasons

Density is not the only barrier. The NT Government told the Nature Knowledge Channel that commercial exploitation would "likely be culturally unacceptable" (Hylands 2022). Kangaroos are a significant food and ceremonial animal for Aboriginal people, who own about half the Territory. Aboriginal people near Kulgera reported in 2006 that they already had difficulty finding healthy Kangaroos to hunt (Neave 2008). A commercial harvest would compete directly with that use.

The NT position has not changed since 2008. There is no NT wildlife trade management plan for macropods, and the Territory does not appear in the Commonwealth's national quota reports.

8.4 Killing under permit

All Kangaroos and wallabies in the Territory are protected wildlife. Under the TPWC Act a person needs a permit from the Parks and Wildlife Commission to kill or take one, including on their own land. Landholders apply for permits to kill animals described as causing damage to crops, pasture or infrastructure. The Act does not define a "problem animal", and the NT has no published management plan setting how many of any commonly killed species may be taken (HSI 2024).

A long history of low-level killing

The earliest figures come from the 2008 DNRETA review, which recorded the number of Red Kangaroos taken under permit in selected years (Table 8.5).

Table 8.5. Red Kangaroos taken under non-commercial permits, selected years

Year	Red Kangaroos taken
1962	about 2,100
1976	about 2,000
1981	5,726
1982	18
1985	6

The review did not explain the sharp fall after 1981, and no comparable series exists after 1985. The same review noted that permits to kill Agile Wallabies were being issued in the Top End.

What was licensed in 2023

The only recent figures come from Humane Society International (HSI), which obtained permit data from every state and territory for its 2024 report *Licence to Kill*. The NT does not publish these figures itself. In 2023 the NT licensed the killing of 21,622 native animals (Figure 8.2).

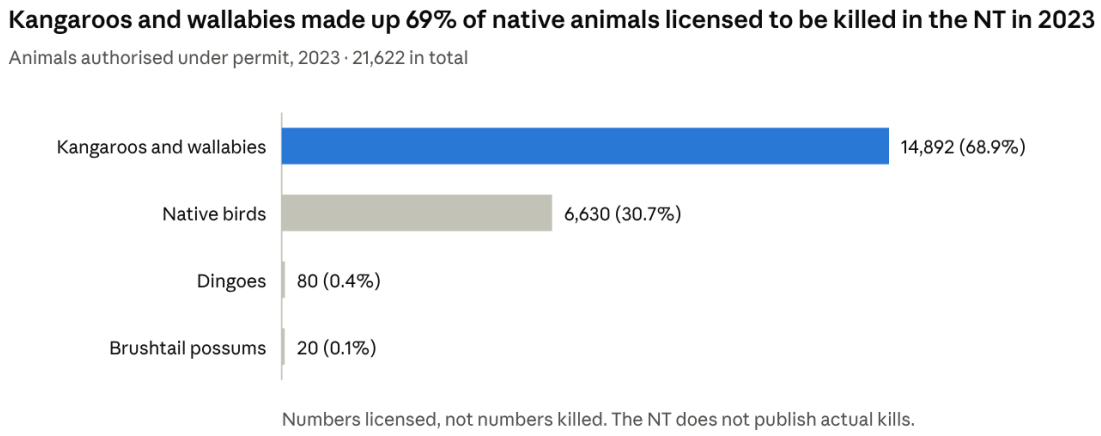


Figure 8.2. Native animals licensed to be killed under permit, Northern Territory, 2023

Source: Humane Society International (2024), Licence to Kill, NT data for 2023 · shares computed from the four groups.

Kangaroos and wallabies were the largest group by far, mainly Agile Wallabies in the Top End and Red Kangaroos in the south. HSI's published summary does not split the NT figure by species. Nationally, 419,120 Kangaroos and wallabies were licensed to be killed under non-commercial permits in 2023, so the NT accounted for about 3.6 per cent of the national total (derived).

Table 8.6. Kangaroos and wallabies licensed to be killed under non-commercial permits, Australia

Year	Australia	Northern Territory
2021	343,245	not found
2022	321,749	not found
2023	419,120	14,892

Data note. These are numbers *licensed*, not numbers killed. Permit holders may kill fewer animals than allowed, and returns are not published. The figure also excludes animals killed without a permit, and those killed under Aboriginal harvest rights, which need no permit (Section 8.6).

