Developing a New Threatened Species Strategy - Discussion Paper

RSPCA Australia Submission

17 November 2020

1. Introduction

We are pleased to see the Threatened Species Strategy (TSS) being reviewed with public consultation being undertaken. The TSS plays a vital role in enabling national recognition and leadership in developing a framework for the protection and conservation of our threatened species. In doing this, it provides a mechanism to achieve an agreed understanding of key threats and a focus to prioritise response and actions to protect and conserve key threatened species.

This submission focuses on highlighting important animal welfare aspects rather than the broader issues such as those relating to structure and elements of the TSS.

2. Key comments

2.1 RSPCA Policy

RSPCA Australia recognises that under certain circumstances there is a need to manage wild animals, where they have adverse impacts on human activities or the environment. The RSPCA has a number of policies relating to wildlife, with the most relevant being RSPCA Policy E01 Wildlife - General principles and RSPCA Policy E02 Management of wild animals. In our Policy E02 we state that any measures taken to manage wild animals must recognised that whether the animals are native, introduced or viewed as a 'pest' this does not affect their capacity to experience pain, suffering or distress. We believe that it is important to emphasise this and advocate for management techniques for invasive species that are humane.

2.2 Importance of animal welfare in pest animal control

Acknowledgement of animal welfare

There is increasing community concern and expectations regarding the treatment of vertebrate pest animals. 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 increasing number of papers published on this important issue (Littin et al 2004; Littin & Mellor 2005). In addition, there has been a greater focus on animal welfare in management plans and strategies. Despite this, the TSS makes no reference to animal welfare. In relation to the proposed 'Action areas', animal welfare should also be considered under 'Building knowledge and tools' as it carries equal importance as 'chance of success'. Also, under 'Action (benefit and cost), there is an inference that this only relates to financial considerations but other costs such as the impact on individual animals (target and non-target) species should also be acknowledged.

The RSPCA believes that incorporating the consideration of animal welfare into the aims and objectives, and action areas of the TSS is essential.

Communication terms

In addition, it is important to note that, just because a particular species is overabundant, this does not necessarily mean they have a negative impact. This aspect is acknowledged in the *International Consensus Principles for Ethical Wildlife Control*, developed with input from RSPCA Australia, which state that negative labels such as 'pest' and 'abundant' should not be

applied to target species but rather based on the specifics of the situation (Dubois et al 2017). The RSPCA also supports the other six principles which underpin ethical wildlife control as outlined by Dubois et al (2017).

Furthermore to the use of 'labels', the RSPCA is also concerned that all too often, there is a strong focus on the numbers of animals per se which may be considered to be causing a problem, rather than the impact they are having. This focus also relates to 'kill numbers', which are often promoted as a means of demonstrating 'success' or progress regarding control, rather than evaluating the reduction of impacts.

Communications regarding the TSS can be challenging, with some concern that a strong emphasis has been placed on setting a target for the number of animals killed, rather than an 'impact' target that can demonstrate a direct improvement in threatened species survival in ecologically sensitive areas. In the past, this has been particularly evident in relation to feral cat control. The focus on the kill number also demonises feral cats and tends to suggest that this is the only method that should be used. The RSPCA advocates that kill target numbers are not used to promote feral cat and other feral species control programs but that the emphasis should be on the overall goal to protect and conserve threatened species. This switch in focus will also help the community to better understand why feral cat control is important as well as to include other threat abatement activities such as fox or rabbit control, which also needs to be considered. For example, declaring a 'war on cats' further polarises views in the community especially as many people refer to stray domestic cats as 'feral'. This causes concern and anxiety amongst cat owners and animal lovers and leads to victimisation of any cat, not just feral cats.

The RSPCA believes that the TSS should not focus on kill target numbers and the demonising of feral species but rather the achievement of the conservation goals.

Relative humaneness model

The relative humaneness model developed by Sharp and Saunders (2011) is an excellent resource that acknowledges the importance of animal welfare considerations relating to invasive species control by providing a useful practical tool for on-the-ground operators to be able to identify the most humane control methods available. To date, there has been limited promotion of the model and the associated species relative humaneness matrices and standard operating procedures. The RSPCA recommends that the TSS refer to the relative humaneness model and associated documents (i.e. species relative humaneness matrices and standard operating procedures) wherever relevant.

Further details of the model are available here:
http://www.pestsmart.org.au/a-model-for-assessing-the-relative-humaneness-of-pest-animalcontrol-methods/

2.3 Other causes of species decline

Whilst it is vital to manage predators and species who destroy habitat or compete for resources, it is also essential to address other key factors including climate change, and habitat loss and fragmentation. All animals including wildlife (University of Sydney 2020) can be directly and indirectly affected by climate change across terrestrial (land), aquatic (freshwater) (Pratchett et al 2011) and marine (saltwater) environments (Wild et al 2019). Many animals have and will continue to suffer and die from the effects of climate change (Fey et al 2015).

