

**Submission
No 140**

**INQUIRY INTO PROPOSED AERIAL SHOOTING OF
BRUMBIES IN KOSCIUSZKO NATIONAL PARK**

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**Submission to the NSW Legislative Council Animal Welfare
Committee Inquiry into the proposed aerial shooting of
Brumbies in Kosciuszko National Park**

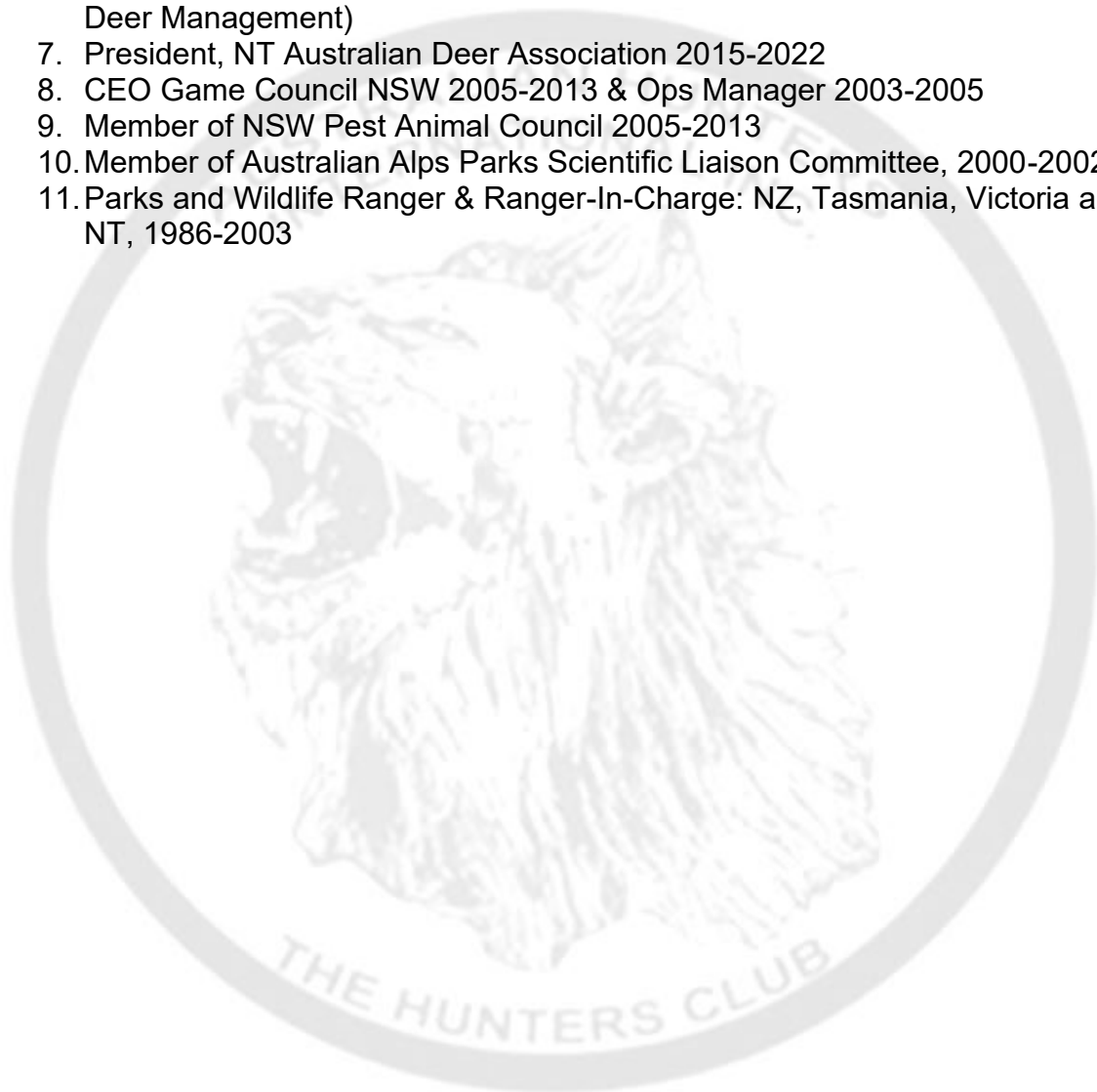
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Hunters International Inc (AHI) on behalf of AHI.**





