Friday 28th April 2023

Impacts and management of feral horses in the Australian Alps

Submission by the Australasian Wildlife Management Society

The Australasian Wildlife Management Society (AWMS) is a professional society that promotes the study and application of evidence-based wildlife management in the Australasian region, with members from Australia, New Zealand, and around the world. AWMS aims to influence policy and management decisions through the provision of clear, explicit and pragmatic scientific advice on options for wildlife management and associated risks. AWMS welcomes the opportunity to comment on the inquiry into impacts and management of feral horses in the Australian Alps. In the following submission, we focus on the terms of reference relevant to wildlife management.

Our key points are:

1. Protecting feral horses in National Parks is inconsistent with the way other introduced animals are managed in almost every other context. Doing so fails to meet our obligations under state, national and international agreements/legislation.
2. We should be managing to reduce impacts, and to that end we need to focus on reducing feral horses to ecologically sustainable densities in places where they are having measurable environmental impacts (while simultaneously reducing other introduced animals). This may require complete removal/eradication of feral horses from some areas.
3. Aerial culling is an important tool we need because ecologically sustainable densities or local removal/eradication of feral horses is unlikely to be achieved without it, and without also causing other undesirable animal welfare impacts.

a) Identifying best practice approaches to reduce the populations of feral horses in the Australian Alps:

Best practice pest control is typically achieved by using multiple approaches in concert and tailoring these approaches to each specific situation. As such, managers require multiple available tools. Previous control methods applied to feral horses in the Australian Alps have included trapping or mustering for slaughter or domestication ('rehoming'), and ground-based shooting. These methods have not been effective at sustainably reducing feral horse populations. Alternative control methods proposed, such as fertility control, are extremely unlikely to be effective (Hobbs and Hinds 2018). To reduce feral horse numbers, all methods that are both effective and meet animal welfare standards should be available and used.

To substantially reduce feral horse impacts in the Australian Alps in a timely manner, considerable culling effort needs to be expended to create a rapid reduction in their numbers. Any such program undertaken would need to be supported by sufficient long-

term planning, funding and political will to allow meaningful reduction. It would also require the use of effective management tools.

Aerial culling (shooting) is an effective and efficient method for reducing large ungulate populations across a landscape scale (Bengsen *et al.* 2022). Aerial shooting of feral horses is an accepted practice in other Australian jurisdictions (Western Australia, the Northern Territory, South Australia, Australian Capital Territory and Queensland). Aerial culling is used to control other large feral ungulate populations in the Australian Alps and other National Park estates in NSW, e.g. introduced deer (fallow deer, *Dama dama* and sambar deer, *Rusa unicolor*), but currently not for feral horses.

The rate of increase of feral horses is unlikely to decline unless aerial culling is adopted (Driscoll *et al.* 2019). Other control methods have been ineffective for population reduction to date due to inefficiency of the chosen techniques, sporadic and modest control effort, large geographical areas, including sites in the Australian Alps that are not easily accessible for trapping or yarding. Aerial shooting of feral horses is covered by a nationally adopted Code of Practice (COP) (Sharp and Saunders 2012) and Standard Operating Procedure (SOP HOR002) (Sharp 2011). The process imposes a relatively short duration of stress and eliminates the need for mustering, trapping, yarding or transportation for slaughter.

Failing to reduce feral horse densities (i.e. no or ineffective management) imposes negative welfare impacts, and these are felt by not only the target species (through intermittent starvation and mass mortality of feral horses), but also native non-target species via loss of habitat (Foster and Scheele 2019). This view has been under-recognised by the Australian public. Accordingly, we feel that the welfare of all sentient animals inhabiting the ecosystems in question should be taken into consideration when determining the most appropriate management strategy, and not just the welfare of the individual horses (Hampton *et al.* 2019).

Any negative publicity surrounding aerial culling and horse welfare should be addressed by taking a science-based approach, and the scientific literature suggests that overall or net welfare outcomes from aerial culling are likely to be superior to those arising from alternative control methods (Hampton *et al.* 2017). Thus, we encourage the Australian government to recognise their role as stewards of the welfare of all the wild animals inhabiting the Australian Alps as they pursue specific conservation goals.

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

The detrimental impacts of feral horses on soil, vegetation and waterways are well described (see Driscoll *et al.* 2019), including on the EPBC Act listed (endangered) Alpine Sphagnum Bogs and Associated Fens ecological community. Feral horse grazing and trampling of vegetation makes habitat less complex and suitable for the survival of native species including the threatened broad-toothed rat (*Mastacomys fuscus*). The loss of ground cover has further effects on soil stability, creating erosion and habitat degradation, while grazing in water-dependent habitats impacts the breeding site of the corroboree frog (*Pseudophryne corroboree*, *P. pengilleyi*).

Given that feral horses have continued to increase in numbers, it is likely that they pose a greater threat than previously recognised when some earlier conservation advice was provided; for example in 2008 priority actions under s266B of the Environment Protection and Biodiversity Conservation Act 1999 included "…prevent grazing pressure at known occurrences of the Alpine Sphagnum Bogs and Associated Fens ecological community on leased crown land through exclusion fencing or other barriers …". Updated advice and recommendations on future actions under any relevant Commonwealth, state or territory law is therefore warranted.

