RSPCA
Submission

Impacts and management of feral horses in the Australian Alps

27 April 2023

Table of Contents

1 Introduction

The RSPCA appreciates the opportunity to provide comment on the impacts and management of feral horses in the Australian Alps.

The RSPCA acknowledges that in some circumstances it is necessary to manage populations of wild animals.

The RSPCA has a number of policies relating to the control of animals who cause negative impacts, with the most relevant being RSPCA Policy E01 Wildlife - General principles and RSPCA Policy E02 Management of wild animals. The full wording of these policies is provided in Appendix A.

Key aspects of these policies include ensuring that:

- Programs and strategies which prescribe the management of wild animals (such as threat abatement plans and native animal management plans) are justified, supported by scientific evidence and have clearly stated aims. Such programs should be subject to public consultation, ethical approval and review prior to implementation. Once implemented, the results of such programs should be regularly monitored, evaluated, publicly reported and used to inform future activities.
- A balance is found between maintaining the viability of an ecosystem and protecting the welfare of individual animals.
- Where human activities have the potential to have a negative impact on wild animals, whether directly or indirectly, that they are conducted in a way that causes as little injury, suffering or distress to animals as possible.
- Management programs are aimed at reducing adverse impacts rather than simply reducing the number of animals. (Note: The RSPCA is opposed to the use of incentive methods (such as bounty systems) where these focus on killing animals rather than reducing impacts.)
- The humaneness of current control methods is improved or they are replaced with more humane and effective alternatives.
- There is adoption and implementation of compulsory codes of practice and standard operating procedures for all wild animal management activities.
- All activities to control animals considered as pests are:
    - justified - impact must be legitimate, quantified and appropriately measured to assess progress; benefits must outweigh the harms.
    - humane – that it is recognised that pest species are sentient, and that the most humane methods are used.

2 Background

The RSPCA has contributed to discussions and documents related to the management of feral horses at both a state and national level.

This includes;

- Membership of the Wild Horse Humaneness Assessment Panel which applied the relative humaneness model to different methods used to manage wild horses (ITRG 2015)
- Membership of the Independent Technical Reference Group (ITRG) which compiled a report released on the impacts and best practice control methods of wild horses in the Kosciuszko National Park (ITRG 2016)
- Membership of the Feral Horse Best Practice Management Steering Group which updated and developed key national codes of practice and standard operating procedures and guidelines to support best practice on-ground action to assist NSW, ACT and Victorian governments in 2021-2023
- Membership of the working group which reviewed NSW Feral Horse Code of Practice and Standard Operating Procedures
- Membership of the Parks Victoria Feral Horse Technical Reference Group
- Submission to the 2021 Draft Victorian Feral Horse Action Plan for the Protection of the Alpine National Park
- Submission to the Parks Victoria Strategic Action Plan: Protection of floodplain marshes in Barmah National Park and Barmah Forest Ramsar site (2019 – 2023).

3 Comments

3.1 General comments

There is increasing community concern and expectations regarding the treatment of animals considered as pests. In the past, little scrutiny was given to the animal welfare impacts of control methods, however, over the past decade, there has been a greater focus on animal welfare in management plans and strategies. However, unless this translates into improved practices on the ground, progress will not be achieved. More needs to be done especially in relation to humaneness of control methods, competency of operators and research into more humane management options.

RSPCA Australia supports the eight principles derived from A National Approach to Humane Vertebrate Pest Control workshop held in 2003, jointly hosted by RSPCA Australia, the Animal Welfare Science Centre and the Vertebrate Pest Committee (HVPC Working Group, 2004). These principles provide a logical pathway by commencing with important ethical considerations regarding justification and likelihood of success of control of animals considered as pests, then leading into humaneness aspects of methods to be used, evaluation, ongoing maintenance and concluding with a commitment for continuous improvement. These principles are quite comprehensive and should therefore provide a robust framework in terms of meeting animal welfare requirements.

1) The aims or benefits and the harms of each control program must be clear; control should only be undertaken if the benefits outweigh the harms.
2) Control should only be undertaken if there is a likelihood that the aims can be achieved.
3) The methods that most effectively and feasibly achieve the aims of the control program must be used.
4) Whether or not each control program actually achieved its aim must be assessed.

5) Once the desired aims or benefits have been achieved, steps must be taken to maintain the beneficial state.

6) The most humane methods that will achieve the control program's aims must be used (this requires an assessment of the humaneness of all existing methods).

7) The methods must be applied in the best possible way.

8) There should be research to reduce the negative animal welfare impacts of existing control methods and to develop novel methods that cause less pain and distress.

In terms of international recognition of the importance of applying ethical principles to help manage human-animal conflict, Dubois et al (2017) propose seven principles. These principles align closely to those listed above and were referenced in the 2020 Report of the Kosciuszko Wild Horse Scientific Advisory Panel (SAP 2020).

To maximise success of control activities, it is recommended that actions are coordinated cross-tenure and cross jurisdictions. In addition, monitoring and evaluation of the management program in terms of effectiveness and humaneness must be undertaken annually to allow timely improvements to be implemented.

