

Human Harms of Kangaroo Killing



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"I have seen spotlights shining across the open sky accompanied by gunfire...
Sometimes the gunfire comes from three different directions making us feel quite sick
and vulnerable." – Victorian Resident

Executive Summary

Kangaroos occupy a unique place in Australia's national psyche. They are a symbol of the nation; images of the kangaroo tell us a product is Australian-made, they are on the Coat of Arms and the national airline carrier, and in the names of major sporting teams. Yet, Kangaroos are also viewed as "pests"; competitors for livestock, threats to human safety, and a resource to be managed. Victoria is one of several states in Australia to operate management programs for kangaroos populations involving "lethal control"; the killing of kangaroos. However, the need for kangaroo management is contested with the debate focused on agricultural and ecological impacts of kangaroos, human and animal welfare, and the validity of population estimates.

Critically, the human harms reported by people who live close to kangaroo killing are not recognised in government policy or academic research. This report provides a foundation for understanding the unintended consequences that government-sanctioned kangaroo killing causes to those who witness it or its aftermath, and situates these harms in a growing trend towards mutualistic co-existence with wildlife in Australia and other developed countries.

This report is informed by a qualitative survey, semi-structured interviews with survey participants and experts, document analysis, and academic and government literature reviews. This report finds the following:

- **Finding 1:** Shooting activity at night raises concerns for personal safety that threaten physical harm and harms individuals' psychological health (Chapter 3 and 4).
- **Finding 2:** The very violent nature of kangaroo killing, coupled with the practice of butchering kangaroos in the field, appears to lead to trauma and associated mental and physical health harms for individuals. Wildlife carers are of particular concern regarding the mental health impacts of current kangaroo management practices (Chapter 4).
- **Finding 3:** Quality of life can be diminished for individuals near kangaroo killing through the effects described in Findings 1 & 2, and by harm to their livelihoods, economic circumstances, social connectedness, and agency (Chapter 5).

- **Finding 4:** For some First Nations Australians, current kangaroo management practices are deeply harmful. It is not only their quality of life that is impacted, their *way of life*, including connectedness to Country, that is threatened (Chapter 6).
- **Finding 5:** First Nations Australian consultation regarding kangaroo management practices is limited and does not include First Nations Australians who disagree with current practices (Chapter 6).
- **Finding 6:** There is not widespread support for lethal control of kangaroos. Instead, lethal control methods reflect the outdated legislative context of the *Wildlife Act 1975*. Furthermore, there is evidence that a growing mutualistic ethical orientation amongst the public will lead to less support for lethal control over time (Chapter 7).

Based on these findings, this report recommends the following:

- **Recommendation 1:** The Victorian Government amend the *Wildlife Act 1975* to reflect a growing mutualist orientation towards wildlife in the Victorian community. Current dominance-informed legislation does not reflect changing social sentiment and is not consistent with stated goals of First Nations Australian reconciliation.
- **Recommendation 2:** Subsequent wildlife management programs, including those regarding kangaroos, should focus on co-existence with wildlife and management of populations using non-lethal methods.

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Glossary

Abbreviations

- ACT – Australian Capital Territory
- ATCW - Authority to Control Wildlife
- DELWP - Victorian Department of Environment, Land, Water, and Planning
- DJPR – Victorian Department of Jobs, Precincts and Regions
- KHMP - Kangaroo Harvest Management Plan
- KHP - Kangaroo Harvesting Program
- NSW – New South Wales
- The Act – The *Wildlife Act 1975*

Key terms

- **Aftermath:** "a (usually undesired) thing remaining or left after the end or exit of something; an unwelcome consequence or effect".¹ This term is used intentionally as the sight of distressed orphaned joeys and dismembered kangaroo remains can be a very unwelcome consequence of kangaroo shooting programs.
- **Harm:** an individual is harmed when their prospects are diminished, or where there is a probability that their prospects will be diminished. Harm can include negative impacts on a person's physical safety, stability, or development, and can occur in relation to their cultural, economic, physical, psychological, and social wellbeing.²
- **Harvester:** an individual who shoots kangaroos and sells their carcasses for a living. In Victoria, harvesters operate under the KHP.

¹ "aftermath," Oxford English Dictionary, published December 2021, <https://www.oed.com/view/Entry/3696?redirectedFrom=aftermath#eid>.

² This definition of "harm" has been developed with reference to Victorian Government descriptions of harm to children and in the workplace, and philosopher Nils Holtug's analysis of the Harm Principle. See Andrews (2021), Department of Education and Early Childhood Development and Department of Human Services (2018), and Holtug (2002).

- **Kangaroo killing:** any instance, accidental or otherwise, when a person causes the death of a kangaroo. This term is used intentionally in place of others, including "control", "culling", or "management", due to the euphemistic nature of these other terms.
- **Kangaroo shooting programs:** refers to government-sanctioned kangaroo shooting activities. In Victoria, this includes ATCW permits and the KHP.
- **Lethal control:** a common wildlife management term for managing populations by killing individual animals.
- **Macropod:** a term to describe the marsupial family, including kangaroos and wallabies.
- **Quality of Life:** a cumulative measure of wellbeing consisting of an individual's psychological, physical, cultural, social, and economic wellbeing.

1. Introduction

Kangaroos occupy a unique and often contradictory place in Australia's national psyche. They are a symbol of the nation; images of the kangaroo tell us a product is Australian-made, they are on the Coat of Arms and the national airline carrier, and in the names of major sporting teams. In contrast, some view kangaroos as threats to ecosystem health and human safety or “pests” competing with livestock for food and water. These views have led many Australian state governments, including Victoria, to sanction the killing of kangaroos to protect property, human health and safety, and biodiversity.³ The reported benefits of kangaroo killing are contested by some, including First Nations Australians, scientists, wildlife rescuers and advocates, and private citizens. This long-running debate takes place in the context of kangaroo killing as the largest instance of wildlife slaughter in the world and Australia as the site of the most mammal extinctions worldwide.⁴

In Victoria, wildlife is protected by the *Wildlife Act 1975* for conservation purposes. However, provisions in the Act enables kangaroos to be killed by a licensed or permitted individual. There are two ways to gain authorisation to kill kangaroos in Victoria: obtaining an Authority to Control Wildlife (ATCW) permit to “control” wildlife on private property⁵ or a commercial harvesting license under the Victorian Kangaroo Harvesting Program (KHP).⁶ Notably, the unique biology of kangaroo species makes them resistant to farming practices that would enable killing in a controlled environment, as occurs with other animals such as cows, deer, and sheep.⁷ This resistance to domestication means that killing must occur where kangaroos are found, raising the probability that bystanders may witness killing events or unexpectedly come across their aftermath. The potentially

³ Department of Environment, Land, Water and Planning, *Living with Wildlife Action Plan* (Melbourne: State Government of Victoria, 2018), 5; Department of Environment, Land, Water and Planning, *Victorian Kangaroo Harvest Management Plan* (Melbourne: State Government of Victoria, 2018), 33; “Kangaroo Harvesting”, Department of Jobs, Precincts and Regions, last modified April 22, 2022, <https://djpr.vic.gov.au/game-hunting/kangaroo-harvesting>; Keely Boom et al., “‘Pest’ and resource: A legal history of Australia's kangaroos,” *Animal Studies Journal* 1, no. 1 (2012): 17-40; “Wildlife management and control authorisations,” Victorian Government, last reviewed April 12, 2022, <https://www.vic.gov.au/wildlife-management-and-control-authorisations>

⁴ Environment and Communications References Committee, *Australia's faunal extinction crisis* (Canberra: Commonwealth of Australia, 2019); Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos and other macropods in New South Wales* (Sydney: Parliament of New South Wales, 2021), 16.

⁵ Wildlife Act 1975 (Vic) s 1a; “Wildlife management and control authorisations.”