Bird killing as a guide to scale

The scale of individual permits came to light in May 2026, when written questions by independent MLA Justine Davis revealed that Newcastle Waters Station had been granted permits to kill 15,000 Galahs and 5,000 Little Corellas using the poison alphachloralose (ABC News 2026). Those two permits alone, 20,000 birds, come to about three times all the native birds licensed in 2023. The case shows that a single permit can authorise very large numbers, and that the public learns of them only when a parliamentarian asks. No equivalent questions about macropod permits have been found.

8.5 The Agile Wallaby: declining, yet treated as a pest

The Agile Wallaby (*Notamacropus agilis*) is the most commonly seen macropod of the Top End. It lives on coastal plains, river floodplains and the edges of monsoon forest. Those are the same well-watered country that has been cleared for improved pasture, mangoes, melons and other crops around Darwin, Katherine and the Douglas Daly.

The NT Government's own species page is unusually frank. It states that Agile Wallaby "numbers in the NT are decreasing", while still describing the species as secure. It notes that farmers consider the wallaby a pest, that a permit is required to kill one, and that illegal commercial trade is a key threat

(NT Government, Agile Wallaby page). That last point implies that some wallabies are taken for sale outside any lawful industry or oversight.

Damage mitigation culling at Douglas Daly

The best-documented case is the Douglas Daly Research Farm, a Government property south of Darwin. A study for Meat & Livestock Australia (Bedoya-Pérez, Lawes and McMahon 2017) recorded the following.

Table 8.7. Agile Wallabies at the Douglas Daly Research Farm

Measure	Finding
Density on improved pasture (2016)	up to 205 wallabies per km²
Wallabies culled and measured, 2007–2013	2,043
Culling contractor	ABS Scrofa Pty Ltd, under a damage mitigation permit
Estimated pasture loss	$122,008 per km² per year
Density at which culling alone was judged worthwhile	above about 1,854 per km²
Commercial harvest assessed	No

High densities on improved pasture reflect green feed in a landscape that is otherwise dry for much of the year. On the study's figures, killing alone was not an economic answer at the densities found. The 2,043 animals were those measured for the study. The total killed under the permit over the period was not reported.

A pattern of local killing

The Agile Wallaby case shows how killing proceeds in the NT without a commercial industry:

1. **Land use creates the conflict.** Clearing and irrigation produce green pasture that concentrates wallabies at unnatural densities.
2. **The conflict justifies permits.** Landholders and Government farms apply to kill the animals drawn in.
3. **Killing does not resolve it.** While the pasture remains, wallabies continue to come, and at Douglas Daly culling ran for at least seven years.
4. **The overall trend is unknown.** No Territory-wide count is published, yet the Government accepts that numbers are falling.

No figures have been found for the number of Agile Wallaby permits issued each year, the number of animals authorised, or the number actually killed.

8.6 Aboriginal harvest and cultural considerations

Kangaroos and wallabies have been hunted in what is now the Northern Territory for tens of thousands of years. They remain an important food and appear in Dreaming stories, ceremony and art across Arnhem Land, the Victoria River District and Central Australia. The NT Government material supplied to the Nature Knowledge Channel describes this relationship. It gives it as the reason commercial exploitation would be culturally unacceptable (Hylands 2022).

Legal basis

Section 122 of the TPWC Act preserves the right of Aboriginal people who have traditionally used an area to take wildlife there for food, ceremonial and religious purposes (Neave 2008). The *Native Title Act 1993* (Cth) gives similar protection to native title holders. No permit is needed, and no records are kept.

Table 8.8. Regimes under which macropods are killed in the NT

Regime	Who	Permit required	Numbers recorded	Numbers published
Commercial harvest	–	Not permitted	–	–
Permits to kill problem wildlife	Landholders, farm managers	Yes	Licensed numbers held by Government	No (obtained by HSI)
Damage mitigation on research and Government farms	Contractors	Yes	Partly, in research reports	Only in research reports
Aboriginal traditional harvest	Traditional owners	No (s.122 TPWC Act)	No	No
Road deaths	Motorists	–	No systematic count	No
Illegal shooting and trade	Unknown	–	No	No

Pressure on a shared resource

Traditional harvest is not a threat in itself. It is part of a system that sustained both people and animals for millennia. The concern is cumulative. Where Kangaroos are already sparse, killing by landholders, road deaths, predators and drought all draw on the same small population that traditional owners rely on.

The 2008 review recorded that Aboriginal people near Kulgera, close to the South Australian border, had difficulty finding healthy Kangaroos to hunt in 2006 (Neave 2008). The Nature Knowledge Channel's own experience in the Territory which they know well, is similar: the authors of the 2022 paper "see very few" Kangaroos (Hylands 2022).

