**LEAFLET: *KILLING KANGAROOS IN THE ACT*:**

**SOURCES AND NOTES**

This document provides source references and explanatory notes for each claim found in the leaflet.

**Part 1: Culling kangaroos is unnecessary and harms the environment**

1. *Kangaroos are a keystone species, ie, at natural (not "managed") densities, they are critical to maintaining the other native plants and animals that share their habitat.*

**Source:** ACT Kangaroo Management Plan, 2017, p 12-13: <http://www.environment.act.gov.au/__data/assets/pdf_file/0016/1060360/Controlled-Native-Species-Management-Plan-covering-Consultation-report-FINAL.pdf>

**Note**: The Kangaroo Management Plan (KMP) itself references numerous scholarly sources for this statement.

1. *Killing kangaroos is therefore NOT protecting threatened species. It is actually further endangering them.*

**Note:** A "keystone species" is, by definition, a species that is critical to the survival of the other species in the system, a concept coined by the zoologist Robert Paine in 1969. If a species is a keystone species, it follows that any event that reduces its natural population will have a deleterious impact on the co-evolved plant and animal species that share its habitat and depend on the keystone species for their survival. (Note: This deleterious impact could take the form of either increasing or decreasing the population of the dependent species.)

1. *CSIRO Plant Industries has confirmed that, on ACT reserves, three kangaroos per hectare are better for the environment than none, and more than three per hectare could not be found.*

**Source:** Vivian, L & Godfrey, R, (CSIRO Plant Industries), 2014, *Relationships between vegetation condition and kangaroo density in lowland grassy ecosystems of the northern Australian Capital Territory – analysis of data 2009, 2012 and 2103. Final report for ACT Environment and Sustainability Directorate (Executive Summary , dot points 6 and 7).*

1. *Kangaroos do not overpopulate. At natural (not "managed") densities, their death rate equals their birth rate.*

**Sources:**

1.Coulson G, Alviano P, Ramp D, Way S 1999 The kangaroos of Yan Yean; history of a problem population in Proceedings of the Royal Society of Victoria 111(1): 121-130.

2.Arnold, GW, Grassia A, Steven DE & Weeldenburg JR 1991 Population ecology of western grey kangaroos in a remnant of wandoo woodland at Bakers Hill in southern Western Australia, in Wildlife Research 18 (5): 561-575

1. *When food is scarce kangaroos simply stop breeding.*

**Sources:**

1.Burnie, David, Don E. Wilson, 2001, in Animal, pp. 99–101

2.Dawson, T, 2012, Kangaroos (2nd Edition), in Australian Natural History Series (CSIRO).

1. *Female kangaroos give birth only once a year.*

**Source:** Dawson, T, 2012, Kangaroos (2nd Edition), in Australian Natural History Series (CSIRO).

1. *They also suffer a high (50% to 100%) level of infant mortality.*

**Source****s:**

1.Banks, Peter B,Newsome, Alan E, and Dickman, Chris R 2000, "Predation by red foxes limits recruitment in populations of eastern grey kangaroos", in Austral Ecology, 25(3) p283

2.Mjadwesch R, 2001, in *Kangaroos at Risk*: *Biology and Conservation Ecology* <http://www.kangaroosatrisk.net/2-biology--population-ecology.html>

1. *This means that when kangaroo populations are reduced (e.g. "culled"), they cannot grow back faster than about 10% per year.*

**Source:** Mjadwesch R, 2001, in *Kangaroos at Risk*: *Biology and Conservation Ecology* <http://www.kangaroosatrisk.net/2-biology--population-ecology.html>

1. *The ACT Government kills them at 30-40% per year.*

**Sources:**

1.ACT Kangaroo Management Plan, 2010, p 135: <http://www.tams.act.gov.au/__data/assets/pdf_file/0012/394698/Kangaroo_Management_Plan_complete_for_web.pdf>

2.ACT Kangaroo Management Plan, p25

<http://www.environment.act.gov.au/__data/assets/pdf_file/0016/1060360/Controlled-Native-Species-Management-Plan-covering-Consultation-report-FINAL.pdf>

1. *This guarantees extinction within a few years.*

**Note:** Any species that is being killed 3-4 times faster than it can replace its population is bound for extinction.

1. *When urban kangaroos are made homeless by development, translocation is a well-proven, humane alternative.*

**Sources:**

1.ACT Wildlife Foundation reports on the welfare of kangaroos translocated from Government House in 1992

2.Eye witness reports on the Bathurst (Mount Panorama) kangaroo translocation in 2017

1. *Canberra's urban reserves are fragmented by deadly road systems.*

**Source:** Google maps, ACT!

1. *Vegetated wildlife overpasses are needed to re-link them, in order to protect both kangaroos and motorists.*

**Note:** Information on the use of wildlife overpasses around the world (including pictures) can be found at: [Wildlife Overpasses Around The World: Working With Nature, Not Against - True Activist](https://www.trueactivist.com/amazing-animal-bridges-around-the-world/)

1. *Eastern grey kangaroo populations have been declining since European settlement. Some wildlife experts estimate that there may be only 10% left.*

**Source**: Mjadwesch R, 2001, in *Kangaroos at Risk*: Biology and Conservation Ecology <http://www.kangaroosatrisk.net/2-biology--population-ecology.html>

**Note**: The decline is due primarily to unremitting slaughter combined with loss of habitat.Kangaroos are driven, or fenced out, or shot across almost the entirety of their native habitat, namely the 4.5 million km2 that has been purloined and cleared of native vegetation for (mainly animal) agriculture.