⁶ Department of Environment, Land, Water and Planning, *Victorian Kangaroo Harvest Management Plan 2021-2023* (Melbourne: State Government of Victoria, 2021).

⁷ Nadine Richards, Biologist at enRIChed Pursuits, interview with author, recorded on April 8, 2022.

harmful and unintended impacts of these events on bystanders are a largely unexplored element of the kangaroo policy debate.

1.1 Aims of report

The literature and debate surrounding kangaroo killing primarily focus on the impacts kangaroos have on human activity and how to best manage populations to avoid these impacts.⁸ However, the impacts of kangaroo killing on bystanders are unexplored in academic literature and government policy documents. This report's aims are threefold:

1. identify and illustrate unintended human impacts of government-sanctioned kangaroo killing, with a focus on individuals who witness these events or their aftermath;
2. determine what harms, if any, come from these unintended impacts; and
3. identify implications that potential harms have for public policy concerning kangaroo management.

1.2 Methods

This report is a qualitative inquiry and was produced using a mixture of methods based on methodologies outlined in Jennifer Mason's seminal guide *Qualitative Research*.⁹

Primary Sources:

- 1 qualitative survey of 53 individuals who have witnessed kangaroo killing or its aftermath
- 3 semi-structured interviews with survey participants
- 1 semi-structured interview with four representatives from DELWP and DJPR
- 1 semi-structured interview with a First Nations Australian knowledge-holder
- 1 semi-structured interview with a biologist
- 1 semi-structured interview with a wildlife advocate

⁸ See Dunne and Doran (2021), Gibson (1987), McLeod and Hacker (2020), Read et al. (2021), and Zanker (2021) for examples.

⁹ Jennifer Mason, *Qualitative researching* (Sage, 2018).

Secondary Sources:

- State and Federal Government sources, including policy, parliamentary inquiry, and legislation documents, and website information
- Academic articles on kangaroo biology, management techniques, public perceptions of kangaroos, and relationships between humans and non-human animals
- Kangaroo and other wildlife advocacy group publications, websites, and blogs
- News articles regarding government management of kangaroo populations, including international reactions to commercial kangaroo harvesting practices

1.3 Scope and limitations

The complicated and contested nature of kangaroo management in Victoria, and Australia more broadly, and the lack of literature regarding unintended negative human impacts requires the report to limit itself primarily to the illustration and analysis of individual experiences of witnessing kangaroo killing or its aftermath. Furthermore, the restrictions in report word length and the wide-ranging nature of harms identified means that analysis of these harms is necessarily broad.

The report does not deal substantively with the impacts of kangaroo populations on farmers, the impacts of killing on the shooters, or the impacts of accidental killing, such as vehicle collisions. These issues, which underpin current government kangaroo management policies, are already debated in numerous academic articles, government documents, and interest group papers.¹⁰ Finally, mental and physical health harms have been determined from a sociological perspective, and these areas would benefit from research conducted by mental and physical health professionals to increase understanding of their effects.

¹⁰ See Dunne and Doran (2021), Gullone (2012), McLeod and Hacker (2020), NSW Farmers' Association (2021), and Zanker (2021) for examples.

2. Background context

2.1 Kangaroo management in Victoria

The governance of kangaroo management in Victoria is complex. The Department of Environment, Land, Water and Planning (DELWP) is responsible for managing kangaroo populations in Victoria through the Kangaroo Harvest Management Plan (KHMP). They conduct population surveys at two-year intervals and use estimates from these surveys to set quotas for kangaroo killing under two authorised programs: ATCW permits and the KHP. The Department of Jobs Precincts and Regions (DJPR) and the Game Management Authority (GMA) administer the KHP. DJPR is responsible for ensuring transparent harvester authorisation, quota allocation, and compliance monitoring processes. Harvester authorisation and compliance activities are sub-delegated to the GMA.¹¹

DELWP produces a publicly available report each year detailing population estimates, commercial harvesting quotas, and the reported "take" of kangaroos under their authorised programs. In 2021, DELWP reported that 119,176 kangaroos of Eastern and Western Grey species were killed under these programs; 6% of the estimated population size of 1,911,626 as of 1 January 2021.¹² However, the methodologies for estimating kangaroo populations are contested by some scientists. Critics cite concerns with mathematical modelling, limited availability of data over time, application of assumptions from localities with different environmental conditions, and lack of peer review in literature used to estimate kangaroo populations. Kangaroo advocates claim that the true number of kangaroos in Victorian is unknown and contend that DELWP overestimates the population size.¹³

¹¹ Department of Environment, Land, Water and Planning, *Kangaroo Harvesting Program Annual Report 2021* (Melbourne: State Government of Victoria, 2021), 2, https://www.wildlife.vic.gov.au/_data/assets/pdf_file/0030/564843/Kangaroo-Harvesting-Program-Annual-Report-2021.pdf.

¹² Department of Environment, Land, Water and Planning, *Kangaroo Harvesting Program Annual Report 2021*, 5.

¹³ Claire Galea, *Biostatistical report on the Kangaroo Harvest Program in Victoria* (Australia: Australian Wildlife Shelters Coalition and Australian Wildlife Protection Council, 2022); Peter Hylands, "Kangaroos 2022," *Cowboy Blog* (blog), accessed March 30, 2022, https://www.creativecowboyfilms.com/blog_posts/kangaroos-2022; Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos and other macropods in New South Wales*, 35-53.

2.2 "Humane" kangaroo killing is a violent and potentially traumatising event

Under the KHP, commercial kangaroo "harvesting" is undertaken by professional commercial shooters. Commercial shooters must kill kangaroos per the *National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes*. The code aims to "minimise, to the fullest extent possible, pain, distress and suffering"¹⁴ of kangaroos and wallabies in commercial shooting. They must kill kangaroos with a single headshot to ensure "immediate unconsciousness and rapid death"¹⁵. In the case of private landholders, they are only required to comply with the *Firearms Act 1996* (discussed in Chapter 2); there are no requirements to comply with the National Code.

Reports of shooter accuracy are mixed. Studies from the 1980s and early 2000s claim more than 95% commercial shooter accuracy. However, recent research conducted for advocacy groups coupled with reporting from volunteers claim up to 40% of kangaroos were not killed according to the National Code.¹⁶ Frequently, shooters hit the kangaroo elsewhere on the body. In the worst cases for animal welfare, the kangaroo may have a limb or even its jaw blown off. If the kangaroo escapes the area, it will be highly stressed and in significant pain, as it dies slowly of either blood loss or malnourishment over days or even weeks.¹⁷ The sight of the kangaroo dying slowly and painfully can be traumatic for people who witness it.

Furthermore, the killing of dependent young can be particularly confronting for witnesses and is a key concern of advocates. When a female kangaroo is killed, the National Code requires that the shooter also kill any dependent young. Methods for killing dependent young vary according to the young's developmental stage, involving either blunt force trauma, decapitation, or cervical dislocation. Blunt force trauma is considered the most humane method for killing dependent young and is performed by slamming the young

¹⁴ AgriFutures Australia, *National Code of Practice for the Human Shooting of Kangaroos and Wallabies for Commercial Purposes* (Wagga Wagga: AgriFutures Australia, 2020, 2, <https://www.agrifutures.com.au/wp-content/uploads/2020/11/20-126-digital.pdf>).

¹⁵ AgriFutures Australia, *National Code of Practice for the Human Shooting of Kangaroos and Wallabies for Commercial Purposes*, 9.

¹⁶ Coalition for the Protection of Kangaroos, *Submission to the Parliamentary Inquiry into Ecosystem Decline in Victoria* (Australia: Coalition for the Protection of Kangaroos, 2020), 6; *Kangaroo: A Love-Hate Story*, directed by Mick McIntyre and Kate McIntyre Clere (Second Nature Films, 2017), <https://kangaroothemovie.com>.

Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos and other macropods in New South Wales*, 73;

¹⁷ Coalition for the Protection of Kangaroos, *Submission to the Parliamentary Inquiry into Ecosystem Decline in Victoria*, 7; *Kangaroo: A Love-Hate Story*.

against a hard object, such as a vehicle tyre, to render it unconscious on impact.¹⁸ Footage of this practice indicates that it is challenging to execute with one blow, causing significant trauma to the kangaroo before death.¹⁹ Even if a single blow is successful, the young is in their mother's pouch when she is killed. It is then pulled out of the pouch by the legs and carried to the nearest hard object, a traumatic end to the young animal's life.²⁰ An RSPCA representative at a recent New South Wales (NSW) parliamentary inquiry concluded that "the manner in which macropod shooting is currently conducted poses arguably insurmountable risks to the welfare of orphan joeys".²¹

Furthermore, there is no requirement in the National Code or the KHP to dispose of dead kangaroos, so commercial harvesters typically leave the dead young at the site where they were killed. Adult kangaroos are butchered on-site, with body parts not suitable for commercial purposes left behind once the harvester is finished. The outcome of these practices is that the area is littered with young kangaroo bodies and dismembered body parts.²² For individuals who come across these sites afterwards, the aftermath can be quite traumatic, especially if they have a connection to the kangaroo mob in the area. Many report participants provided images of these scenes; a selection of images are collated in Appendix A.

¹⁸ AgriFutures, 13-14.

¹⁹ *Kangaroo: A Love-Hate Story*.

²⁰ *Kangaroo: A Love-Hate Story*.

²¹ Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos*, 74, 146.

²² *Kangaroo: A Love-Hate Story*.

3. Risks to Personal safety

Personal safety is a recognised human right under the United Nations' *Universal Declaration of Human Rights* and the *Victorian Charter of Human Rights and Responsibilities Act 2006*.²³ Concerns for personal safety from shooter activity were common in submissions to a recent NSW parliamentary inquiry²⁴ and from survey participants. These included fear of both accidental and intentional physical harm from shooters. Importantly, whether a physical injury occurs or not, a reduced sense of personal safety is often associated with psychological harm (this is discussed further in Chapter 4).

3.1 Shooting activity and risk of unintentional harm

Kangaroo shooting in Victoria takes place on private properties by, or with the permission of, the landowner or property manager. When coupled with the difficulty of shooting a kangaroo discussed in Section 2.2, the proximity of shooters to neighbouring properties is potentially a significant threat to an individual's safety. Indeed, the dangers of shooting on private properties are recognised in legal requirements for the safe use of firearms as outlined in the *Victorian Firearms Act 1996* and *Firearms Regulations 2018*. For killing animals deemed 'pests', the occupant or owner of a property must permit shooting within 250 metres of their dwellings, and shooting must not occur within 100 metres of a road.²⁵ General prohibitions also exist for those operating a firearm. They are not allowed to damage property, shoot across or onto private property without the occupier's or owner's consent, or otherwise use a firearm in a dangerous manner.²⁶ These limits are in place to minimise the risk of injury or death from a bullet that misses its intended target. There are reports of .22 calibre rifle bullets, one of the approved ammunition types for kangaroo shooting, travelling up to two kilometres depending on weather conditions and the angle of the shot.²⁷

²³ *Charter of Human Rights and Responsibilities Act 2006* (Vic), 3, 15; *Universal Declaration of Human Rights* (UN), 3.

²⁴ Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos*, 86.

²⁵ *Firearms Regulations 2018* (Vic), 5-7.

²⁶ *Firearms Act 1996* (Vic), 234, 239.

²⁷ Brandon Bates, "Expert: 'The average person doesn't realize how far a bullet from a gun travels'," *WBIR*, April 4, 2019, 02:46 p.m. EDT, <https://www.wbir.com/article/news/expert-the-average-person-doesnt-realize-how-far-a-bullet-from-a-gun-travels>; Domna Antoniadis, "Range of a Handgun Bullet," *The Physics Factbook*, last updated 2006, <https://hypertextbook.com/facts/2002/DomnaAntoniadis.shtml>.

Many participants in this research project reported shooting activity in the direction of, across, and onto their properties, without the shooter seeking permission or notifying them that shooting would occur. In some cases, participants reported shooting activity as close as 25-30 metres from their homes. These events are a significant risk of serious injury or death if a shooter misses their target or mistakes another animal or person for a kangaroo during night-time shooting.

Table 1: Examples of participant responses regarding personal safety

Spotlights shining into our bedroom window together with loud gunfire have woken us up on numerous occasions. On one occasion, the shooter shone a spotlight from his vehicle with loaded guns, on my partner [name redacted] while she was standing close to our gate less than 60 metres away.

Sometimes the gunfire comes from three different directions making us feel quite sick and vulnerable. A few weeks ago we had an artist and her husband visiting. They quickly got in their car and left.

On several occasions over the years, shooters have killed a roo on my property. On one occasion I was in a building about 20 meters away from where they shot onto my property to kill the roo.

3.2 Antisocial behaviour and fears of intentional harm

Antisocial behaviours vary significantly in their definition and severity as they are contingent upon the community in which they occur.²⁸ Typically, they range from behaviours considered a nuisance to those that are harmful to others. However, common across many Australian formulations of antisocial behaviour is aggressive and hostile behaviour towards another. Such behaviour is generally considered the most severe type of antisocial behaviour as it violates the rights to safety and stability of the person receiving it.²⁹

Reports of antisocial behaviour and associated fears for personal safety were a strong theme in participant responses. Intimidation, threats, and harassment from shooters and pro-shooting landholders were consistently cited in open-ended question responses. 34% of participants reported intimidation from professional shooters, while 46% reported intimidation from neighbours and other landholders regarding kangaroo shooting.

Table 2: Examples of participant responses regarding antisocial behaviour

Whenever I put anything up on social media about kangaroos that have been killed or acts of cruelty... people are shocked and outraged. Fear of dealing with unhinged people with guns keep most locals from being excessively vocal.

Shooting animals needs to be recognised as a form of violence (even if it is "legal") and the impact of that violence on social communities needs to be recognised, acknowledged and legislated for.

[The shooter's] behaviour is dangerous and intimidating... He has also intimated and threatened our guests. He claimed it was dangerous for them to be on a public road while he was shooting. Instead of waiting for our guests and my partner to get out of harms way he proceeded to shoot while they were still on the public road.

²⁸ Amanda McAtamney and Anthony Morgan, *Research in Practice Summary Paper No. 5* (Canberra: Australian Institute of Criminology, 2009), 1, <https://www.aic.gov.au/publications/rip/rip5>.

²⁹ M. Blais et al., "Personality and Personality Disorders", in *Massachusetts General Hospital Comprehensive Clinical Psychiatry*, eds. Theodore A. Stern et al. (Elsevier, 2008), 433-444; McAtamney and Morgan, *Research in Practice Summary Paper No. 5*; P. Frick, E. Robertson and J. Clark, "Callous-unemotional traits," in *Developmental Pathways to Disruptive, Impulse-Control and Conduct Disorders*, ed. Michelle M. Martel (Academic Press, 2018), 139.

4. Mental and physical health harms

The debilitating nature of poor mental health is well documented and was recognised in the Victorian Government's 10-year mental health plan in 2015.³⁰ Concerning the unintended impacts of government-sanctioned kangaroo killing, participants' most common negative impacts in survey responses and interviews were related to mental health. 100% of participants reported that their experiences negatively impacted their mental health, and 70% of respondents reported that the impact was "severe" or "very severe". In addition, 32% of respondents reported speaking with a GP regarding their experience and 26% talked to a psychologist. Key themes connected to mental health impacts included trauma and psychological and emotional distress coupled with mental illnesses such as anxiety and depression.