Given the welfare risks and community concerns regarding the management of feral horses, the development of an equivalent document to 'Ensuring acceptable welfare standards under the Australian Feral Camel Management Project' (Hart et al 2013) could help address these concerns. Such a document would contain useful information regarding the processes and requirements for ensuring high welfare standards including the use of Standard Operating Procedures, consultation, review and the use of the relative humaneness matrix to select the most humane control methods.

In addition to assessing welfare impacts of different control methods, it is also useful to consider the welfare of target groups prior to any intervention as described by Harvey et al (2020). This will enable consideration of body condition, health status and reproductive status which can influence welfare outcomes associated with interventions.

To help achieve consistency in terms of impact evaluation, humaneness assessment, outcome evaluation and maximising efficiencies, it is recommended that an Australian Alps feral horse management advisory group be established. The group should consist of members with expertise in animal welfare, ecology, on the ground management, firearms, environmental assessment and represent relevant state/territory jurisdictions.

- **Recommendation 1: Management of feral horses is coordinated cross tenure and cross jurisdictions.**
- **Recommendation 2: Establish an Australian Alps feral horse management advisory group to include cross jurisdictional and members with appropriate expertise.**
- **Recommendation 3: Develop a document which outlines processes for ensuring acceptable animal welfare standards for feral horse management (similar to that for the Australian Feral Camel Management Project).**

3.2 Currently used control methods

There are many procedural aspects associated with managing wild horses. The most common method currently used is shooting including either ground (free roaming or trapped) or aerial. Wild horses are also mustered and trapped (yarded), passively trapped, and then transported to be either rehomed or sent to slaughter. Another option is for trapped horses to be shot on-site.

3.2.1 Relative Humaneness Model

This model helps to focus on the welfare impacts prior to and during death associated with different control methods (Sharp & Saunders 2011). For example, the welfare impacts prior to ground shooting can be minimal if animals are not startled or chased and if a single fatal brain shot is achieved, the humaneness rating is considered high. The model has been used to develop a matrix for each of the main animal species targeted for control, including feral horses. The methods in the green shaded area in Figure 1 below are considered the most humane compared to those in the orange shaded area. On the ground operators should choose the most humane control method wherever possible and should only use relatively less humane methods where it is clearly justified and negative impacts are minimised. The relative humaneness matrix is underpinned by a nationally agreed Code of Practice, and Standard Operating Procedures for different control methods.

Model code of practice for the humane control feral horses - PestSmart

SOP HOR001 Ground shooting of feral horses

SOP HOR002 Aerial shooting of feral horses

SOP HOR003 Mustering of feral horses

SOP HOR004 Trapping of feral horses

RELATIVE HUMANENESS MATRIX FOR FERAL HORSES

The relative humaneness matrix for feral horses was developed by the Independent Technical Reference Group based on the relative humaneness model developed by Sharp and Saunders (2011). Ground shooting, aerial shooting, mustering and yarding, and passive trapping, were assessed (ITRG 2015). However, the following methods were not assessed for humaneness- roping, on-site humane killing (shooting trapped horses), loading and transport either to an abattoir or for domestication (rehoming), fertility control and exclusion fencing.

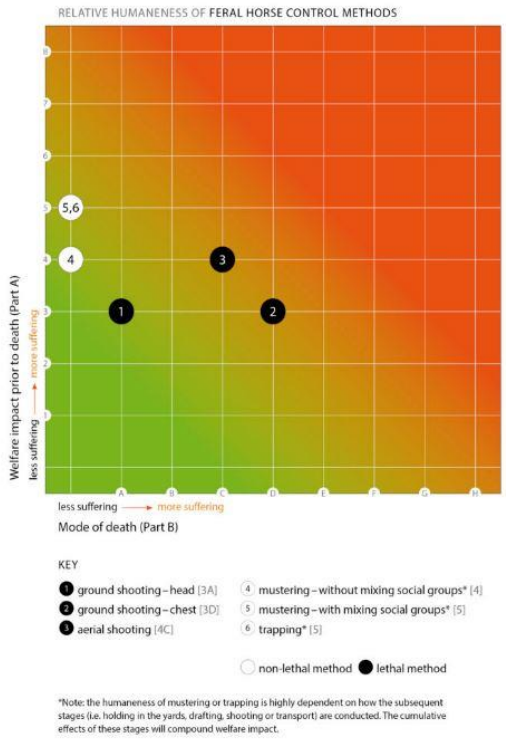

Figure 1: Feral horse control methods humaneness matrix - PestSmart

Roping involves pursuing and physically capturing individual wild horses by a rider on horseback using physical restraint with catching ropes. Due to inherent and significant animal welfare risks, the RSPCA does not consider roping as an effective or humane control method and as such must not be used.

3.2.2 Shooting

CHEST VS HEAD SHOT

There is contention regarding the use of head versus chest shots due to welfare concerns. The relative humaneness matrix rates chest shots lower than head shots (see Figure 1). Under optimal conditions using a competent shooter, head shots should be able to be achieved consistently and should be the shot placement of choice. Correctly placed head shots result in extensive brain damage causing brain function to cease, and insensibility will be immediate. By comparison, death from a shot to the chest is due to massive tissue damage and haemorrhage from major blood vessels and organs. Insensibility will occur sometime after, from a few seconds to a minute or more. If a shot stops the heart functioning, the animal will rapidly lose consciousness but this may not always be achieved.