**Part 2: The ACT kangaroo slaughter is cruel**

1. *Under ACT law, animal welfare codes of practice exist purely to permit acts of cruelty that would otherwise be prohibited.*

**Source**: *ACT Animal Welfare Act, 1992*.

**Note**: Section 20 defines the only legal power of a non-mandatory Code of Practice (such as the kangaroo killing code) as providing an exemption from prosecution acts of cruelty that would otherwise be prosecuted under the general cruelty provisions of the Act.

1. *The ACT code of practice for killing kangaroos allows the killing of females with young, orphaning thousands of unweaned young-at-foot.*

**Source**: Animal Welfare Code of Practice for the Humane (Shooting of Kangaroos and Wallabies, 2014, No 1, pp8,10: [http://www.legislation.act.gov.au/di/2014-23/default.asp](http://www.legislation.act.gov.au/di/2014-23/default.asp%25252525252039)

**Note**: The impact of killing nursing mothers in the ACT has been confirmed by:

* Admissions at the ACT Administrative and Civil and Administrative Tribunal, Transcript of Hearing on ACT Government Kangaroo Cull, 2014, that the annual slaughter orphans a "ghost population" of orphaned at-foot joeys; and
* Eye witness reports, year after year since the slaughter began, of dozens of orphaned joeys lining the roadsides where they have crawled under fences to escape the shooting.

1. *The code requires pouch young to be bashed to death or decapitated*.

**Source**: *Animal Welfare Code of Practice for the Humane (Shooting of Kangaroos and Wallabies*, 2014, No 1, p12-13: [http://www.legislation.act.gov.au/di/2014-23/default.asp](http://www.legislation.act.gov.au/di/2014-23/default.asp%25252525252039)

**Note**: While the Code "requires" that the bashing or decapitation achieve a quick and painless death, the methods described demand a level of expertise and precision that are unlikely to always (or even often) be achievable in the field.

1. *The "cull" is NOT (as the government claims) conducted at a time when there are fewer at-foot young to be bashed to death. There is no such time of year.*

**Note**: Kangaroo joeys take 18 months to wean (the KMP itself admits this on p11). Therefore there is no time in a year when an adult female kangaroo can be killed without very probably killing a dependent at-foot joey.

1. *Kangaroo families are terrorised night after night, for months, year in, year out. Stress is often fatal to kangaroos and the level of stress caused by recurrent large-scale shooting is extreme.*

**Source**: There is no single source for this. Numerous scholarly works and anecdotal accounts can be found on the Internet confirming both the close family bonds and critical social organisation of kangaroos, and their susceptibility to a deadly form of stress called myopathy. A 2017 study by Green-Barber, Stannard and Old, identified changes in blood chemistry and necrosis of muscle tissue as symptoms of myopathy in Eastern Grey Kangaroos.

1. *ACT contract shooters do not always adhere to the very limited protections in the code of practice. In 2012, an autopsy by a wildlife veterinarian, confirmed that one kangaroo found in a government burial pit, had been shot, stabbed and bludgeoned before dying of blood loss or suffocation.*

**Source**: Regional Friends of Wildlife submission to Environment and Sustainability Commissioner Robert Neil, December 2014, pp 20, 159, Attachment J, autopsy report by Doctor Howard Ralph: <https://warmandwildblog.wordpress.com/55-2/regional-friends-of-wildlife-submission-2013/>

*30. The ACT government claims this cruelty is "necessary" for environmental reasons (see P1 for why this is nonsense).*

**Sources**: See Part 1.

*31. This cruel slaughter costs ACT taxpayers hundreds of thousands of dollars every year.*

**Source**: Documents released under *Freedom of Information Act* to *The District Bulletin* by the ACT government concerning the annual expenditure on the kangaroo massacre and published in *The District Bulletin*.

*32. The ACT public are entitled to an independent inquiry into the REAL reasons for the government's annual massacre of kangaroos on public reserves.*

**Note**: The government's claim that the slaughter is conducted for ecological reasons has been utterly debunked. The following are some alternative explanations that have been suggested for this waste of taxpayers money:

* a mere continuation of the "kill everything that's in the way" mindset which has pervaded the European invasion of Australia;
* as elsewhere in Australia, the government is too easily influenced by the agricultural lobby;
* the government receives agistment fees for gazing cattle on reserves where kangaroos have been exterminated;
* there are kick-backs to the government from developers for getting rid of the kangaroos so they (the developers) don't have to bother;
* bureaucratic empire building - the $1m a year of public money provided to ACT Parks and Conservation is just too much for the bureaucrats to give up; or
* perhaps the "culled" kangaroos are secretly being supplied to the corrupt and lucrative international pet food market.

Only a genuinely independent investigation and audit would have any hope of getting to the truth of the matter.