4.1 Trauma

Trauma is increasingly understood as an underlying cause of poor mental health and mental illness, with trauma-informed responses for mental illness rising in prevalence.³¹ A traumatic event is "any event that involves exposure to actual or threatened death, serious injury, or sexual violence"³² or threatens an individual's sense of psychological or social integrity.³³ Critics of kangaroo shooting programs often cite the risk of psychological trauma for residents from these programs. This report finds validity in this criticism. In some cases, participants directly identified the experience as traumatic, while in other cases, participants described the impacts of their experience in ways consistent with trauma.

³⁰ Department of Health and Human Services, *Victoria's 10-Year Mental Health Plan* (Melbourne: State Government of Victoria, 2015), 17, <https://www.health.vic.gov.au/sites/default/files/migrated/files/collections/policies-and-guidelines/v/victoria-10-year-mental-health-plan.pdf>.

³¹ Angela Sweeney et al., "A paradigm shift: relationships in trauma-informed mental health services," *BJPsych Advances* 24, no. 5 (2018): 319-333; Department of Health and Human Services, *Victoria's 10-Year Mental Health Plan*, 17.

³² "Stress and trauma", Australian Institute of Health and Welfare, published July 23, 2020, <https://www.aihw.gov.au/reports/australias-health/stress-and-trauma>.

³³ Sweeney et al., "A paradigm shift: relationships in trauma-informed mental health services," 320.

There are several, often overlapping, ways in which the nature of kangaroo shooting programs risks trauma to witnesses:

1. As discussed in Chapter 3, shooting takes place at night with the use of spotlights and high-powered rifles. The nature of kangaroo shooting is a threat to individuals with the potential for serious injury or death.
2. As discussed in Chapter 2, the commercial practice of butchering kangaroos in the field exposes individuals to death. After killing a kangaroo for commercial purposes, the harvester will cut off the kangaroo's head and limbs, and gut the animal. They leave these body parts at the kill site and take what remains of the carcass for processing. Individuals in the area often come across the remains of kangaroos, sometimes dozens in an area, during their day. The traumatic nature of unexpectedly seeing the remains of harvested kangaroos has been commonly reported across government inquiries, news articles, advocacy publications, and the survey for this project.³⁴ Survey participants often described how persistent mental images of dead kangaroos disturb their sleep and lead to anxiety about future shooting.
3. The inherent difficulty of humanely killing kangaroos exposes individuals to traumatic injury. Participants described and provided images of kangaroos that had not been killed by a shot through the brain as required by the National Code. In such cases, kangaroos have had limbs and jaws shot off or have been injured by shots to the neck or body. In some instances, kangaroos may take days or even weeks to die. Many participants described witnessing the suffering of these injured animals in ways that either directly invoked or indicated trauma.

³⁴ See Dahlstrom (2021), Portfolio Committee No. 7 (2021), and Wilson and Croft (2005) for examples.

Table 3: Examples of participant responses indicating or invoking trauma

I had flashbacks about this for weeks, and even now the scene can play out in my mind with revolting clarity.

I have attended multiple rescues... where kangaroos have been shot and left alive. Causing me the emotional trauma of witnessing their suffering, having to end their life humanely and then unsuccessfully look for their joeys... I have personally found numerous dismembered bodies of kangaroos roadside and on private property.

We stopped to check. He was dead. Shot. We then noticed bodies everywhere. It was so distressing I could barely breathe and still to this day the images haunt and distress me beyond belief... I have no fear of going to hell. I'm already there.

My GP has ordered more sessions but I have not taken them up yet. I am a mature, confident and self-assured woman who has been a leader in my field of work and successful in life. I have dealt with life's losses and change, but this event has been very traumatic.

I do have PTSD from the shooting any slight bang or noise will send a shock wave through me and start my heart racing after which I can't sleep. I often have nightmares and wake in fright.

The shooting continued - waking us up at 1:00, 2:00 and 3:00am with gunshots and lights shining through our home and retreat. I would often wake up and look out the window and think the gunman was entering our property as he appeared to at our front gate. I always thought I was going to be killed and my life was in danger. I began having panic attacks and at times I thought I would need an ambulance.

I suffer from C-PTSD from childhood sexual abuse and seeing animals that have been shot or killed or injured on the roads exacerbates the trauma and can sometimes be very difficult to deal with.

When i go to bed it should be for peace, reflection of the days activities and slumber. I should not be ruminating of the horror i have seen which cannot leave my mind.

This has all had a terrible impact on my wellbeing, keeping me awake and giving me nightmares.

Most of it stays with me and will forever.

4.2 Anxiety

On average, one in four Australians experience anxiety throughout their lifetime, making it the country's most common mental health condition.³⁵ Anxiety consists of chronic and distressing thoughts and fears that interfere with daily life.³⁶ Anxiety was a common mental health harm indicated by participants and most commonly connected to concerns for their safety (see Chapter 2) and for animal welfare during shooting.

Table 4: Examples of participant responses regarding anxiety

I am now highly anxious when I travel rurally. I am almost waiting to hear the gunshot. Whether I see a kangaroo or not. I can no longer sleep overnight in the bush, camping or near any farmland as I know the killing occurs most then.

Just about nightly spotlight shooters shine the spotlight on our house and property and shoot across our place, across neighbours paddocks from a moving vehicle. Shooters shoot in a local creek area on Crown land. Some Kangaroos are shot and left to die. I'm frightened by the shooting and am worried about my family's safety and the wild wallabies and kangaroo on our place.

The Roos are the apples of our eyes. They are our children. Everything we do, we do for them. The thought of harm coming to them makes us feel sick. Our lives are constantly anxious. We live in fear of shooters seeing our Roos and wanting to target them. We know shooters are actively seeking out properties to shoot on.

I feel constantly on guard. Lights travelling down our road, cars back firing, long weekends, people walking in paddocks.....I can no longer relax. Weekends are the worst. I lay awake, especially on weekends ready to get in my car and head to gun shots or spotlights. I feel fried.

³⁵ "Anxiety," Beyond Blue, accessed April 23, 2020, <https://www.beyondblue.org.au/the-facts/anxiety>.

³⁶ "Anxiety disorders," Better Health Channel, accessed April 23, 2020, <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/anxiety-disorders#about-anxiety-disorders>.

4.3 Depression and other mental health conditions

Depression is a common mental health condition affecting about 1 in 7 Australians during their lifetime, which can severely impact an individual's psychological and physical health. The main symptoms of depression include a feeling of sadness and loss of motivation that interfere with daily life.³⁷ Some survey participants reported episodes of depression following shooting activities. These were often associated with a sense of helplessness for individuals, particularly regarding government sanctioning of shootings and unsatisfactory responses from institutions (discussed in Chapter 5). In several cases, individuals were medicated due to depression or other mental health disorders associated with their experiences of kangaroo killing.

Table 5: Examples of participant responses regarding depression

But it is heartbreaking to be so powerless to stop the slaughter... I feel actually sick to my stomach when I think of the torture they will go through with the farmers and the culls.

Hard to sleep after witnessing the atrocities, always worrying about our beautiful wildlife and how mistreated they are. Feel overwhelming sad about it all and helpless.

I have thought about... moving from the area (I still do). The enormous grief of losing 'my mob' remains and I feel so sad when I see the few remaining, and remember the times I would see the mob move back and forth from my living room. I am in constant FEAR for the remainder, as this could re-occur at any time. I feel absolutely POWERLESS to stop this program and the killing of our roos.

³⁷ "Depression," Better Health Channel, accessed April 23, 2020, <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/depression>.

