



**RSPCA AUSTRALIA  
SUBMISSION**

**Federal Inquiry into Australia's Faunal Extinction Crisis**

**31 August 2022**

## Introduction

Thank you for the opportunity to comment on the federal inquiry into Australia's faunal extinction crisis. The RSPCA welcomes progress on climate action and on addressing Australia's fauna extinction crisis.

Animal welfare should be considered as an integral part of addressing the extinction crisis and we urge the Committee to recognise this in its deliberations. Animal welfare is a crucial factor in assessing impacts of climate change on native animals as well as the impacts of methods used to control invasive animal species.

The RSPCA is concerned by the significant impact that climate change has had, and continues to have on animals, and supports immediate action to protect animal welfare, reduce extinction and promote biodiversity. We advocate for the inclusion and emphasis of animal welfare in the formation and improvement of climate policy across federal, state and territory jurisdictions. We support policies and measures to conserve and protect Australia's threatened native species and ensuring that the welfare of introduced species or species considered as "pests" are treated humanely.

The RSPCA adopted a climate policy in 2021 which highlights the detrimental impacts of climate change on the welfare of all animals including both native and introduced species. We specifically refer this policy to the Committee for review as part of this submission (please refer to Appendix 1).

This submission is structured in two sections. The first addresses the ways in which climate change impacts animal welfare in Australia and the second focuses specifically on the terms of reference for the Federal Inquiry into Australia's Faunal Extinction Crisis that are most relevant to improving the welfare of Australia's animals

## Summary of recommendations

The RSPCA recommends the following. Each of these recommendations is expanded on within the following pages.

**Recommendation 1:** That the welfare of both invasive and native species be included as a priority in plans to address Australia's extinction crisis.

**Recommendation 2:** That TAPs include guiding principles consisting of, but not limited to, animal welfare, sustainability and ecological sciences.

**Recommendation 3:** That land clearing is given greater consideration as to its impact on Australian animals and although not considered a threatened species, the impacts of land clearing on peri-urban kangaroos should be assessed to prevent poor welfare outcomes.

**Recommendation 4:** That adaptive management responses must always consider welfare impacts for both threatened and invasive species (e.g., use of the most humane killing methods as evidenced by animal welfare science).

**Recommendation 5:** That work continues to progress more humane options for baiting programs

**Recommendation 6:** That an additional outcome be included in the Draft Plan for all activities under the auspices of the NFPAP and all government funded vertebrate pest animal control activities (as a condition of funding) must comply with relevant SOPs and COPs.

**Recommendation 7:** That the use of bounty systems for culling introduced species is discouraged.

## Section One - The impact of climate change on animal welfare

### The Five Domains for animal welfare

Climate change has wide-ranging negative effects on the welfare of all animals. The effects of climate change on animals can be demonstrated by applying the Five Domains model of animal welfare, which is a framework that considers positive and negative physical and affective states categorised by nutrition, environment, health, behaviour, and mental state [1].

Animals may suffer thirst, hunger, malnutrition, gastrointestinal pain, starvation and death as climate change threatens global food and water security for both humans and animals [2]. Climate change can have profound direct and indirect effects on animal health, such as heat-related illnesses, traumatic death during extreme weather events, and increased disease rates due to stress and the increase of environmental pathogens, parasites and disease vectors due to climatic changes [3,4].

Climate change poses several potential behavioural challenges to animals including constraining environment focused activity (e.g., fish unable to swim as water bodies dry up), disrupting social dynamics (e.g., separation of kin during extreme weather events), inescapable sensory impositions (e.g., inescapable heat) and limitations on sleep/rest (e.g., due to the destruction of rest sites by bushfires).

There is ample research indicating that climate change has a negative impact on human mental health [5] but little to no attention has been given to the effects of climate change on the overall mental state of other species. There are accounts of Australian native wildlife in the aftermath of bushfires, demonstrating behavioural responses consistent with shock [6]. It is likely that climate change has and will continue to cause animals negative experiences including anxiety and fear.