Although the TSS mentions climate change, the RSPCA urges that a greater emphasis of the importance of taking steps to mitigate the impact of climate change on conservation and biodiversity be included.

See attachment 1 for an overview of concerns relating to the impact of climate change on wildlife.

The RSPCA advocates that the TSS includes a stronger emphasis on the need to address the impacts caused by climate change which influence threatened species survival.

2.4 Commonwealth leadership

Several opportunities exist where commonwealth leadership could achieve significant benefits in relation to acknowledging and promoting humane practices in relation to invasive animal control, including:

- by supporting the continued development, review and implementation of national animal welfare codes and standard operating procedures for invasive animal control
- by encouraging states/territories to regulate these standards through animal welfare legislation
- by incorporating these standards into national pest animal action plans
- by ensuring humaneness assessments are an integral part of any commonwealth funded research into new control methods but also facilitating more research into humane and effective non-lethal methods
- by ensuring humaneness assessment of new toxins to be required for APVMA registration
- by ensuring control activities conducted on commonwealth land complies with these standards
- by incorporating a requirement for compliance as part of conditions for commonwealth government funded projects, particularly community-based action programs.

Appendix 1: Examples of the impact of climate change on wildlife (RSPCA 2020).

Mass mortalities involving the death of thousands of birds (McKechnie & Wolf 2010), fish (Vertessy et al 2019) and mammals (Welbergen et al 2014) have been linked to extreme weather events (e.g., heatwaves, bushfires). It is estimated that over 1 billion terrestrial mammals, birds and reptiles were killed in bushfires in 2019/2020 (University of Sydney 2020). Approximately 23,000 spectacled flying foxes (almost one third of the total population) died in a single heatwave event in 2018 (Mao et al 2019), one of many heat related bat mass mortality events recorded in Australia since the 1990s (Welbergen et al 2014). 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 (Redfearn 2020). 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 been confirmed (Midena 2020). Extreme weather events are predicted to become more frequent and severe with climate change. Thus wildlife, at an individual and population level, are likely to suffer repeat trauma without time to recover.

In addition to direct trauma and death, climate change is likely to be associated with diminishing availability, quality and quantity of basic resources including tolerable ambient temperature, clean air, shelter, food and water (Steffen et al 2009). Unable to access these basic resources, wildlife may experience a range of negative affective states including fear, thirst and hunger. Concerns are held about wildlife dying from starvation in the aftermath of bushfires (Stirrat 2020). Wild animals who do not succumb immediately may suffer secondary complications such as kidney failure associated with heat related illness and dehydration (Rajewski 2020).

Generalist species (able to thrive in a variety of environments) may adapt to climate change (e.g., range shift (Fordham et al 2012). However, many native Australian animals are specialised to live in specific conditions and are therefore at high risk of extinction with individual animals suffering distress, debility and death in a changing climate (Steffen et al 2009). Other processes threatening wildlife (e.g., habitat loss and fragmentation, invasive species) also limit wild animals' ability to cope with the effects of climate change (Finn & Stephens 2017) and may have a cumulative detrimental effect (Hing et al 2016).

Migratory species are vulnerable to the effects of climate change. For example, a systematic review concluded that climate change will affect the timing of migratory behaviour and migratory species may face increased hazards across a destabilised network of sites (Robinson et al 2009).

Climate change leads to many animals being brought into captivity for rescue and rehabilitation some of whom may never be fit for release or for whom release sites are unviable (Stockwell 2020). Animals are brought into care due to immediate welfare concerns but by doing so, they are exposed to stressors such as capture, confinement, handling and transport (Hing et al 2014). Animals release after rehabilitation are exposed to stressors associated with translocation (Dickens et al 2010).

Climate change puts the welfare of wildlife in Australia's marine environment at risk. For example, a record-breaking marine heatwave off the coast of WA in 2011 led to mass mortalities of fish and up to 12.2% declines in the survival rates of Indo-Pacific bottlenose dolphins (Wild et al 2019). While there has been attention given to the destructive effects of climate change on Australian coral reefs, investigation is required into the impact on the welfare of the animals that inhabit those reefs.

The distribution and abundance of invasive species is also affected by climate change (Fordham et al 2012). From an animal welfare perspective, this may increase the number of animals harmed by invasive species (e.g. preyed upon, poisoned by) and the number of target and non-target animals affected by control methods.

References

Dickens MJ et al (2010) Stress: an inevitable component of animal translocation. Biological Conservation 143:1329–1341.