4.4 Wildlife carers as a high-risk group

Survey data and analysis of submissions to parliamentary inquiries indicate that wildlife carers are a high-risk group for increased poor mental health from kangaroo shooting programs. Wildlife carers were the largest distinct cohort of participants in the survey, constituting 40% of respondents, with 80% of wildlife carers reporting that their experiences had a "severe" or "very severe" impact on their mental health. Shooting occurring near wildlife shelters was a common theme in open-ended responses. These events created significant anxiety for wildlife carers, not knowing which of the kangaroos they had cared for, often from a very young age, would survive the night. Indeed, wildlife carers often expressed frustration and dismay at how their year's work can be destroyed in a single night of shooting and reported this contributing significantly to poor mental health. A sense of helplessness was also common amongst wildlife carers, who often mentioned a conflict of interest for DELWP between managing harvest numbers, ATCW permits, and regulating wildlife carers.

Table 6: Examples of wildlife carer participant responses

Our normal day of feeds and treatment starts at 6am and finishes sometime after 10pm (unless we have "pinkies" who need an extra 2.30am feed) If we hear one shot overnight, sleep is out, we have to react as if the killers are here. This continual pressure is soul destroying and creates anxiety and depression.

We have also had our neighbour being granted culling permits for his property and had to listen to the shootings going on next door, not knowing whether any of our released kangaroos were part of the kill.

I've had friends who have painstakingly, and at a tremendous financial and emotional cost, rehabbed kangaroos at their wildlife shelters only to have the rehabbed kangaroos killed by a neighbour who used body shots and left joeys to die from exposure.

Yes, I fear for every kangaroo we rear and release. When I hear shooting in the area around our property, it strikes fear in my heart and I am on high alert. I can't unsee what I've seen - miss shot kangaroos, orphaned joeys, utes full of carcasses.

4.5 Physical health impacts

64% of participants reported their experience harmed their physical health. Physical health impacts were more distributed, with 38% "moderately impacted", 29% "severely impacted", and 24% "very severely" impacted. Harms were primarily connected to the outcome of poor mental health, particularly emotional stress and trauma leading to poor sleep with flow-on effects to physical health more generally, such as fatigue and increased illness.

Table 7: Examples of participant responses regarding physical health impacts

Lack of sleep and resulting fatigue. Anxiety makes me feel physically ill and the result has been significant weight loss that has made my loved ones and doctor very concerned.

I need to take valium periodically to sleep. I've never taken anything more than an aspirin. The sleeplessness affects my overall physical energy and strength.

Anxiety and distress increase my heart palpitations and incidence of asthma.

Lack of sleep and all things previously discussed led to me stopping physical exercise that exasperated depression and anxiety.

Tiredness, increased feeling of being unwell, stomach problems, loss of weight.

Long term and prolonged stress has an affect on my body such as inappetence, sleep deprivation, anxiety, feelings of fear, injustice and doom.

5. Quality of life

Quality of life is a measure of wellbeing in modern societies, with the term used in various contexts from healthcare to social connectedness. As a unifying concept, an individual's quality of life is the cumulative impact of their psychological, physical, cultural, social, and economic wellbeing on their overall wellbeing.³⁸ As discussed in Chapters 3 and 4, kangaroo shooting programs can harm an individual's sense of personal safety and mental and physical health, contributing to a poorer quality of life. Moreover, these programs can also harm individuals' livelihoods, economic wellbeing, social connectedness, and sense of agency, negatively impacting quality of life.

5.1 Livelihoods

Many participants in both this research project and a NSW parliamentary inquiry reported negative impacts from being unable to engage in the activities and livelihoods of their choosing due to kangaroo shooting occurring near their homes and businesses.³⁹

One case, highlighted in both the NSW inquiry and the documentary film, *Kangaroo: A Love-Hate Story*, tells of two landowners, Greg and Diane, who purchased a property because of its conservation value for Australian bushland and kangaroos. Six months after the purchase, the owner of an adjacent farm engaged in kangaroo shooting activity. As a result of the shooting, Greg and Diane have been unable to operate their conservation business. Instead, they have spent more than a decade enduring what the inquiry called 'the brutality of kangaroo killing, social isolation, threats to their safety and financial hardship'.⁴⁰ Greg and Diane's time is now mostly spent documenting the aftermath of kangaroo shooting – including instances of non-fatal shooting – amidst intimidation, threats, and abuse from shooters. Greg and Diane's case study illustrates commonly reported stories of "tree-changers" who move to the bush to be closer to nature but are confronted by frequent episodes of mass wildlife slaughter.⁴¹

The experiences of several report participants reflected this well-documented case. One participant, who owns an eco-lifestyle tourism business in a tourism precinct of Victoria,

³⁸ Martha Nussbaum and Amartya Sen, eds, *The quality of life*, Clarendon Press, 1993.

³⁹ Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos*, 85-86.

⁴⁰ Portfolio Committee No.7, 85

⁴¹ Peter Hylands, former President of the Australian Wildlife Protection Council, interview with author, recorded on April 11, 2022; Portfolio Committee No.7, 86.

reported that they have been unable to grow their business due to visitors feeling unsafe when hearing gunshots at night. A second participant could not maintain their accommodation business due to continuous shooting on an adjoining property. When they attempted to lease part of their property on the rental market to cover their financial shortfalls, the eventual tenant moved out quickly because of safety and mental health concerns attributed to the shooting.

5.2 Economic harms

Economic harms were evident in participant responses, with 51% of survey participants attributing financial losses to kangaroo killing activities. Reduced income, either as an employee or business owner, was the most reported reason for financial loss at 37%. The second most common loss was through expenditure on volunteer activities at 36%. These were primarily related to wildlife caring, which is a largely self-funded activity. Losses through volunteer activities often overlapped with reduced income due to the time commitment required to raise orphaned kangaroo joeys. Other losses were attributed to preparing properties for quick sale and accepting reduced offers because of kangaroo shooting activity in the area. Estimated costs ranged from less than AUD\$1000 in several cases to more than AUD\$500,000 in others. Most reported losses fell within the AUD\$1001 to AUD\$10,000 and the AUD\$10,001 to AUD\$50,000 brackets at 21% and 29% respectively.

5.3 Social connectedness and community impacts

Strong social connections and a sense of community are also essential for quality of life.⁴² A common theme in participant responses for this report was a reduced sense of safety and cohesiveness within local communities. As noted in Chapter 3, 34% of participants reported intimidation from kangaroo harvesters, and 46% reported intimidation from neighbours or other landholders regarding kangaroo shooting. Furthermore, 38% of survey participants reported that their experiences had worsened their sense of safety in their community, and a further 45% indicated that it had worsened significantly. Participants frequently reported that they no longer felt connected to their local community.

⁴² Ichiro Kawachi and Lisa F. Berkman, "Social ties and mental health," *Journal of Urban health* 78, no. 3 (2001): 458-467; Sheldon Cohen, "Social relationships and health," *American psychologist* 59, no. 8 (2004): 676-684.

Report participants also shared experiences of community division stemming from individual landholder decisions to engage in kangaroo killing. In several cases, participants described how landholder communities had lived harmoniously with local kangaroo mobs until a new landholder had moved into the area. The new landholder was legally able to engage in either an ATCW or the KHP to have the local kangaroo population culled despite the protestations of the existing community. The following case studies illustrate the impact that a single individual's view of kangaroo management can have on a community.

Case Study 1

Adrian [pseudonym] lives on a 60-acre property between Melbourne and Ballarat. For over a decade, he and his neighbours have coexisted peacefully with their own "private" mob of kangaroos living across their properties. However, early in 2022, a couple bought an empty parcel of land in the area and engaged a commercial harvester to kill a kangaroo they felt threatened by on the property. On the first visit, the harvester killed over 20 kangaroos, and returned to the area on several more occasions to fill their quota under the KHP. Adrian and his long-term neighbours have no recourse under current legislation to object to or stop the shooting, even despite the neighbour not currently using the property. As a result, what was previously a peaceful co-existence with the local kangaroo mob now involves periodic instances of unannounced and violent night-time shooting, and the degradation of a once harmonious community.