No one knows how many Kangaroos are taken for food each year. Any future assessment of macropod numbers in the Territory should be developed with Aboriginal ranger groups and land councils, who hold knowledge of local populations that the Government does not.

8.7 Roads, predators and the wider mammal decline

Road deaths

The NT Government acknowledges that "Kangaroos and Wallabies are killed or injured on Territory roads each year, but joeys can often survive such incidences" (Hylands 2022). Its advice to motorists is to check the pouch and contact a wildlife carer. Anyone who has driven the Stuart, Barkly or Victoria Highways at night has seen the toll. Yet no agency counts it, and road deaths do not appear in any official estimate of mortality.

Predators and local extinction

The Government's kangaroo and wallaby page names feral cats, foxes and wild dogs as the cause of local extinctions, including around Uluru. Cats and foxes have been the main drivers of the loss of the Territory's small and medium-sized macropods, the hare-wallabies, nailtail wallabies and bettongs (Table 8.2). Changed fire regimes and grazing by cattle and feral herbivores have also been identified as contributing to the decline (Fitzsimons et al. 2010).

The northern mammal collapse

The Top End was long thought to be a refuge for mammals that had already vanished from southern Australia. Monitoring in Kakadu National Park showed otherwise (Table 8.9).

Table 8.9. Mammal decline in Kakadu National Park, 1996 to 2009

Measure	1996	2009
Monitoring sites with no native mammals recorded	13%	55%

The report *Into Oblivion* (Fitzsimons et al. 2010) recorded "some decline" in the Nabarlek, Antilopine Wallaroo and Spectacled Hare-wallaby. It described the Agile Wallaby as stable and the trend for the Northern Nailtail Wallaby as uncertain, and noted how little monitoring was being done. Since then the NT Government has said Agile Wallaby numbers are decreasing.

Recovery behind fences: the Mala

The Mala, or Rufous Hare-wallaby, disappeared from the wild in the NT in the 1990s. Between 2017 and 2020 the Australian Wildlife Conservancy (AWC) reintroduced it to a 9,400 ha feral predator-free area at Newhaven Wildlife Sanctuary, north-west of Alice Springs (Table 8.10).

Table 8.10. Mala translocated to Newhaven, 2017 to 2020

Translocation	Mala released
1	27
2	34
3	9
4	31
Total	**101**

In the Territory the Mala now lives only behind predator-proof fences. That shows the scale of the predator problem facing every small macropod outside such havens.

8.8 Access to information

The Nature Knowledge Channel has found it increasingly difficult to obtain information from the NT Government about the killing of Kangaroos and wallabies. The searches for this chapter confirm the problem: almost nothing is published, and what is known has come through third parties.

Table 8.11. Public information on macropod killing: the NT compared with the commercial states

Type of information	Commercial states (Qld, NSW, Vic, SA, WA)	Northern Territory
Population estimates	Annual or regular aerial surveys, published	Last published 2008 (data to 2006)
Quotas or limits	Published annually under Commonwealth-approved plans	None set
Numbers killed commercially	Published in annual harvest reports	Not applicable
Numbers licensed under non-commercial permits	Published in some states or released on request	Not published; obtained by HSI (2023 only)
Numbers actually killed under permit	Partly published	Not published
Details of individual permits	Variable	Revealed only through written parliamentary questions
Management plan for killed species	Commonwealth-approved plans	None

How information has come to light

Three channels have produced almost all of the recent information about permit killing in the Territory:

1. **Non-government organisations.** HSI's *Licence to Kill* (2024) obtained and published the only recent NT permit figures. HSI found that the NT does not publish licence data and has no population management plans for commonly killed species.
2. **Parliamentary questions.** The Newcastle Waters permits to kill 20,000 Galahs and Little Corellas came to light only through written questions from independent MLA Justine Davis, answered by the Minister in 2026 (ABC News 2026).
3. **Research reports.** The scale of Agile Wallaby culling at Douglas Daly is known only from an industry-funded study (Bedoya-Pérez et al. 2017).

The NT Government's own web pages say that Kangaroos and wallabies are protected and that a permit is required to kill them. They give no information on how many permits are issued, for which species, where, or with what result.

Why it matters

Without this information the public, scientists and traditional owners cannot judge whether killing is sustainable. That is a concern for the Agile Wallaby, which the Government itself says is declining, and for the Red Kangaroo, whose last published Territory survey is two decades old. The Government grants permits to kill a declining species without publishing either how many it permits or how many remain.