The following extract is from the Final Report of the Independent Technical Reference Group (ITRG) (2016) Supplementary to the Kosciuszko National Park (KNP) Wild Horse Management Plan (ITRG, 2016):

"Where the conditions stipulated for aerial shooting (Scenario 1) are not possible, ground shooting (head shots), or passive trapping/mustering (small groups) followed by on-site humane killing had the next lowest assessment scores, although the impact of on-site killing requires further assessment and is dependent on the development of an acceptable methodology and SOP." (Page 19)

The 2020 Scientific Advisory Panel (SAP) Report for the KNP wild horse management also supported the 2016 ITRG recommendations for prioritising the methods with the least welfare impacts, stipulating this to be head shots with any shooting methods (ground, in-yards, aerial).

Where chest shots are taken, the aim should be the heart, as this will achieve a more rapid loss of consciousness compared to shooting one or both lungs.

- Recommendation 4: Head shots for both ground and aerial shooting are to be taken as the first shot as standard procedure except in specific circumstances where a chest shot is deemed to be essential on welfare grounds.
- Recommendation 5: Where chest shots are taken, the aim should be the heart as this will achieve a more rapid loss of consciousness compared to shooting one or both lungs.

PURSUIT TIME

Pursuit time is an important factor in relation to animal welfare impacts, particularly mental impacts such as fear and fatigue. Shooting SOPs should include recommended maximum pursuit times and/or distance rather than merely stipulate that these should be as short as possible. Where groups of horses are pursued during the targeting of an individual horse, this time must also be considered due to the effect of cumulative stress.

- Recommendation 6: Specify maximum pursuit times and/or distance in the relevant SOPs.

GROUND SHOOTING

The RSPCA is concerned about some views accepting incapacitating horses using a chest shot rather than aiming to achieve instant insensibility using an accurate head shot. The RSPCA believes that shooting should be planned to ensure that it is only done under ideal conditions. This includes achieving a single fatal head shot and the capacity to confirm death within a couple of minutes. This is best achieved through shooting only being conducted under ideal conditions. In addition, it is common practice to use chest shots as follow-up shots rather than a head shot. However, head shots are preferable for achieving immediate insensibility should the first shot not be fatal. Further assessment of the use of thermal imaging and shooting at night should be undertaken to investigate potential improvements in welfare outcomes.

Only shooters who are assessed to be competent are to be permitted to shoot feral horses as part of management programs.

There are currently no published studies on the welfare outcomes for ground shooting feral horses. The RSPCA recommends that investment is provided to fund studies to examine the welfare impacts of ground shooting feral horses as an urgent priority.

- **Recommendation** 7: Conduct a welfare assessment of ground shooting including the use of thermal imaging and shooting at night.

AERIAL SHOOTING

The RSPCA acknowledges that aerial shooting is a management tool that has the potential to remove large numbers of horses over a relatively short period of time or from areas that are otherwise inaccessible. However, the relative humaneness and effectiveness of this method depends on several factors and most importantly the skill of the shooter and the pilot.

There appears to be only one paper published on welfare aspects of this method. Hampton et al (2017) showed that the humaneness of aerial shooting is highly dependent on the skill of the shooter.

Key findings of concern include:

- At least 1% horses were non-fatally wounded.
- Although the inferred point of aim for the cranium was 74% and 26% for the thorax of horses shot, at post mortem, only 35% showed bullet wound tracts affecting the cranium, with the remainder showing bullet wound tracts in the cervical (neck) spine or thorax.
- Approximately 63% of horses were considered to have had an instant death with total time to death of non-instantaneously killed horses ranging from 3 to 242 seconds (mean of 19s) with total time including pursuit time ranging from 2 to 654 seconds (mean of 80s).

The humaneness assessment as reported by the ITRG in 2015 identified several aspects which should be considered to improve animal welfare outcomes where aerial shooting is conducted including;

- Using highly experienced and skilled shooters and pilots.
- Ensuring that the point of aim for the first shot is always the cranium: if the first shot cannot be accurately placed then a shot is not fired.
- Shooting occurs only in open areas with minimal high-canopied vegetation (tree cover or woodland).
- Shooting in flat terrain rather than steep or undulating areas as this will result in fewer injuries and allow for easier sighting of wounded animals.

- Shooting in cooler temperatures to minimise heat stress in pursued animals.
- Small groups of horses (<10) are targeted at a time: congregation of social groups in larger mobs is avoided.

Where aerial shooting is conducted it should be audited against appropriate humaneness assessment parameters and must cease immediately if there are any unacceptable animal welfare outcomes.

Given the general nature of the terrain in the Australian Alps, aerial shooting may need to be limited to specific areas of open terrain to avoid negative welfare outcomes.