Animals who are exposed to extreme weather events experience significant suffering including, but not limited to pain, fear and death. Mass mortalities involving the death of thousands of birds, fish and mammals have been linked to extreme weather events (e.g., heatwaves, bushfires) [2,7,8]. It is estimated that over 1 billion terrestrial mammals, birds and reptiles were killed in bushfires in 2019/2020 [10]. Approximately 23,000 spectacled flying foxes (almost one third of the total population) died in a single heatwave event in 2018 [9], one of many heat related bat mass mortality events recorded in Australia since the 1990s [10]. Up to 10,000 koalas (a third of the total NSW koala population) are feared to have died in the 2019/2020 bushfires and as many as 25,000 koalas (more than half the island's total koala population) died in the 2019/2020 Kangaroo Island bushfires. These mass mortality events are perhaps the starkest illustration of the effects of climate change on the welfare of wildlife in Australia. The death of wildlife located over 50km away from bushfires due to smoke inhalation has also been reported [11]. Extreme weather events are predicted to become more frequent and severe with climate change [12]. Thus wildlife, at an individual and population level, are likely to suffer repeat trauma without time to recover. Climate change poses an immediate and future risk to the welfare of all animals and urgent action must be taken now to manage and prevent those risks. The RSPCA has compiled a research report which details these impacts (please refer to [Appendix 2](#)).

**Recommendation 1:** That the welfare of both invasive and native species be included as a priority in plans to address Australia's extinction crisis.

## Section Two - Response on specific Terms of Reference

**Terms of Reference (d) the adequacy of Commonwealth environment laws, including but not limited to the *Environment Protection and Biodiversity Conservation Act 1999*, in providing sufficient protections for threatened species and against key threatening processes.**

### Balancing the welfare of native and invasive species

In terms of conserving and protecting threatened native species, not only is action required to mitigate climate change impacts but greater commitment is needed to undertake other mitigation strategies including invasive species management. The RSPCA strongly recommends that the impact of invasive species on threatened species is measured, and any activity undertaken that may have negative impacts on animals (invasive and otherwise) is justified. The current focus on kill numbers alone as a measure of success is neither ethical nor efficient. The RSPCA urges that impact evaluation to assess control methods be undertaken. Success indicators must be determined in measuring threatened species population health following invasive species intervention.

The RSPCA supports the use of Threat Abatement Plans (TAPs) because these plans assist in ensuring strategic planning and consistency in approaches across Australia. However, the RSPCA is concerned by the lack of animal welfare science referred to in the TAPs. There is increasing community concern and expectations regarding the methods used to control animals considered as pests. In the past, little scrutiny was given to the animal welfare impacts of vertebrate pest control methods. However, over the past decade, there has been an increase in the scientific literature published on this important issue [1,13,14]. Consequently, the RSPCA urges that a greater focus on animal welfare in management plans and strategies is included.

**Recommendation 2:** That TAPs include guiding principles consisting of, but not limited to, animal welfare, sustainability and ecological sciences.

### Impact of land clearing on animal welfare

The RSPCA also urges greater consideration of the impacts and evidence of harm to Australian animals caused by land clearing. Land clearing causes deaths and injuries that are both physically painful and psychologically distressing because of their traumatic and debilitating nature. Prolonged distress will occur if animals are required to attempt survival in cleared environments, destroyed habitats or due to complete displacement. A recent report conducted by the World Wildlife Fund, in collaboration with RSPCA Queensland found that “over 120 Australian vertebrate species are now included in the national threatened species list due in large part to bulldozing of their bushland habitat” [15]. On the basis of current clearing rates, more than 50 million mammals, birds and reptiles are likely to be killed annually because of land clearing in Queensland and New South Wales alone [16].

In addition to threatened species, there is an ongoing animal welfare crisis affecting kangaroos being displaced by urban sprawl. The lack of regulatory regard to the plight of

this species demonstrates an attitude which can erode empathy towards other native species. The welfare issues surrounding kangaroo management are complex and challenging, as they involve balancing prevention of harm to kangaroos whilst solving human-animal conflict situations.

**Recommendation 3:** That land clearing is given greater consideration as to its impact on Australian animals and although not considered a threatened species, the impacts of land clearing on peri-urban kangaroos should be assessed to prevent poor welfare outcomes.

### **Terms of Reference (i) the adequacy of existing monitoring practices in relation to the threatened species assessment and adaptive management responses**

#### Impact Assessments for threatened species programs

The RSPCA acknowledges the use of Impact Assessments for many conservation programs in Australia. However, we would like to see Impact Assessments incorporated into monitoring practices for all programs protecting threatened species. The use of kill targets alone as indicators for recovery and/or population health of a threatened species is inadequate.