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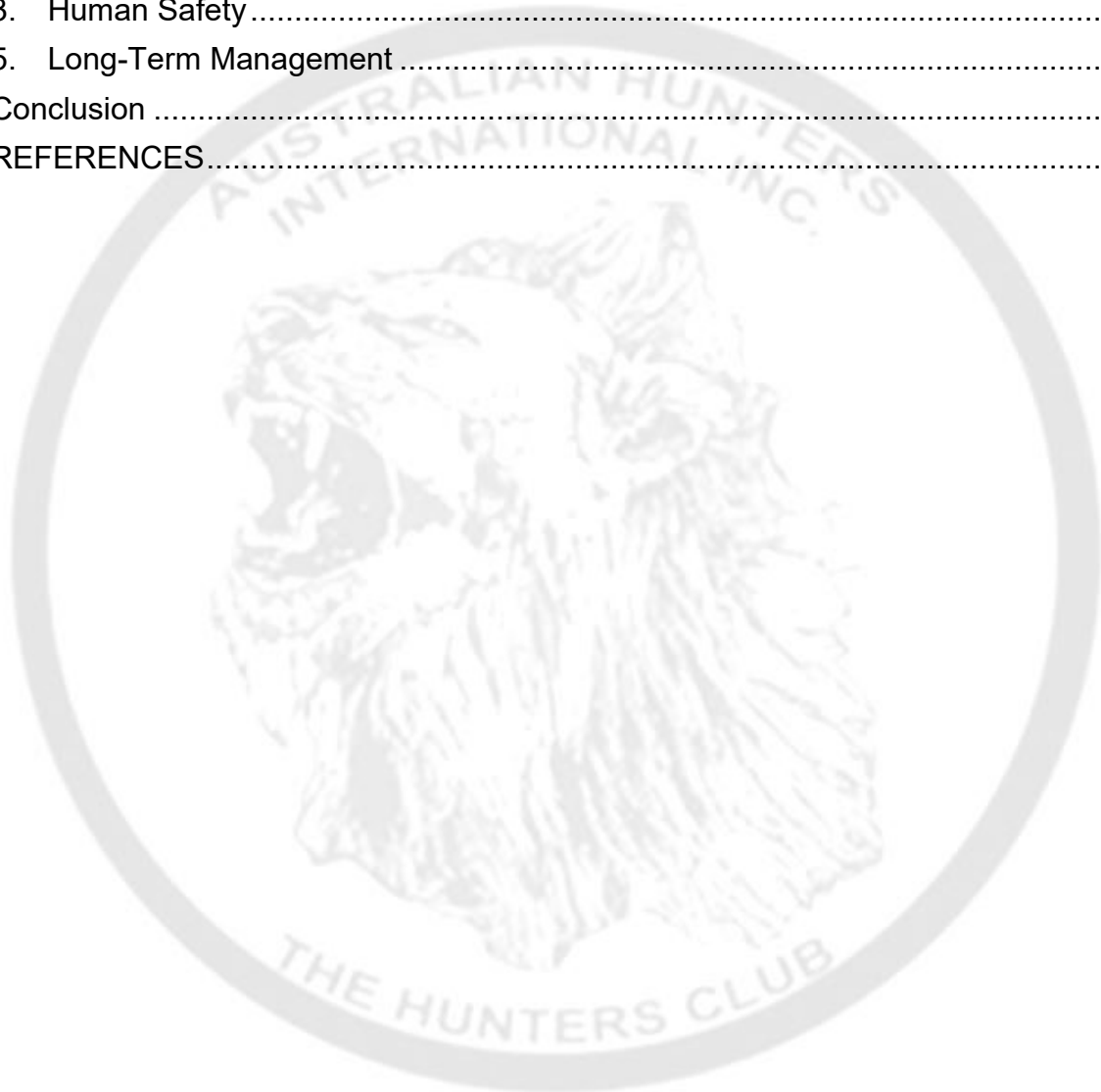
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Executive Summary