- **Recommendation 8: Develop appropriate humaneness assessment parameters for aerial shooting to use for animal welfare audit checks.**

SHOOTING TRAPPED HORSES (ON-SITE HUMANE KILLING)

Where horses may not be able to be rehomed, shooting in situ may offer improved welfare outcomes to avoid transportation to slaughter. However, it is understood that welfare assessment of shooting trapped feral horses has not been conducted and this needs to be addressed as an urgent priority. Currently, there is insufficient detail regarding the recommended procedure for conducting trap/yard shooting in the most humane way possible. The importance of conducting such assessments is highlighted by Hampton et al 2016.

The current SOP HOR004 Trapping of feral horses does not include advice for humanely shooting trappe/yarded horses (ITRG 2015). Shooting is referred to, but this is only where individual horses require euthanasia due to injury or unsuitability to be either rehomed or transported for slaughter. The shooting of multiple trapped/yarded horses poses many animal welfare risks including horses panicking thereby experiencing fear and distress which could result in injury due to escape attempts as well as a higher risk of horses being wounded. The RSPCA recommends that a full animal welfare assessment is conducted for on-site shooting before considering this as an option. The advice in the humaneness assessment report prepared by the ITRG (2015) recommended that the following should be considered for evaluating on-site shooting;

- best available techniques (e.g. shooting, chemical restraint, captive bolt devices),
- use of partitions and visual barriers,
- sound suppressors for firearms,
- methods for minimising handling of horses,
- order of killing for different ages and classes of horses
- possible effects on horses that are within sight or sound of these procedures.

- **Recommendation 9: Conduct a full animal welfare assessment for on-site shooting of trapped/yarded feral horses.**
- **Recommendation 10: Incorporate findings from the animal welfare assessment into a SOP for on-site shooting of trapped/yarded feral horses.**

3.2.3 Mustering

There is limited published information in the scientific literature regarding the welfare impacts of mustering feral horses. To mitigate welfare risks, feral horses should be mustered quietly and at a slow pace especially if the herd comprises foals or older animals. Mustering should only be done

within approximately 2km (ITRG 2015) by competent handlers who comply with the SOP HOR003 Mustering of feral horses.

3.2.4 Trapping

Trapping is conducted passively (i.e. horses are lured to traps through providing access to food, mineral blocks or mares).

Trapped wild animals may be exposed to many welfare risks including physical injury (e.g. escape attempts, fighting due to mixing of social groups, welfare impacts on mares used as lures) and negative mental impacts including fear and stress due to being restrained and being in close proximity to humans. Trapped feral horses are either shot in situ or loaded and trucked to an abattoir or for rehoming. Loading, transportation and unloading of feral horses causes significant fear and stress. Once trapped, feral horses should be assessed for potential rehoming based on prior arrangements that appropriate homes are available. To avoid unnecessary injury, pain, suffering and distress, feral horses must not be transported for slaughter. Transportation for rehoming is acceptable where action is taken to mitigate negative welfare outcomes. As mentioned above, the SOP HOR004 Trapping feral horses does not contain sufficient detail for the on-site shooting of trapped horses.

3.2.5 Transport of feral horses

Transportation of feral horses poses many animal welfare risks which may not be easily mitigated and so careful consideration must be given as to how and why feral horses are transported (Weeks 2012; Padalino 2016). Feral horses should only be transported for the purposes of rehoming. It is essential that a separate SOP is used for transporting feral horses as there are many considerations which apply to feral horses which do not apply to domestic horses and their handling requires highly skilled, competent and experienced operators.

In terms of fitness to transport, emaciated horses (Body Condition Score 0 – 1.5) should not be transported as they are likely to be weak and unable to withstand the rigours of transport. In addition, all mares must be checked and if lactating must be released if her foal is not trapped due to the mare experiencing mammary engorgement in transit (is very painful) and the foal suffering from starvation and exposure. Dogs and electric prodders must not be used in the handling of feral horses. Welfare checks must be conducted every two hours during transit.

- Recommendation 11: Undertake a comprehensive animal welfare assessment to verify best practice methods as part of the development of a SOP for transport of feral horses.

3.2.6 Transport and slaughter

The RSPCA does not support the transportation of feral horses for slaughter as this is not justified on welfare grounds.

- Recommendation 12: Transportation of feral horses to abattoir/knackery is not permitted under feral horse management programs.

3.2.7 Rehoming

Rehoming feral horses requires special considerations including high standards during transportation, receival, handling and gentling, health care, facilities and nutrition. Only people who are highly trained in handling and caring for feral horses should undertake rehoming. To provide community assurance

that the welfare of rehomed feral horses is safeguarded, periodic inspections by an appropriate authority should be conducted. The physical and mental condition of each horse should be assessed as well as relevant health and management records.

The RSPCA supports a process to ensure that those caring for feral horses are registered and comply with best practice guidelines to help safeguard the welfare of these horses. In addition, all horses must be microchipped and the fate of each rehomed feral horse should be reported to the land manager who provided the horses for rehoming.