Case Study 2

Melissa [pseudonym] has called her broad-acre property in Victoria's west home for 30 years and until recently had not encountered kangaroo killing. During this time, she has lived alongside the local kangaroos, whose mob she feels very much a part of. Over several evenings in 2021, Melissa estimates that more than 40 kangaroos were killed in the area. Before the shooting, Melissa felt part of a harmonious community of more than a dozen landholders who had their differences but did not harm wildlife. Now she avoids walking the local roads for fear of running into the landholders who have permitted the killing, and multiple landowners are in the process of moving due to their lack of agency in preventing shooting activity. Melissa reports that the thriving community she has called home for 30 years has been divided and broken apart.

5.4 Institutional support and individual agency

Another critical factor in an individual's wellbeing and quality of life is their agency.⁴³ Here, agency is defined as an individual's sense of autonomy and a belief that they can influence their circumstances.⁴⁴ Agency is highly valued in democratic systems, with Government interference with individual agency generally only acceptable under circumstances where such interference protects others from harm. Furthermore, in a democratic system, individual agency relies on the sense that government institutions will have mechanisms for reporting citizen concerns and consider such concerns in policymaking.⁴⁵

A lack of agency in affecting issues that matter to them was a strong theme in survey responses and submissions to parliamentary inquiries. This theme was most strongly correlated with a lack of institutional support from government departments or officials in managing the negative consequences of the ATCW and KHP schemes. Government ministers and the three organisations responsible for kangaroo shooting programs (GMA, DEWLP, and DJPR) received the highest dissatisfaction from survey participants regarding responses to feedback; 75% of participants were "very unsatisfied" with their responses. Furthermore, these four groups were reportedly amongst the most likely not to respond to complaints or feedback.

⁴³Geoffrey L. Cohen and David K. Sherman, "The psychology of change: Self-affirmation and social psychological intervention," *Annual review of psychology* 65 (2014): 335; Jonathan M. Adler et al., "The incremental validity of narrative identity in predicting well-being: A review of the field and recommendations for the future," *Personality and Social Psychology Review* 20, no. 2 (2016): 161-162, <https://doi.org/10.1177/1088868315585068>;

⁴⁴ Jonathan M. Adler et al., "The incremental validity of narrative identity in predicting well-being: A review of the field and recommendations for the future," 157.

⁴⁵ Fred Dallmayr, *The promise of democracy: Political agency and transformation* (Suny Press, 2010); Guillermo O'Donnell, *Democracy, agency, and the state: theory with comparative intent* (Oxford: Oxford University Press, 2010), 13-51; Harry C. Boyte, "Reframing democracy: Governance, civic agency, and politics," *Public administration review* 65, no. 5 (2005): 536-546, <https://doi.org/10.1111/j.1540-6210.2005.00481.x>.

Table 8: Examples of participant responses regarding institutional support

We have complained to the relevant bodies, the police, DELWP and the GMA who respond by saying no crime has been committed and refuse to acknowledge that the shooters behaviour is reckless, intimidating and dangerous.

We know from other neighbours who have been much more severely impacted, there is no recourse for shooters who kill animals against the code or against the law. It requires evidence, and how can one possibly gather evidence when it happens in the dead of night, in the wild of the forest, and moments from our homes. Sometimes our neighbours are the ones with the guns and the law on their side. It is incredibly frightening. The country should be a place of peace for all, not violence and intimidation with a tiny minority protected to the detriment of residents, tourists and animals of all species. A few wanton people with guns are essentially immune from penalty or prosecution.

After a particularly dangerous shooting incident in December 2020 I began not only writing letters to politicians but ringing them up and I found myself yelling at people... DELWP have not returned my calls, the police have never visited or spoken to us, the local council support the farmers and have failed to take a strong stand against shooting in the tourism precinct, we have decided to prepare our property for sale and if the shooter comes back we will sell up.

We know our kangaroos are being attacked left right and centre- by habitat loss, by worsening fire seasons, by roads put through their homes without a thought, and to top it off, by ignorant selfish shooters. We are aware that other countries value their wildlife- they build hundreds of road overpasses to keep their wildlife and drivers safe. But here in Australia- with our beautiful unique wildlife - we only have 12 overpasses. In Victoria- the most built up state- we have NO overpasses. The point is, as regional landowners who love our wildlife we feel alone in wanting to protect it. We feel constantly anxious and depressed and when the rude unnecessary shooting starts up, the anxiety turns to panic. We are dismayed and disgusted the government does not recognise the value in protecting our wildlife. It appears clear the government is beholden to a minority but loud and aggressive group of gun enthusiasts. If things do not change fast, we will have no wildlife left in this country, no one wanting to live in regional areas, and likely suicides in the interim.

This perceived lack of support from ministers and department staff regarding individual's concerns about animal welfare and the impact of shooting on human quality of life was reflected in document analysis. A review of public-facing government documents and ministerial and department responses to complaints provided by participants indicates that these authorities routinely dismiss individuals who express interest in preserving local kangaroo populations. Most responses from government officials highlight the legality of kangaroo shooting, largely ignoring the harms being experienced by individuals living and working in proximity to shooting. For departmental staff, this is likely a product of the legislative framework surrounding kangaroo shooting programs (discussed in Section 7.4). In the case of ministers, it indicates ongoing support of kangaroo shooting programs.

6. First Nations Australian harms

The Victorian Government is currently in Phase 2 of a First People's treaty process with Aboriginal Traditional Custodians and Aboriginal Victorians. The most recent annual report of the treaty process acknowledges the ongoing impacts of dispossession and colonisation, and the exclusion of First Nations Australians' cultures, laws, traditions, and customs from Australian laws and government policies.⁴⁶ First Nations Australians have called the land now known as Australia home for at least 65,000 years⁴⁷ and have coexisted with kangaroos throughout their long history.

Notably, First Nations Australians' views on any matter are not monolithic, which is undoubtedly the case with kangaroos and government kangaroo management programs. Consequently, the views expressed in this chapter are those of First Nations knowledge-holders who believe kangaroo shooting programs are an example of ongoing processes of colonisation and domination.

As with other Victorians, First Nations Australians are at risk of the individual harms discussed in Chapters 3-5 of this report. However, for First Nations Australians, harms can run deeper than quality of life impacts; kangaroo shooting programs threaten their cultural and spiritual ways of living and are symbolic of the ongoing fight for self-determination and decolonisation.

6.1 Kangaroos in First Nations Cultures

First Nations Australians have a nuanced relationship with kangaroos; they can be totem, bush tucker, teachers, and form part of ceremony. Kangaroo travelling patterns teach First Nations Australians how to engage with the land by creating and maintaining songlines and dreaming tracks. This is essential for cultural and spiritual connection to

⁴⁶ First Peoples – State Relations, *Advancing the Victorian Treaty Process Annual Report 2020-21* (Melbourne: State Government of Victoria, 2021), 3.

⁴⁷ "Evidence of first peoples," National Museum of Australia, last updated March 23, 2022, <https://www.nma.gov.au/defining-moments/resources/evidence-of-first-peoples>.

Country⁴⁸. As one knowledge-holder stated during a semi-structured interview for this report, "no kangaroo means no culture and no us".⁴⁹

6.2 Kangaroo as totem and connection to Country

For some First Nations Australians, kangaroos are totem. Totems are natural objects, such as plants or animals, and vary across family and clan groups. They are integral to First Nations Australians' cultural and spiritual lives, informing Dreamtime creation stories of Country. Their connection to Country is a powerful mutualistic bond that sees First Nations Australians as a part of Country themselves, with an obligation to care for Country, as it cares for them. First Nations Australians have conservation and caretaking responsibilities for Country and their totems and often view their totems as family. The health of First Nations communities is "inextricably intertwined"⁵⁰ with the health of Country and those animals and plants on Country are part of this tapestry.