Dubois S et al (2017) International consensus principles for ethical wildlife control. Conservation Biology 31:753–760

Fey SB et al (2015) Recent shifts in the occurrence, cause, and magnitude of animal mass mortality events. Proceedings of National Academy of Science 112:1083–1088.

Finn HC & Stephens NS (2017) The invisible harm: land clearing is an issue of animal welfare. Wildlife Research 44:377–391.

Fordham DA, et al (2012) Modelling range shifts for invasive vertebrates in response to climate change. Wildlife Conservation Changing Climate 86–108.

Hing, S (2014) A review of factors influencing the stress response in Australian marsupials. Conservation Physiological 2, 10.1093/conphys/cou027.

Hing S et al (2016) The relationship between physiological stress and wildlife disease: consequences for health and conservation. Wildlife Research 43:51–60.

Littin K & Mellor D (2005) Strategic animal welfare issues: ethical and animal welfare issues arising from the killing of wildlife for disease control and environmental reasons. Scientific and Technical Review of the Office International des Epizooties 24(2):767-782.

Littin KE et al (2004) Animal welfare and ethical issues relevant to the humane control of vertebrate pests. New Zealand Veterinary Journal 52:1-10.

Mao F (2019) How 'one-third' of a bat population died in two days. BBC News. Available: https://www.bbc.com/news/world-australia-46859000 .

McKechnie AE & Wolf BO (2010) Climate change increases the likelihood of catastrophic avian mortality events during extreme heat waves. Biological Letters 6: 253–256.

Midena K (2020) Native Australian smoky mouse becomes first species to be killed from bushfire smoke inhalation. ABC News. Available: https://www.abc.net.au/news/2020-02-27/smoky-mice-die-from-bushfire-smoke-inhalation/12005790 .

Pratchett MS et al (2011) Contribution of climate change to degradation and loss of critical fish habitats in Australian marine and freshwater environments. Marine and Freshwater Research 62:1062–1081.

Rajewski G (2020) An S.O.S. for Australian Wildlife. Tufts Now. Available: https://now.tufts.edu/articles/sos-australian-wildlife.

Readfearn G (2020) Kangaroo Island bushfires: grave fears for unique wildlife after estimated 25,000 koalas killed. The Guardian. Available: https://www.theguardian.com/australia-news/2020/jan/07/kangaroo-island-bushfires-grave-fears-for-unique-wildlife-after-estimated-25000-koalas-killed .

Robinson RA et al. (2009) Travelling through a warming world: climate change and migratory species. Endangered Species Research 7:87–99.

RSPCA (2020) Climate change and animal welfare – Research Report. RSPCA Australia, Canberra, ACT, Australia.

https://kb.rspca.org.au/wp-content/uploads/2020/05/Climate-Change-and-Animal-Welfare-RSPCA-Australia-Research-Report-May-2020.pdf

Sharp T & Saunders G (2011) A Model for Assessing the Relative Humaneness of Pest Animal Control Methods. Second Edition. Australian Government Department of Agriculture, Fisheries and Forestry: Canberra, ACT, Australia. Available: http://www.daff.gov.au/animal-planthealth/welfare/aaws/humaneness-of-pest-animal-control-methods

Steffen W et al (2009) Australia's biodiversity and climate change - a strategic assessment of the vulnerability of Australia's biodiversity to climate change. A report to the Natural Resource Management Ministerial Council commissioned by the Australian Government. CSIRO Publishing. Available: https://www.environment.gov.au/system/files/resources/eab369d6-76f9-46c8-beb4-aaae8ece112e/files/biodiversity-vulnerability-assessment.pdf.

Stirrat C (2020) Massive food drop to help save endangered wallabies in fire-affected areas. The Sydney Morning Herald. Available: https://www.smh.com.au/environment/conservation/massive-food-drop-to-help-save-endangered-wallabies-in-fire-affected-areas-20200112-p53qss.html.

University of Sydney (2020) More than one billion animals impacted in Australian bushfires. Available: https://sydney.edu.au/news-opinion/news/2020/01/08/australian-bushfires-more-than-one-billion-animals-impacted.html .

Vertessy R et al (2019) Final report of the independent assessment of the 2018-2019 fish deaths in lower Darling. Available: https://www.mdba.gov.au/sites/default/files/pubs/Final-Report-Independent-Panel-fish-deaths-lower%20Darling_4.pdf .

Welbergen J et al (2014) Killer climate: tens of thousands of flying foxes dead in a day. The Conversation. Available: https://theconversation.com/killer-climate-tens-of-thousands-of-flying-foxes-dead-in-a-day-23227

Wild S et al (2019) Long-term decline in survival and reproduction of dolphins following a marine heatwave. Current Biology 29, R239–R240.

Ends.