**Recommendation 4:** That adaptive management responses must always consider welfare impacts for both threatened and invasive species (e.g., use of the most humane killing methods as evidenced by animal welfare science).

### **Terms of Reference (n) any related matters**

#### Humane control methods

The RSPCA urges that research is undertaken to develop more humane and effective control methods for species considered as "pests". For example, reducing reliance on sodium fluoroacetate (1080) baiting is imperative [17]. The RSPCA acknowledges the progress which has been achieved by the development of more humane toxins for some species (e.g., PAPP for feral cats; sodium nitrite for feral pigs) but work must continue to expand more humane options for all species targeted in baiting programs.

**Recommendation 5:** That work continues to progress more humane options for baiting programs

## The relative humaneness matrix

The relative humaneness model is an invaluable tool which assists in selecting the most humane control method. Referring to the relative humaneness matrix helps to demonstrate a commitment to consider animal welfare as an integral part of planning invasive animal control [18].

The relative humaneness matrix has been developed using the Five Domains Model and scores welfare impacts prior to death and impacts associated with the mode of death. The matrix considers the severity and duration of negative welfare impacts.

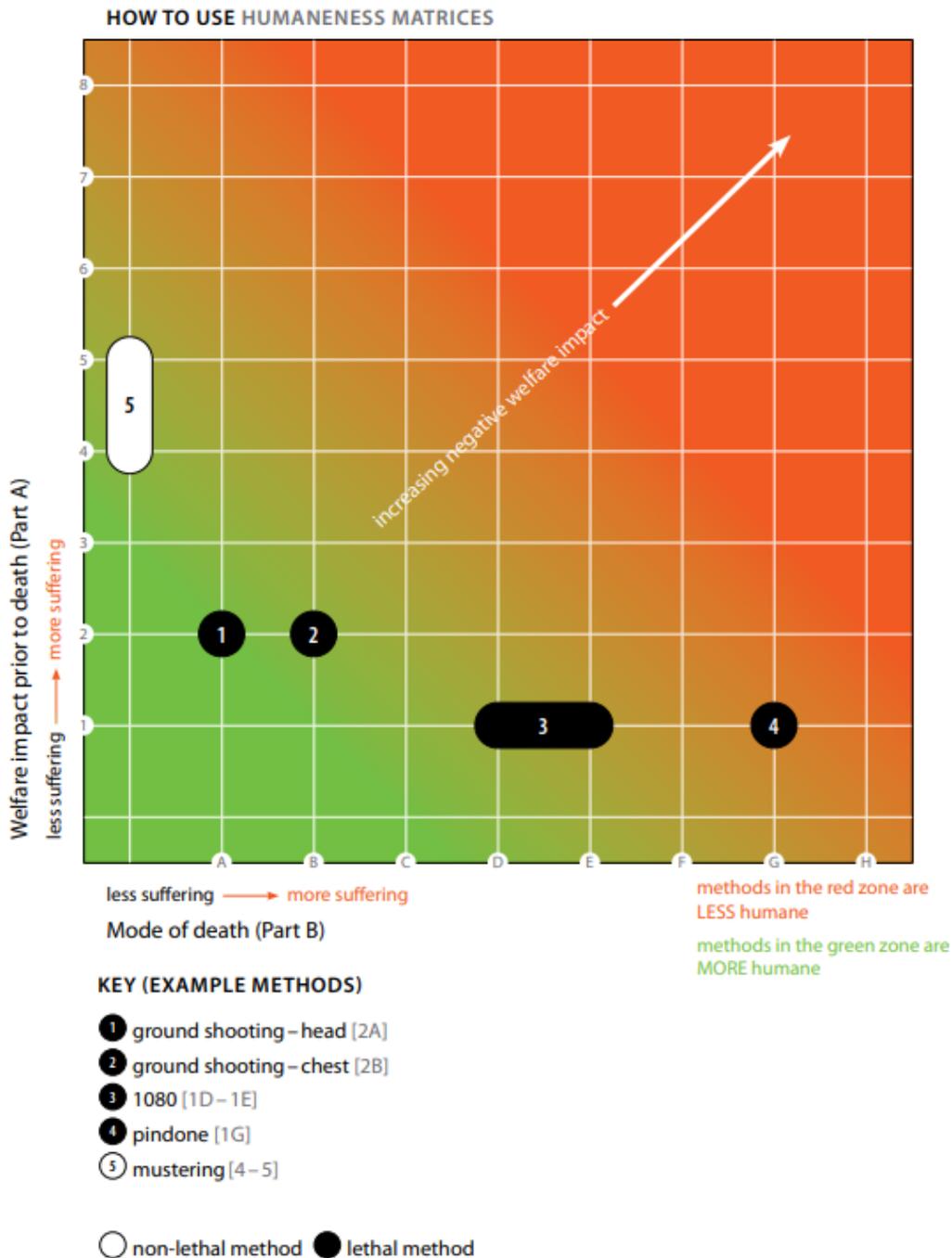


Figure 1 Humaneness matrices, and how to use it developed by Sharp & Saunders (2011) [19]

## Codes of Practise (COPs) and Standard Operating Procedures (SOPs)

An essential element to achieve consistent humane feral pest management is to have the national [Welfare Codes of Practice \(COPs\)](#) for all the vertebrate species regulated under animal welfare legislation in each jurisdiction. The purpose of these COPs is to ensure that minimal legal standards are applied to all vertebrate pest control activities. Adoption and regulation of national welfare COPs should be included as an additional outcome and performance measure under the TAP.

Given that incorporating COPs into animal welfare legislation may take some time to achieve, it is recommended that an additional outcome be included in the Draft Plan for all activities under the auspices of the NFPAP. All government funded vertebrate pest animal control activities (as a condition of funding) must comply with relevant SOPs and COPs as outlined by Hampton et al (2016) [19]. These COPs and SOPs are available on the Pestsmart website (<https://pestsmart.org.au>) which is maintained by the Centre for Invasive Species Solutions.