Australian Hunters International Inc. (AHI) values conservation hunting, sustainable utilisation, and ethical hunting, with a commitment to responsible wildlife management. AHI recognises the need to manage wild horse populations in Kosciuszko National Park (KNP) while respecting their cultural and community significance and calls for a balanced approach that considers the cultural, historical and emotional connection non-indigenous people have with brumbies. AHI advocates for humane and scientifically sound management programs that respects the welfare of animals.

AHI emphasises the importance of science-backed and publicly scrutinised programs for managing wild animals. Programs should consider ecological viability, social, cultural, and economic factors. Humane and ethical treatment of animals, adherence to codes of practice, and justification for control actions are pivotal. The humane treatment of animals should not be compromised for cost-effectiveness or political dogma.

AHI raises concerns about the humane aspects of aerial shooting, calling for a shift to more potent calibres and the avoidance of shotguns due to ethical and efficiency issues. We also call for robust external oversight and auditing of aerial shooting operations. We recommend video monitoring, random sampling, and autopsy to ensure humane outcomes and prevent unethical practices.

AHI has concerns for the current SOP for its inadequacy. Concerns are raised regarding the angle of shooting from helicopters. The practice of returning to finish off wounded animals after pursuing others is flagged as problematic, leading to animals escape and suffering in the wilderness.

AHI believes stress and trauma on animals in aerial shooting operations should be thoroughly researched, comparing cortisol levels and other physiological indicators in animals killed by different methods. This research will inform the establishment of humane pursuit time limits during aerial shooting.

AHI firmly believes that ground shooting is the most humane method for controlling feral animals and wild horses. A successful example of ground shooting by recreational hunters in Litchfield National Park NT is cited, highlighting its potential as an effective long term control method.

AHI emphasises the need for research to assess whether aerial shooting operations result in animals being driven onto roads, endangering motorists. Clear boundaries should be established to prevent such occurrences.

AHI highlights the risk of secondary poisoning from lead cores in projectiles used in aerial shooting operations. A shift to non-toxic copper or copper alloy projectiles is recommended to reduce environmental harm.

AHI wishes to underscore the importance of addressing the underlying factors contributing to population growth during aerial shooting operations. We believe



robust population surveys and cross-tenure collaborations involving landowners and managers are critical for effective long-term management.

In conclusion, AHI advocates for a comprehensive approach to managing wild horse populations in KNP, balancing ecological and cultural concerns while prioritising humane and ethical practices. Our recommendations aim to enhance animal welfare, safety, and environmental sustainability in control operations, promoting responsible and science-based wildlife management.

Recommendations Summary

1. NPWS produce more education material to aid the general public and stakeholders in understanding the methodology and results in technical reports related to wild horse management in KNP.
2. Minimum calibre of .338 Federal and up should be considered and used for wild horse control programs.
3. Shotguns should never be used by FFAST shooters on horses or deer.
4. Helicopters used in FFAST operations must have tamper-proof video monitoring systems with cameras on various locations, including rifles being used.
5. Independent observers should be on board for 10% of aerial shoots to verify reported and recorded data. The number of shots and killing and wounding rates must be recorded and reported for all aerial shooting operations.
6. A review of the SOP (Aerial Shooting of Feral Horses (HOR002) Standard Operating Procedure) should be undertaken by qualified and experienced individuals and be open for review by the Legislative Council Animal Welfare Committee and the public.
7. Shooters must kill each individual animal before moving on to target and kill the next animal, avoiding leaving wounded animals while pursuing others.
8. Undertake a research program to determine the stress levels of animals shot in aerial and ground-based shooting operations to determine if limits should be placed on aerial shooting maximum pursuit times.
9. Undertake a research program to record if animals are driven out of aerial shooting control operations areas, leading to increased road kills and safety risks for motorists.
10. A welfare assessment research program be undertaken of ground shooting by R-licensed hunters shooting during the day and at night with thermal imaging gear.
11. Undertake a research program to record if animals (both target and non-target) are driven out of aerial shooting control operations areas and result in increased road kills and risk of safety to motorists. (i.e. survey and record number of dead animals on all external and nearby roads before and after operations).
12. All aerial shooting and ground-based shooting operations where the carcass is left in-situ must use non-toxic copper or copper alloy projectiles.
13. A thorough monitoring and evaluation plan must be part of all long-term management of wild horses and feral animals in KNP.
14. All control operations for wild horses and feral animals must be cross-tenure involving landowners and land managers on National Parks, State Forests, and private land.