6.3 Harm from kangaroo shooting

"The kangaroo are my ancestors. They are my culture and my family's spiritual connection to country. Every time one of these totemic animals is gunned down a part of myself – my family – dies. Our cultural connections die. The interconnectedness of Country dies, our creative spirit torn apart."⁵¹

The KHP and KHMP are not consistent with culturally appropriate treatment of animals under First Nations Australian cultural practice in several ways:

1. Commercial use of animals for profit is against many First Nations' practices, with animals only hunted for food and medicine.

⁴⁸ *Kangaroo: A Love-Hate Story*; Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos*, 16, 13; "Songlines," *Deadly Story*, accessed May 8, 2022. https://www.deadlystory.com/page/culture/Life_Lore/Songlines; K. Li'Dthia Warrawee'a, "The Kangaroo Betrayed," in *Kangaroos: Myths and Realities*, 3rd ed., eds. Maryland Wilson and David B. Croft (Melbourne: Wildlife Protection Council of Australia, 2005), 95-97; Sophie Chao, "Bouncing back? Kangaroo-human resistance in contemporary Australia," *Environment and Planning E: Nature and Space* (2022), <https://doi.org/10.1177/25148486221084194>.

⁴⁹ Anonymous First Nations Australian Knowledge-Holder, interview with author, recorded on May 9, 2022.

⁵⁰ Legislative Council Environment and Planning Committee, *Inquiry into ecosystem decline in Victoria*, 42-43.

⁵¹ Witness at a NSW inquiry: Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos*, 12-13.

2. Hunting a totem animal should only occur with the permission of the local First Nations Australian family or clan for whom the animal is totem, and should be conducted with appropriate respect and ceremony.⁵²
3. The risk of local extinctions of kangaroo populations endangers connection to Country as songlines disappear.⁵³
4. For those for whom kangaroo is totem, kangaroos are part of their family and connect them to their ancestors. Killing kangaroos, particularly without ceremony and permission, is like killing a family member.

These cultural harms are exacerbated by how kangaroos are butchered in the field. For many First Nations Australians, their cultural practice is to bury the body parts of kangaroos that are not used to show respect for the animal. The common practice of commercial harvesting to leave the dismembered body parts of kangaroos in the field is considered deeply disrespectful.⁵⁴

6.4 Consultation with First Nations Australians

Part of the Treaty process is ensuring the cultural and spiritual perspectives of First Nations Australians are reflected in government policies and legislation.⁵⁵ DELWP has not actively consulted with First Nations Australian groups in constructing the KHMP and plans to do so for the next iteration (due in 2024). There has been limited consultation in instances where groups have proactively contacted DELWP to express aspirations for being part of the program. However, as with non-Indigenous Australians, there is a lack of consultation for First Nations Australians who do not support kangaroo shooting programs.⁵⁶ This lack of consultation with First Nations groups of diverse views is concerning given the cultural harm indicated by First Nation Australians consulted for the report and the Victorian Government's stated objective of respecting the voices of First Nations Australians.

⁵² Anonymous First Nations Australian Knowledge-Holder, interview with author; Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos*, 14.

⁵³ Legislative Council Environment and Planning Committee, *Inquiry into ecosystem decline in Victoria*, 292; Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos*, 13.

⁵⁴ Anonymous First Nations Australian Knowledge-Holder. Portfolio Committee No.7, *Report 11: Health and wellbeing of kangaroos*, 83.

⁵⁵ Department of Premier and Cabinet, *Advancing the Victorian Treaty Process Annual Report and Plan 2018-19* (Melbourne: State Government of Victoria, 2019).

⁵⁶ Representatives from the Department of Environment, Land, Water and Planning and the Department of Jobs, Precincts and Regions, interview with author, recorded on June 3, 2022.

7. Implications for legislation and policy

As discussed in section 5.4, a consistent theme in participant responses is a lack of responsiveness from government institutions regarding their concerns and the harms they experience. To understand the implications that these concerns have for legislation and policy, it is important to situate participant views within a broader societal context.

7.1 Analysing trends in public opinion

Public opinion on the management of kangaroos is divided. Kangaroos have a history of malignment as agricultural pests and dangerous animals. Despite this history, support for lethal control of kangaroos in the broader population is mixed. One recent study indicated a 53-47% split against lethal control, while another indicated just 39% agreement with the practice, with 43% against and 18% neutral.⁵⁷ Wildlife management research shows that support for management plans is often determined by how an individual perceives wildlife from an identity-based or ethical positionality rather than demographics. For example, several studies have shown that an individual's locality has no impact on support for lethal control of wildlife, with pro- and anti-lethal control views found equally in regional and city residents, and across countries. In contrast, specific identities, namely being either a farmer or an animal rights activist, were more likely to indicate an individual's support or disapproval of lethal control measures. Across the broader population, public opinion correlates with ethical orientations, particularly the dichotomy of domination and mutualism.⁵⁸

7.2 Shifting ethical orientations

A common dichotomy in wildlife management research is between domination and mutualism ethical orientations. A domination orientation is the view that humans are outside, and masters, of nature. Individuals with a domination orientation prioritise their own needs over those of nature and support commercial practices that exploit nature

⁵⁷ Mark Boulet et al., "Evenly split: Exploring the highly polarized public response to the use of lethal methods to manage overabundant native wildlife in Australia," *Journal for Nature Conservation* 61 (2021), <https://doi.org/10.1016/j.jnc.2021.125995>.

⁵⁸ Boulet et al., "Evenly split: Exploring the highly polarized public response to the use of lethal methods to manage overabundant native wildlife in Australia," 6; Lily M. van Eeden et al., "Exploring nationality and social identity to explain attitudes toward conservation actions in the United States and Australia," *Conservation Biology* 34, no. 5 (2020): 1172, <https://doi.org/10.1111/cobi.13488>; Lily M. van Eeden et al., "Social identity shapes support for management of wildlife and pests," *Biological conservation* 231 (2019): 167-169, <https://doi.org/10.1016/j.biocon.2019.01.012>.

when they serve human interests. Mutualism is the orientation that animals and humans are equal in ethical standing; mutualists believe that all living creatures deserve equal compassion and care, whether humans or animals.⁵⁹

Research on public opinion of kangaroo management indicates that individuals who support lethal control often invoke arguments that align with domination orientations. These include labelling kangaroos as pests that interfere with farming activity, as overabundant and therefore unsustainable animals, and as fun to kill.⁶⁰ A domination orientation can include an interest in animal welfare. However, it frames all animal issues as problems for humans to solve while ensuring human benefit. For these individuals, lethal control is the preferred population control method, often for the economic benefit of selling animal by-products.⁶¹

In contrast, individuals who do not support lethal control of kangaroos commonly invoke arguments that align with a mutualist orientation. These include rejection of profiting through commercial use of animal body parts, the value of compassion for wildlife, prioritisation of conservation, and the need for humans to change their lifestyles to enable wildlife protection.⁶² Where management is necessary, mutualistic approaches often emphasise non-lethal measures such as sterilising breeding adults, population relocation, or reintroducing locally extinct natural predators such as the dingo.⁶³ Mutualism is also associated with collaboration amongst local organisations, conservation partners, and private landowners.⁶⁴ Significantly in the context of chapter 6, mutualism is foundational to First Nations Australians' understanding of Country and the reciprocal obligations they

⁵⁹ Mehmet and Simmons, "Kangaroo court? An analysis of social media justifications for attitudes to culling," 373; Michael J. Manfredo, Tara L. Teel, and Alia M. Dietsch, "Implications of human value shift and persistence for biodiversity conservation," *Conservation Biology* 30, no. 2 (2016): 292-293, <https://doi.org/10.1111/cobi.12619>.

⁶⁰ Boulet et al., "Evenly split: Exploring the highly polarized public response to the use of lethal methods to manage overabundant native wildlife in Australia," 6; Lily M. van Eeden et al., "Diverse public perceptions of species' status and management align with conflicting conservation frameworks," *Biological Conservation* 242 (2020): 3, <https://doi.org/10.1016/j.biocon.2020.108416>; Mehmet and Simmons, "Kangaroo court? An analysis of social media justifications for attitudes to culling," 373, 380.