Prescribed procedures are valuable as guidelines for standardising methodology, but the development of 'welfare standards' that focus on desired thresholds for animal-based measures offers many advantages for improving animal welfare. The relationship between what is done to animals and what they experience, as assessed by animal-based measures, requires more attention. Procedural documents are commonly developed in the absence of empirical animal-based measures, creating potential unknown or unexpected animal welfare outcomes. Refinement of the use of procedural documents in wildlife management is required to ensure they generate desirable outcomes for animals and should encourage the development of improved methods where appropriate.

The development of evidence-based procedural documents is undoubtedly beneficial for the advancement of animal welfare. The use of resource-based only compliance audits of wildlife management programs, rather than the collection of animal-based measures, is inconsistent with a knowledge-based ethic. Addressing animal welfare concerns in wildlife management should also not stop with the production of procedural documents. Despite the inconvenience of requiring empirical evidence to inform policies, animal welfare could be refined considerably by shifting focus from animal inputs to animal outputs.

**Recommendation 6:** That an additional outcome be included in the Draft Plan for all activities under the auspices of the NFPAP and all government funded vertebrate pest animal control activities (as a condition of funding) must comply with relevant SOPs and COPs.

## Discourage use of bounty systems

Bounty systems, which are used as an incentive to increase kill rates of introduced species exist in several states including Victoria, Qld, WA and South Australia. The RSPCA does not support bounties due to their ineffectiveness, potential for fraud and associated high welfare risks [20]. Bounty hunters have been found to utilise inhumane and non-selective killing methods such as shooting animals in non-vital regions, which causes suffering and delayed death. Unselective killing often occurs, resulting in the deaths of many non-target species (some of these threatened). Predator bounty programs have also been found to be ineffective by wildlife professionals and should be discouraged [21].

**Recommendation 7:** That the use of bounty systems for culling introduced species is discouraged.

## Appendix 1

### RSPCA's policy on climate change

The RSPCA adopted a policy on climate change in 2021:

6.1	RSPCA Australia recognises the significant impact that climate change is having on the welfare of animals, whether living in the wild or in the care of humans.
6.2	RSPCA Australia considers that action is urgently needed to address the impacts of climate change in Australia to reduce the impacts on animals.
6.3	RSPCA Australia advocates for the consideration of animal welfare in the formation and adoption of national, state and industry climate policy and policies related to drought, fire, flood and other extreme weather events.

## Appendix 2

Research Report - [Climate-Change-and-Animal-Welfare-RSPCA-Australia-Research-Report-May-2020.pdf](#)

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