Introduction

AHI appreciates the opportunity to provide comment to the *Inquiry into the proposed aerial shooting of brumbies in Kosciuszko National Park*. AHI understands that wild horses pose a complex management problem in Australia, with very diverse views in the community about how best to manage them. With no natural predators mortality of wild horses in Australia is mainly associated with drought, which causes starvation, lack of water and consumption of toxic plants. None of these factors appear to be an issue for wild horses in Kosciuszko National Park (KNP).

Since its inception in 1982, Australian Hunters International Inc. has worked to excel in the areas of Conservation Hunting, sustainable utilisation, and ethical hunting. We support and promote conservation and the implementation of sound wildlife (including game and feral animal) management principles. Respect for all wildlife and the animals we hunt, our environment and fellow land users are core AHI values.

AHI recognises that it is necessary to manage populations of wild animals including wild horses or brumbies in KNP. We also recognise that wild horses are having an impact on habitats of corroboree frogs and the important cultural connection that the local indigenous Walgalu people have with these animals which are recognised as totems for some of them.

AHI would like the Animal Welfare Committee, the NSW government and the National Parks and Wildlife Service (NPWS) to acknowledge and include in their management considerations, policy and planning, that non-indigenous people in NSW have iconic animals that they have a deep, cultural and community connection with and feel very dearly about. They are their equivalent of totemic animals. Brumbies and wild deer would indeed fall into this category and must be managed with respect. In recognition of this AHI supports retaining and managing a population of brumbies in KNP as they are now part of the history and cultural identity of the Park and the history of the Snowy region.

AHI understands that feral animals are categorised as a both resource and a pest by different stakeholders in NSW. Developing targeted strategic management programs based on scientific data and recognising environmental, economic and social impacts of wild or feral animals as well as their value as a possible cultural, recreational or commercial resource is critical to the successful ongoing management of these animals in Australia. Such multi-use management programs have been established in New Zealand in response to the environmental, economic and social needs.

AHI believes the following issues must be considered when planning and undertaking control operations for wild horses in Kosciuszko National Park or similar contexts (aerial shooting of deer, goats, and pigs):

1. Programs and strategies which prescribe the management of wild animals on public land (such as threat abatement plans and game and feral animal management plans) are justified, supported by sound 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. A balance must be found between maintaining the viability of an ecosystem and managing wild animals to the benefit of NSW socially, culturally and economically.
3. Where management programs are conducted, or the animals are harvested or utilised, that this is undertaken in as humane a way as possible.
4. The humaneness of current control methods is improved, or they are replaced with more humane alternatives.
 - Humane outcomes are not compromised for the sake of cost-effectiveness often touted as 'efficacy'.
5. Codes of practice and standard operating procedures for all wild animal management activities are strictly adhered to.
6. All activities to control animals considered as pests are:
 - Justified. The impact must be legitimate, quantified and appropriately measured to assess progress.
 - Humane. That it is recognised that wild animals that are considered as pest species still deserve respect, and that the most humane methods available are used when managing them.

AHI believe that the appropriate selection and implementation of management tools should underpin all control programs. If effective management of pest animal impacts requires removal of the animals, selection of management techniques becomes a key part of developing a management plan. Key considerations for selecting removal techniques include: humaneness; human safety; non-target impacts; and finally cost-effectiveness. AHI would like to stress that cost-effectiveness of government shooting programs should not be override the requirement for the humane treatment of the animals being controlled.