- Recommendation 13: Establish processes (including the development of appropriate guidelines) to ensure that those who elect to rehome a feral horse have appropriate skills and have facilities to help safeguard horse welfare. It should also be a requirement to microchip each feral horse rehomed and to comply with mandated welfare standards with monitoring and enforcement of standards. The fate of each rehomed feral horse should be reported to the person who provided the horses for rehoming.

Recent research has found that the number (0.0083%) and value (average $1408 vs $1790) of feral horses available is much less than for domestic horses based on analysing data from a specific recreational riding horse selling platform (Condon et al 2023). The authors concluded that more research is required to assist in identifying appropriate target markets to help support rehoming as a more sustainable tool for managing feral horses.

3.2.8 Other non-lethal methods

Non-lethal methods for managing feral horses include exclusion fencing and rehoming, which may have limited applicability due to relatively small area or number of horses controlled respectively. However, these approaches may be useful in specific circumstances. Although national guidelines are being prepared for rehoming, there is no SOP for exclusion fencing. It is understood that welfare impact assessment of exclusion fencing of target and non-target species has not been conducted, despite this method being used extensively in agricultural areas to manage wild dogs etc. A study to evaluate such impacts is an important and urgent priority.

Other non-lethal options include deterrents and fertility control. As with exclusion fencing and rehoming, these options are unlikely to be effective for broad scale control but may provide alternative options as part of an integrated management approach for particular situations. It is understood that very little if any research has been undertaken in relation to the use of potential deterrents. However, some work has shown potential benefits of fertility control (Grams, 2022).

Investment in developing and refining humane non-lethal methods is encouraged as without alternative options, there will be a continued reliance on shooting, which is not sustainable in the long term.

- Recommendation 14: Invest in research to further develop and assess fertility control methods.
- Recommendation 15: Assess welfare impacts of exclusion fencing on target and non-target species and incorporate findings into a SOP.

4 Comments on Terms of Reference

4a) identifying best practice approaches to reduce the populations of feral horses in the Australian Alps and their impact on:

i. biodiversity, including threatened and endangered species and ecological communities listed under Commonwealth, state or territory law,

A number of studies have shown that feral horses cause negative impacts on the environment and ecological communities (Cherubin et al 2019; Driscoll et al 2019; Robertson et al 2019; Scheel and Foster 2018; Schultz et al 2019). However, there is a need for further impact studies to be conducted. Where it is demonstrated that feral horses are responsible for declining biodiversity and declines in threatened native species, management programs must have clear objectives relating to mitigating these impacts. The effectiveness of the management program must be monitored and evaluated based on these objectives. This will assist with providing the community with an assurance that the program is necessary and is successful.

In addition to documented negative impacts caused by feral horses on conservation and biodiversity, animal welfare impacts on native wildlife also needs to be considered. When habitat is destroyed or food availability diminished, vulnerable animals will experience hunger, exposure and other negative states. Feral horses trample and compact soil reducing food availability and cover which can make some animals more susceptible to predation, and reduce breeding, the ability to avoid unfavourable weather conditions and availability of space under snow. Furthermore, horse manure can contaminate the environment by polluting waterways.

In terms of justifying feral horse management, in addition to the environmental impacts on threatened and other vulnerable species and ecosystems, it may be beneficial to include welfare impacts on native animals, as described above.

- Recommendation 16: **Include acknowledgement of welfare impacts on native animals as a negative impact caused by feral horses.**

In addition to mitigating negative impacts of feral horses, consideration must be given to other species which cause negative impacts on natural or cultural assets. By only focusing on feral horses, the overall aims of management may not be achieved.

- **Recommendation 17: Consider impacts and management of other species contributing to negative impacts in addition to feral horses as part of an integrated approach.**

Although recent studies have contributed to furthering our knowledge and understanding of the environmental impacts caused by feral horses it is essential that all management activities are evaluated in terms of mitigating negative impacts (SAP, 2020).

- **Recommendation 18: Ongoing evaluation of negative impacts caused by feral horses be conducted to determine effectiveness of control measures.**

ii. the ecological health of the Australian Alps national parks and reserves,

In addition to negative animal welfare impacts, the RSPCA acknowledges the demonstrated impacts that feral horses have on the Alpine ecosystem and the threat they pose to rare and endemic flora and fauna as described above.

iii. Indigenous cultural heritage, and

The RSPCA acknowledges the Aboriginal cultural values of the Australian Alps and the risks feral horses may pose to those landforms and more broadly to the health of Country.

iv. the headwaters of the Murray, Murrumbidgee, Snowy and Cotter Rivers, including their hydrology, water holding capacity, water quality, habitat integrity and species diversity;

No comment.

4b) Commonwealth powers and responsibilities, including:

i. the protection of matters of national environmental significance under the Environment Protection and Biodiversity Conservation Act 1999, including listed threatened species and communities and the National Heritage listed Australian Alps national parks and reserves

The RSPCA acknowledges that the relevant government departments have statutory obligations to protect biodiversity and key habitat areas. Feral horses are not listed as a key threatening process and therefore there is no threat abatement plan for feral horses. National threat abatement plans provide a robust framework for a consistent approach to be used which includes impact evaluation and animal welfare considerations. These plans also provide a mechanism for sharing resources to maximise cost efficiencies. The RSPCA recommends that a Threat Abatement Plan for feral horses be developed and implemented.