The *Information Act 2002* (NT) provides a right of access to government information. Formal applications under that Act, together with questions in the Legislative Assembly, are at present the only reliable means of obtaining permit data.

8.9 Discussion, conclusions and recommendations

Discussion

The Northern Territory is the counter-example in this Volume. Chapters 1 to 5 describe states where Kangaroos are counted every year so that a share can be sold. Chapters 6 and 7 describe jurisdictions that kill large numbers without a Commonwealth-approved commercial plan. The NT has neither the industry nor the counts.

The NT's reason for having no industry is economic and cultural, not protective. There are not enough Kangaroos for shooters to make a living, and Aboriginal people, who own half the land, rely on the same animals. Neither reason prevents killing. In 2023 permits authorised the death of 14,892 Kangaroos and wallabies, more than two for every three native animals licensed. The Government publishes none of this. It has no management plan for any killed species, and it has not published a Red Kangaroo survey since 2008. Where the surveys were repeated, they showed a two-thirds fall.

The Agile Wallaby sums up the position. The Government says it is declining and that illegal commercial trade threatens it. At the same time it issues permits to kill it, and does not say how many.

Conclusions

1. The Northern Territory has no commercial Kangaroo industry. Its own 2008 assessment found a harvest not feasible, because Red Kangaroo densities were far below the 2 to 3 per km^2 at which shooters stop.
2. Red Kangaroo numbers fell sharply where they were re-surveyed, from an estimated 210,015 to 67,780 on the Burt Plain between 1999–2001 and 2006. No Territory-wide estimate has been published since.
3. Killing under permit continues. Macropods were 69 per cent of the 21,622 native animals licensed to be killed in 2023. Actual kills are not reported.

4. The Agile Wallaby, the main species killed in the Top End, is in decline on the Government's own account.
5. Three macropod and bettong taxa are extinct in the NT, two more are extinct in the wild there, and one is possibly extinct. Predators, fire and grazing, not shooting, drove those losses, but they add to the pressure on the remaining species.
6. Road deaths, Aboriginal harvest and illegal killing are not counted at all.
7. The information gap is a policy choice. Permit data exist inside Government but reach the public only through NGOs and parliamentary questions.

Questions for the NT Government

1. How many permits to kill Kangaroos and wallabies were issued in each year from 2015 to 2026, by species and region? How many animals did they authorise, and how many were reported killed?
2. On what evidence is each permit assessed, given that no population estimate for the Agile Wallaby, Euro or Antilopine Wallaroo has been published?
3. When was the Red Kangaroo last surveyed in the Territory, and will the results be published?
4. What is the evidence that Agile Wallaby numbers are decreasing, and why are permits still issued to kill a declining species?
5. What is known of the illegal commercial trade in Agile Wallabies, and how many prosecutions have there been?
6. Will the Government publish annual permit returns, as other jurisdictions do?

Recommendations

Table 8.12. Recommendations

No.	Recommendation	Responsible
1	Publish annual returns of macropod permits: number issued, animals authorised and animals reported killed, by species and region	NT Department and Parks and Wildlife Commission
2	Make reporting of actual kills a condition of every permit	Parks and Wildlife Commission
3	Resume and publish aerial surveys of Red Kangaroo and Euro in the south, and develop counts for the Agile Wallaby and Antilopine Wallaroo	NT Government, with Aboriginal ranger groups
4	Suspend permits to kill Agile Wallabies until a population estimate shows the species can sustain the killing	NT Government
5	Require non-lethal measures (exclusion fencing, pasture placement) before any damage mitigation permit is granted	Parks and Wildlife Commission
6	Prepare a management plan for each macropod species killed under permit, closing the gap identified by HSI	NT Government
7	Record road deaths of macropods on major highways and fund wildlife carers to rescue joeys	NT Government, Department of Infrastructure
8	Keep the ban on commercial harvest, in recognition of low densities and Aboriginal cultural interests	NT Government
9	Pursue Information Act applications and parliamentary questions to obtain permit data for 2015–2026	Nature Knowledge Channel and allies

Final remark

The Northern Territory shows that the absence of a commercial industry does not mean the absence of killing. It shows, too, that where no industry needs the numbers, governments may stop counting altogether. The Kangaroos and wallabies of the Territory are fewer than they were, several of their relatives are already gone, and the Government that licenses their killing will not say how many it allows.

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