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

The ecological health of the Australian Alps national parks and reserves is compromised by feral horse impacts – see (i) above. If aerial culling is adopted, there are several ways in which any perceived negative impacts on the ecological health of the Australian Alps national parks and reserves can be appropriately managed.

Firstly, we encourage the use of lead-free ammunition to remove risks of causing harmful lead exposure in scavenging wildlife that will feed on the carcasses, such as wedge-tailed eagles (*Aquila audax*) (Pay *et al.* 2021).

Secondly, any concerns about the impacts of having large carcass loads across the landscape can be addressed through appropriate timing of culling/control that takes advantage of natural processes that can accelerate carcass decay rates. Carcass decay rates, including of larger carcasses, are much quicker during the warmer months when both insect and vertebrate scavengers are active, and warmer temperatures facilitate microbial activity which helps carcasses break down (Newsome *et al*. 2021).

Thirdly, co-ordinated control efforts of other introduced animals that take advantage of carcasses as a food source can be adopted, if necessary, e.g. for red foxes *Vulpes vulpes*, or feral pigs, *Sus scrofa.* The timing of aerial culling can also be tailored to periods when other introduced animals are not actively foraging on carcasses e.g. European wasps *Vespula germanica* which actively scavenge on carcasses around April/May each year (Spencer *et al.* 2020). Monitoring scavenger use of carcasses and carcass decay rates will further inform appropriate timing of control and the need for carcass management or co-ordinated control of other introduced animals (Newsome *et al*. 2021).

b) 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 current management of feral horses in the Australian Alps is markedly different to the way in which all other populations of feral horse and other introduced ungulates are managed on conservation estate in Australia (outside of New South Wales), and this inconsistency creates unnecessary confusion. At present, feral horses are essentially protected within Kosciuszko National Park. Yet the impacts of feral horses are recognised

within Commonwealth databases, and several national recovery plans (e.g. for the Alpine Sphagnum Bogs and Associated Fens Ecological Community, and White Cypress Pine–White Box woodlands (a sub-assemblage of the EPBC listed Endangered Ecological Community White Box Yellow Box Blakely's Red Gum woodland)) list the control and management of feral horse impacts as a key/high priority. The Kosciuszko Wild Horse Heritage Act 2018 and the subsequent retention/protection of feral horses within parts of Kosciuszko National Park is a direct contradiction to the aims of the EPBC Act 1999 and these national recovery plans. This approach is also the opposite of what is required for almost all other introduced pest animals under state biosecurity legislation.

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

Australia has obligations as a signatory on the UN Convention on Biological Diversity (since 1993) to "prevent the introduction of, control [and] eradicate those alien species which threaten ecosystems, habitats or [native] species.". The COP-15 Kunming-Montreal Global Biodiversity Framework Goal A and Post-2020 Global Biodiversity Frameworks also demands restoration of ecosystem integrity, including through mitigation of threatening processes. Given the extent of impacts of feral horses in Kosciuszko National Park, it is critical that their numbers be controlled, and ideally they should be eradicated/removed from the Park in order to ensure Australia is actively controlling alien species that threaten ecosystems, habitats and native species.

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

The ongoing failure to control feral horse numbers and impacts is a direct contradiction to the Australian Government's 2022–2032 '*Threatened Species Action Plan*'.

c) 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;

There are currently several barriers to allow feral horses to be effectively controlled in NSW, due to the introduction of the Kosciuszko Wild Horse Heritage Bill 2018 and the ban on aerial shooting of feral horses within New South Wales national parks. Too few feral horses have been removed since the Bill was introduced to allow reduction or even a stabilisation of population densities. Aerial shooting should be permitted under any changes made to the Kosciuszko Wild Horse Heritage Bill 2018, see (a) above, and adequate funding will be needed to allow for intensive, ongoing and widespread control of feral horses in the Australian Alps. The use of horse retention/protection areas within National parks should also be removed and control of feral horses should be permitted in all areas where there are measurable detrimental impacts of feral horses on ecosystems/species.

d) 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

Feral horses currently impose undesirable environmental impacts in many parts of the Alps, and these impacts will not subside unless horse populations are reduced to ecologically sustainable levels. Feral horses are not the only introduced hard-hoofed animals that cause these impacts (Comte et al. 2022), and reducing the impacts of one species (i.e. feral deer) without simultaneously reducing the impacts of the others (e.g. feral horses) is likely to yield little environmental benefit.

e) any other related matters.

Heritage value

Arguments have been made that the feral horses of the Australian Alps have 'heritage value'. This assertion has been used to argue for maintenance of their free-ranging populations. This reasoning is unique in Australian wildlife management, with no compelling arguments made along the same lines for other introduced species that have inhabited identical ecosystems for the same period of time, e.g. feral pigs. Regardless, there are alternative ways that the heritage values can be protected through information at a visitor centre, preservation of huts/infrastructure and interpretive signs, or walking tracks along favoured travel routes of the feral horses. Feral horses might also be kept on private land adjacent to national parks to preserve their heritage value.

Kind regards,

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President

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