- Recommendation 19: Develop and implement a Threat Abatement Plan for feral horses.

ii. obligations under international treaties, such as the Convention on Biological Diversity, and

The RSPCA acknowledges that the relevant government departments have statutory responsibility to meet obligations under relevant international treaties.

iii. the commitment to prevent new extinctions under the threatened species action plan;

The RSPCA supports evidence-based measures to prevent new extinctions under the threatened species action plan.

4c) the adequacy of state and territory laws, policies, programs and funding for control of feral horses and other hard-hoofed invasive species in the Australian Alps, and their interaction with Commonwealth laws and responsibilities;

A broad range of nationally applicable Codes of Practice (CoPs) and Standard Operating Procedures (SOPs) for humane vertebrate pest control including feral horses have been developed which are available for use by state and territory governments, landholders and pest animal control operators. However, despite continued advocacy by the RSPCA to state and territory governments, these CoPs

and SOPs are not mandatory. The RSPCA recommends that welfare standards pertaining to the management of all species considered as pests, including feral horses, be regulated under state/territory animal welfare legislation as for other domesticated species (e.g. sheep, cattle).

The relevant currently available documents include;

Model code of practice for the humane control feral horses - PestSmart

SOP HOR001 Ground shooting of feral horses

SOP HOR002 Aerial shooting of feral horses

SOP HOR003 Mustering of feral horses

SOP HOR004 Trapping of feral horses

- Recommendation 20: **Regulate welfare standards pertaining to the management of all species, including feral horses considered as pests, under state/territory animal welfare legislation as for other species.**

4d) measures required to repair and restore native habitats for species impacted by feral horses and other hard-hoofed invasive species in the Australian Alps, including for iconic species like the corroboree frog and the platypus; and

For specific areas, perhaps consider exclusion fencing if feasible but welfare impacts on all wild animals would need to be assessed. Also, for discrete areas perhaps consider fertility control.

4e) any other related matters.

No comment

5 Summary and recommendations

In summary, the RSPCA acknowledges that feral horses cause significant damage to vulnerable ecosystems and threaten biodiversity and the conservation of some threatened species. On this basis, it is deemed necessary to implement measures which will mitigate these negative impacts. This may involve the use of lethal options, which must be undertaken by skilled operators using best practice methods. Action must be taken to refine current methods and develop non-lethal humane methods to reduce reliance on shooting. Impact evaluation must be robust and welfare assessments must be conducted to ensure both effectiveness and humaneness of operational activities.

To help achieve this, the RSPCA makes the following recommendations.

- **Recommendation 1: Management of feral horses is coordinated cross tenure and cross jurisdictions.**
- **Recommendation 2: Establish an Australian Alps feral horse management advisory group to include cross jurisdictional and members with appropriate expertise.**

- Recommendation 3: Develop a document which outlines processes for ensuring acceptable animal welfare standards for feral horse management (similar to that for the Australian Feral Camel Management Project).
- Recommendation 4: Head shots for both ground and aerial shooting are to be taken as the first shot as standard procedure except in specific circumstances where a chest shot is deemed to be essential on welfare grounds.
- Recommendation 5: Where chest shots are taken, the aim should be the heart as this will achieve a more rapid loss of consciousness compared to shooting one or both lungs.
- Recommendation 6: Specify maximum pursuit times and/or distance in the relevant SOPs.
- Recommendation 7: Conduct a welfare assessment of ground shooting including the use of thermal imaging and shooting at night.
- Recommendation 8: Develop appropriate humaneness assessment parameters for aerial shooting to use for animal welfare audit checks.
- Recommendation 9: Conduct a full animal welfare assessment for on-site shooting of trapped/yarded feral horses.
- Recommendation 10: Incorporate findings from the animal welfare assessment into a SOP for on-site shooting of trapped/yarded feral horses.
- Recommendation 11: Undertake a comprehensive animal welfare assessment to verify best practice methods as part of the development of a SOP for transport of feral horses.
- Recommendation 12: Transportation of feral horses to abattoir/knackery is not permitted under feral horse management programs.
- Recommendation 13: Establish processes (including the development of appropriate guidelines) to ensure that those who elect to rehome a feral horse have appropriate skills and have facilities to help safeguard horse welfare. It should also be a requirement to microchip each feral horse rehomed and to comply with mandated welfare standards with monitoring and enforcement of standards. The fate of each rehomed feral horse should be reported to the person who provided the horses for rehoming.
- Recommendation 14: Invest in research to further develop and assess fertility control methods.
- Recommendation 15: Assess welfare impacts of exclusion fencing on target and non-target species and incorporate findings into a SOP.
- Recommendation 16: Include acknowledgement of welfare impacts on native animals as a negative impact caused by feral horses.
- Recommendation 17: Consider impacts and management of other species contributing to negative impacts in addition to feral horses as part of an integrated approach.
- Recommendation 18: Ongoing evaluation of negative impacts caused by feral horses be conducted to determine effectiveness of control measures.
- Recommendation 19: Develop and implement a Threat Abatement Plan for feral horses.
- Recommendation 20: Regulate welfare standards pertaining to the management of all species, including feral horses considered as pests, under state/territory animal welfare legislation as for other species.