⁶¹ Mehmet and Simmons, "Kangaroo court? An analysis of social media justifications for attitudes to culling," 380.

⁶² Mehmet and Simmons, 382; Michael J. Manfredo et al., "Linking society and environment: A multilevel model of shifting wildlife value orientations in the western United States," *Social Science Quarterly* 90, no. 2 (2009): 422, <https://doi.org/10.1111/j.1540-6237.2009.00624.x>.

⁶³ Boulet et al., "Evenly split: Exploring the highly polarized public response to the use of lethal methods to manage overabundant native wildlife in Australia," 1; van Eeden et al., "Social identity shapes support for management of wildlife and pests," 169.

⁶⁴ Manfredo, Teel, and Dietsch, "Implications of human value shift and persistence for biodiversity conservation," 292-293.

have with it. Thematic analysis of participant survey responses supports the literature on mutualism.

Table 9: Examples of participant responses indicating mutualism

In the case of the big male, we couldn't help but wonder why someone would do such a thing. Why would anyone shoot a magnificent indigenous animal who is merely existing on his own land? I took the day off work, spent some time with rescued wildlife, caring for them and interacting with them. And then one just gets on with life. Until the next time.

Over time, as I learned about kangaroo shooting and met injured and recovering joeys from my involvement with Five Freedoms Animal Rescue, I found myself becoming more bleak in my outlook about our world. If people cannot be kind to animals, then how can there be any future? A world where our environment doesn't seem to matter to the people in charge; a world where animals are hurt and no one seems to really care?! I found myself thinking of how hard the lives of animals are and how little we do to help them.

An understanding of the wildlife and their needs, people to stop being greedy and share the land. The farmers need to stop thinking about the money from their cattle and sheep and think about sharing the land and grass. Kangaroos are slow breeders and are in danger of becoming extinct. They are gentle animals that just want to graze peacefully with their mob on the land. Humans need to stop being so selfish.

All life on this planet is equal. What needs to change is for humans to realise this. We do not have the right to decide that only we shall live, or to choose which other species we kill.

7.3 Social licence to operate

Domination and mutualism orientations are antithetical, creating difficulties for compromise when seeking social support for wildlife management practices.⁶⁵ An important tool for understanding the viability of public decision-making is a Social Licence to Operate (SLO). SLOs indicate community approval for an activity and are especially important in commercial or government activities that use public land or resources.⁶⁶ Importantly, support is typically tacitly given and reliant upon assumptions in the community that may not reflect the reality of the industry. As community values change and practices become known, loss of public support can make a practice less viable, regardless of its regulatory situation. Kangaroo killing has faced increasing scrutiny from sections of the community, leading to commercial bans on kangaroo products in California in the USA and Russia, and a potential ban in the EU.⁶⁷ Indeed, the data presented above indicates a reluctance in the community toward lethal control of kangaroos and other wildlife that threatens the SLO of lethal control for kangaroo population management.

7.4 The *Wildlife Act 1975* and Government policy

Understood in the context of domination and mutualism, the Victorian Government's current legislative and policy frameworks reflect the challenge of appealing to both orientations. Stated rationales for the KHP are to generate economic benefit while ensuring animal welfare.⁶⁸ The *Living with Wildlife Action Plan* presents wildlife management as a balancing act between human and wildlife needs. However, the legislative context that underpins these government initiatives is one of domination. As

⁶⁵ Boulet et al., "Evenly split: Exploring the highly polarized public response to the use of lethal methods to manage overabundant native wildlife in Australia," 7.

⁶⁶ Jordan O. Hampton, Bidda Jones, and Paul D. McGreevy, "Social license and animal welfare: Developments from the past decade in Australia," *Animals* 10, no. 12 (2020): 2, <https://doi.org/10.3390/ani10122237>.

⁶⁷ Calla Wahlquist, "Why is the EU under pressure to ban kangaroo products and how will it affect Australia?" *The Guardian Australia*, March 20, 2022, 06:00 a.m. EDT, <https://www.theguardian.com/world/2022/mar/20/why-is-the-eu-under-pressure-to-ban-kangaroo-products-and-how-will-it-affect-australia>; Hampton, Jones, and McGreevy, "Social license and animal welfare: Developments from the past decade in Australia."

⁶⁸ Representatives from the Department of Environment, Land, Water and Planning and the Department of Jobs, Precincts and Regions, interview with author, recorded on June 3, 2022.

discussed in Chapter 2, the *Wildlife Act 1975* enables wildlife, including kangaroos, to be killed if they interfere in human activity. Ethically, it places humans above wildlife.

The Act was reviewed for the first time in 2021 by an independent panel on behalf of the Victorian Government. The panel's issues paper describes broad value changes in the Victorian community towards wildlife since the Act's inception that align with a competing domination and mutualism framework. For example, it describes a community view that wildlife have intrinsic value that warrants their protection and conservation. The paper acknowledges that the expectations and values of Victorians regarding wildlife have shifted over the 45 years since the Act's enactment and observes that "the Act may no longer be consistent with broadly held community values, expectations and aspirations for wildlife in Victoria."⁶⁹

⁶⁹ Deborah Peterson, Ngaio Beausoleil, Jack Pascoe and Arie Freiberg, *Independent Review of the Wildlife Act 1975* (Melbourne: State Government of Victoria, 2021), 10, <https://engage.vic.gov.au/download/document/16020>.

8. Findings and recommendations

8.1 Findings

This report concurs with the independent panel's assessment of the Act, described in Section 7.4. It finds that current legislative frameworks for wildlife in Victoria, including kangaroos, do not reflect changing ethical orientations towards wildlife, with harmful outcomes for individuals that live with and near wildlife. Specifically, this report finds the following:

- **Finding 1:** Shooting activity at night raises concerns for personal safety that threaten physical harm and harms individuals' psychological health (Chapter 3 and 4).
- **Finding 2:** The very violent nature of kangaroo killing, coupled with the practice of butchering kangaroos in the field, appears to lead to trauma and associated mental and physical health harms for individuals. Wildlife carers are of particular concern regarding the mental health impacts of current kangaroo management practices (Chapter 4).
- **Finding 3:** Quality of life can be diminished for individuals near kangaroo killing through the events described in Findings 1 & 2, and by harm to their livelihoods, economic circumstances, social connectedness, and agency (Chapter 5).
- **Finding 4:** For some First Nations Australians, current kangaroo management practices are deeply harmful. It is not only their quality of life that is impacted, their *way of life*, including connectedness to Country, that is threatened (Chapter 6).
- **Finding 5:** First Nations Australian consultation regarding kangaroo management practices is limited and does not include First Nations Australians who disagree with current practices (Chapter 6).
- **Finding 6:** There is not widespread support for lethal control of kangaroos. Instead, lethal control methods reflect the outdated legislative context of the *Wildlife Act 1975*. Furthermore, there is evidence that a rising mutualist ethical orientation amongst the public will lead to less support for lethal control over time (Chapter 7).

8.2 Recommendations

Considering the findings above, this report recommends:

- **Recommendation 1:** The Victorian Government amend the *Wildlife Act 1975* to reflect a growing mutualist orientation towards wildlife in the Victorian community. Current dominance-informed legislation does not reflect changing social sentiment and is not consistent with stated goals of First Nations Australian reconciliation.
- **Recommendation 2:** Subsequent wildlife management programs, including those regarding kangaroos, should focus on co-existence with wildlife and management of populations using non-lethal methods.

Appendix A – Images of Kangaroo Killing

This appendix contains images provided by survey participants of the remains of shooting activity at or near their properties. Participants have chosen for these images to be unattributed to protect their confidentiality.

Please be aware that these images may be distressing to some readers.

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