Lessons must be learnt from the Guy Fawkes experience in October 2000 and the subsequent review by Assoc. Prof. Tony English (English, A., 2000) which commented on the techniques for the control of wild horses:

- Fertility control – no suitable method currently available, but further research warranted.
- Immobilisation using drugs delivered by dart rifle – suitable only for small groups that can be closely approached, and not without risk to the horses.
- Mustering and trapping – feasible under some circumstances but not without animal welfare concerns, especially in the transport of the animals after capture.
- Ground shooting – appropriate in open country, but very difficult in rough terrain, especially in following up wounded horses.
- Shooting from helicopters – considered by the Senate Standing Committee on Agriculture (Model Code of Practice for the destruction or capture, handling and marketing of feral livestock animals 1991) to be the only practical method for quick, large-scale and humane culling of large animals in inaccessible locations. This view is shared by the NSW Pest Animal Council (which has RSPCA membership) and the Australian Veterinary Association, provided that the shooting is always done by trained and accredited personnel operating under strict guidelines as a part of a government pest control program.



1. Comment on the methodology used to survey and estimate the brumby population in Kosciuszko National Park

AHI supports the methodology and the results of the November 2022 survey of the wild horse population of KNP. AHI believes the main issue is the general public understanding the science behind the survey and the report.

Recommendation 1. NPWS produce more education material in plain English to aid the general public and stakeholders in understanding the methodology and results in technical reports related to wild horse management in KNP.

2. Humaneness and animal welfare outcomes

One of the primary concerns is ensuring that any killing/control methods used are as humane as possible, and minimising suffering for the animals involved. Inhumane killing/control methods lead to prolonged suffering and naturally raise ethical concerns.

AHI from its' considerable experience in hunting animals of all sizes and builds around the world believe that the .308 Winchester calibre currently used by FAAST operators is simply not sufficient or adequate for horses, especially horses being chased by a helicopter and shot. The 9.3X62 for instance has been used very effectively by our members on horses, camels, water buffalo in Australia as well as larger resilient game animals in Africa. The larger calibres allow for bigger heavier projectiles which give greater penetration and deformed surface area and therefore greater wound channel.

Shotguns should never be used by FAAST shooters on horses or deer – see South Australian study:

https://pir.sa.gov.au/data/assets/pdf_file/0004/431248/Aerial_culling_of_feral_fallo_w_deer_with_a_shotgun.pdf (The number of shots in this report and time until death is unacceptable: see table p.14)

Recommendation 2. Minimum calibre of .338 Federal and up should only be considered and used for wild horse control programs.

Recommendation 3. Shotguns should never be used by FAAST shooters on horses or deer.

AHI has concerns that there is currently no external audit or oversight of aerial shooting operations. For public confidence in the operations and so that poor operators (pilots and shooters) can be identified and either re-trained or removed from FAAST operations it is important that all shooting operations are videoed and reviewed.

AHI suggest that random sampling of shooting operations should occur to record number of shots per animal and autopsies on animals to see where it was shot.

There is also a need to record chase and kill times and number of shots for animals in varying environments: open; wooded; mixed open and wooded; and forested and



varying canopy types in bush forested areas to ascertain if helicopter shooting platforms should be used in all of terrain and vegetation types.

Where aerial shooting is conducted it should be audited against appropriate humaneness assessment parameters and shooting ops 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 (i.e., injury during pursuit in steep, uneven, rough and boulder strewn terrain).

Recommendation 4. Helicopters used in FFAST operations including wild horse shooting programs in KNP must have tamper proof video monitoring systems with cameras on the pilot and passenger side, front and rear facing and also on rifles being used, so that humane outcomes and number of shots per death of animal and time from pursuit to death can be confirmed- independently.

Recommendation 5. Independent observers are on board for 10% of aerial shoots to verify veracity of historical reported and video recorded data.

Recommendation 6. The number of shots and killing and wounding rates must be recorded and reported on for all aerial shooting operations.