6 References

Australian Pest Animal Strategy 2017-2027 (agriculture.gov.au)

Cherubin RC, Venn SE, Driscoll DA et al (2019) Feral horse impacts on threatened plants and animals in sub-alpine and montane environments in Victoria, Australia. Ecological Management & Restoration, 20:47-56.

Condon V, Wilson B, Fleming P et al (2023) Investigating the market value of brumbies (Equus caballus) in the Australian riding horse market. Animals, 13(9), 1481.

Driscoll DA, Worboys GL, Allan H et al (2019). Impacts of feral horses in the Australian Alps and evidence-based solutions. *Ecological Management & Restoration, 20*(1):63-72.

Dubois S, Fenwick N, Ryan EA et al (2017) International consensus principles for ethical wildlife control. Conservation Biology, 31(4):753-760.

Grams K, Rutberg A, Turner Jr JW (2022) Reduction in growth rates of wild horse populations treated with the controlled release immunocontraceptive PZP-22 in the western United States. Wildlife Research 49(8):738-748.

Hampton JO, Hyndman TH, Laurence M et al (2016) Animal welfare and the use of procedural documents: limitations and refinement. Wildlife Research, 43:599-603.

Hampton JO, Edwards GP, Cowled BD et al (2017) Assessment of animal welfare for helicopter shooting of feral horses. Wildlife Research, 44:97-105.

Hart Q, Hampton J, Gee P (2013) Ensuring acceptable animal welfare standards under the Australian Feral Camel Management Project (AFCMP).

Harvey AM, Beausoleil NJ, Ramp D et al (2020) A ten-stage protocol for assessing the welfare of individual non-captive wild animals: Free roaming horses (*Equus ferus caballus*) as an example. Animals 10, 148, 10.3390.

HVPC Working Group (2004) A national approach towards humane vertebrate pest control – Discussion Paper. RSPCA Australia. https://www.rspca.org.au/sites/default/files/website/The-facts/Science/Scientific-Seminar/2003/SciSem2003-DiscussionPaper.pdf

ITRG (2015) Assessing the humaneness of wild horse management methods: Kosciuszko National Park Wild Horse Management Plan. Report by the Independent Technical Reference Group to the Office of Environment and Heritage NSW, Sydney

ITRG (2016) Final report of the Independent Technical Reference Group: Supplementary to the Kosciuszko National Park Wild Horse Management Plan. Report by the Independent Technical Reference Group to the Office of Environment and Heritage NSW, Sydney.

Padalino B, Raidal SL, Hall E et al. (2016) A survey on transport management practices associated with injuries and health problems in horses. PLoS ONE 11(9): e0162371.

Robertson G, Wright J, Brown, D et al (2019). An assessment of feral horse impacts on treeless drainage lines in the Australian Alps. Ecological Management & Restoration, 20, 21-30.

SAP (2020) Final Report of the Kosciuszko Wild Horse Scientific Advisory Panel – Wild Horse Management Plan.

Scheele, B., and C. Foster. (2018). Feral horse impacts on Corroboree Frog habitat in Kosciuszko National Park. In G. L. Worboys, D. Driscoll, and P. Crabb (eds). Feral Horse Impacts: The Kosciuszko

Science Conference - Conference Abstracts. Australian Academy of Science, Australian National University & Deakin University, Canberra.

Schulz, M., Schroder, M., & Green, K. (2019). The occurrence of the Broad-toothed Rat *Mastacomys fuscus* in relation to feral horse impacts. *Ecological Management & Restoration, 20:*31-36.

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.

Weeks CA, McGreevy P, Waran NK (2012). Welfare issues related to transport and handling of both trained and unhandled horses and ponies. Equine Veterinary Education 24(8): 423-430.

Appendix A - RSPCA policies

RSPCA Policy E01 Wildlife – General principles (adopted 06/12/10)

1.1 RSPCA Australia recognises that the state of an ecosystem directly affects the diversity of populations, the likely survival of species and the welfare of individual animals within it. Consideration of wild animal welfare thus requires finding a balance between maintaining the viability of an ecosystem and protecting the welfare of individual animals.

1.2 RSPCA Australia believes that wherever human activities have the potential to have a negative impact on wild animals, whether directly or indirectly, we have a duty to ensure that they are conducted in a way that causes as little injury, suffering or distress to animals as possible.

1.3 RSPCA Australia supports the use of independent environmental impact assessments to determine the potential of any development to threaten the continued survival of a species, significantly alter existing ecosystems, or have a negative impact on animal welfare. Where development projects identify threats to the welfare of wild animals, conditions must be placed on the development to mitigate these threats. Where mitigation is not possible or reasonable the development should not go ahead.

1.4 RSPCA Australia believes that management practices utilising natural resources (such as mining and logging) must be designed to ensure that they cause as little suffering to animals or negative consequences for the viability of a given population as possible.

1.5 RSPCA Australia supports the establishment and maintenance of national parks and conservation zones in areas of environmental significance to preserve genetic diversity, promote biodiversity and protect native animals from human impacts. The use of such areas should only permit activities that do not compromise animal welfare. At the same time, RSPCA Australia recognises that these areas alone are not sufficient for the conservation of biodiversity.

1.6 RSPCA Australia supports the ratification by the Australian government of international treaties, conventions and agreements which serve to protect biodiversity and promote the humane treatment of wild animals.

RSPCA Policy E02 Management of wild animals (adopted 06/12/10)

2.1 RSPCA Australia acknowledges that in some circumstances it is necessary to manage populations of wild animals, native or introduced. There are three main reasons used to justify the management of wild animals*:

- to protect the welfare of individual animals
- to help conserve a threatened, endangered or vulnerable native species
- to reduce adverse impacts on human activities or the environment.

* It is noted that in most cases these problems have arisen as a result of human activities or interventions.

2.2 Any measures taken to manage wild animals must recognise that whether an animal is native, introduced or viewed as a 'pest' does not affect its capacity to experience pain, suffering or distress.

2.3 Programs and strategies which prescribe the management of wild animals (such as threat abatement plans and native animal management plans) must be justified, supported by scientific evidence and have clearly stated aims. Such programs should be subject to public consultation, ethical approval and review prior to implementation. Once implemented, the results of such programs should be regularly monitored, evaluated, publicly reported and used to inform future activities.

2.4 Management activities (such as on-ground intervention or control) should only be undertaken if it is likely that the aims of the program can be achieved. The methods used must be humane, target-specific and effective (see E2.10).

2.5 Once the aims of a management program have been achieved, steps must be taken to ensure that the outcomes are maintained in the long-term.

2.6 RSPCA Australia advocates the adoption and implementation of compulsory codes of practice and standard operating procedures for all wild animal management activities.

See www.dpi.nsw.gov.au/agriculture/pests-weeds/vertebrate-pests/codes/humane-pest-animal-control

2.7 Protecting the welfare of wild animals

2.7.1 Management programs aimed at protecting the welfare of individual animals or populations may be necessary where populations are subjected to severe environmental stress, habitat fragmentation, disease or human activity. Such programs must only be carried out under the supervision of the relevant government agency.

2.7.2 In some circumstances it is considered necessary to reduce the size of a given population of wild animals for the long-term benefit of that population. The killing of animals for this reason should only be permitted where it can be carried out humanely and there is no non-lethal, humane and effective alternative available (see E2.10).

See E3 Rescue and rehabilitation of wild animals

2.8 Conserving native species

2.8.1 Management programs aimed at conserving native animals, including threatened, endangered or vulnerable species centre on habitat protection, but include strategies such as captive breeding, translocation and release of animals. Care must be taken to minimise any adverse effects of these activities on the welfare of both target and non-target animals. Such programs must only be carried out under the supervision of the relevant government agency.

2.9 Reducing adverse impacts of wild animals

2.9.1 Many introduced animals, and some native animals, are viewed as 'pests' because of their adverse impacts on human activities, health and wellbeing or the environment. These adverse impacts include:

- land degradation, ecosystem effects, and predation and competition with native species
- losses to agricultural, horticultural and forestry production, including grazing competition, damage to crops, predation on domestic animals and damage to infrastructure
- risks to public health and safety
- other human activities such as tourism, recreation and transport.

RSPCA Australia acknowledges that, in certain circumstances, it is necessary to manage populations of wild animals in order to reduce these impacts.

2.9.2 Management programs must be aimed at reducing adverse impacts rather than simply reducing the number of animals. RSPCA Australia is opposed to the use of incentive methods (such as bounty systems) where these focus on killing animals rather than reducing impacts.

2.9.3 Wherever possible, pest control measures should be carried out as part of an integrated pest animal management program in consultation with the relevant government agency. Lethal methods must only be used where there is no non-lethal, humane alternative available that is effective at achieving the program's aims.

2.10 Management and control methods

2.10.1 RSPCA Australia is opposed to the use of inhumane methods of controlling or managing wild animals. A totally humane method is one which does not cause any pain, suffering or distress to target and non-target animals.

See also Policy G1 Humane killing

2.10.2 When determining the method of control, the most humane method that will effectively achieve the aims of the management program must be used.

2.10.3 The humaneness of a given control method is influenced by its application and the skill of the operator. Control methods must be applied in the best possible way by trained and competent operators.

2.10.4 RSPCA Australia supports the independent assessment of the relative humaneness of control methods and the publication of these assessments to assist in identifying the most humane available methods for a given situation.

See Sharp T and Saunders G (2008). A model for assessing the relative humaneness of pest animal control methods. Australian Government Department of Agriculture, Fisheries and Forestry, Canberra, ACT

2.10.5 RSPCA Australia believes there is a continuing need to improve current control methods or replace them with more humane and effective alternatives. The RSPCA supports research

and development of humane alternatives, including the replacement of lethal methods with humane and effective non-lethal methods, such as reproductive control.