The SOP or the document that outlines the process for ensuring acceptable standards for aerial shooting operations on horses (and all wild or feral animals) is a core requirement. AHI believes these must be a quality, fit for purpose document.

- AHI believes the current SOP indicates that the author/s simply didn't have any real experience in animal control or the use of firearms, let alone shooting from a helicopter (i.e. the diagram for where to shoot assumed you were shooting from ground level – not from above or to the side).
- AHI has concerns in regards to the issue of shooting angle into chest from above or above and behind as from a helicopter.
 - Projectiles hitting ribs or thoracic processes have a risk of not being fatal and only stunning or knocking out animals which may appear dead.

AHI also wishes to bring to the attention of the Committee the issue of the standard shooting practice from helicopters of starting at the rear animal on a group of animals and progressing through the group when pursuing, chasing animals in a helicopter and then coming back to check and put in the second or a required killing shot to ensure the animal is dead. This could result in lost wounded animals in bush or scrub cover or wounded animals ending up in waterways, creeks or dams as has happened recently in KNP.

Recommendation 7. A review of the SOP (Aerial Shooting of Feral Horses (HOR002) Standard Operating Procedure) be undertaken by suitably qualified and experienced people and the review be open for review by the Legislative Council Animal Welfare Committee and be open for comment and submissions by the public.

Recommendation 8. The shooter must kill each individual animal before moving on to target and kill next animal, leaving wounded animals while pursuing others then coming back for finishing shot is not acceptable.



To ensure the veracity of the data on the shooting operations AHI believes that random sampling of shooting operations must occur to record number of shots per animal and autopsies on animals to see where it was shot. To ensure public confidence in humane outcomes it is important to record chase and kill times and number of shots for animals in varying environments: open; wooded; mixed open and wooded; and forested and varying canopy types in bush forested areas.

Aerial shooting operations lead to stress, fear, and trauma for the animals being pursued, targeted, as well as for other members of the group. Stress and trauma can have negative impacts on the well-being of individual animals and the social dynamics of the population.

AHI believe there is a need for research on the stress levels of animals killed in aerial control programs and compare it to animals shot in ground shooting operations. Blood chemistry, cortisol, muscle glycogen and carcass characteristics of animals of first animal shot should also be compared to those from the last animal shot in a group to determine stress levels of longer pursuits. These characteristics should also be compared to those taken from ground shooting with and without moderators on firearms and compare day shooting with night-time and unsuppressed and suppressed firearms with thermal/night vision gear.

Recommendation 9. Undertake a research program to determine the stress levels of animals shot in aerial and ground based shooting operations to determine if limits should be placed on aerial shooting maximum pursuit times.

AHI would like to refer to RSPCA in its submission (p.5 2023-04-27-Impacts-and-management-of-feral-horses-Austr-Alps-RSPCA-SUBMISSION.pdf) where it stated that:

“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.”

AHI firmly believes that ground shooting is the most humane method for controlling horses and feral animals. AHI would like to point out that recreational hunters have been used very successfully in removing feral animals including wild horses from a block in Litchfield National Park (LNP) since the NT Back Country Hunting (BCH) program began in 2016 (<https://www.ntfirearms.com.au/back-country-hunting>). The successful NT BCH program was modelled on the NSW R-Licence system. The NT Parks Chief District Ranger in charge of LNP is prepared to endorse to talk to the Committee and convey the positive benefits and results of the BCH program, especially in relation to the removal of wild horses from the BCH block in LNP.

Recommendation 10. A welfare assessment research program be undertaken of ground shooting by R-licensed hunters shooting during the day and at night with thermal imaging gear.

3. Human Safety



In 2023 AHI members from the Hunter Valley observed the carcasses of 4 sambar deer that had been hit and killed by vehicles on the Hunter Expressway soon after an aerial shooting operation in the area.

Research must be undertaken in this area, so that, if necessary, SOP's will clearly define boundaries to ensure horses and other feral animals disturbed but not shot during an operation will not be pushed out onto roads and highways and exposed to the risk of being hit by a vehicle.

Recommendation 11. Undertake a research program to record if animals (both target and non-target) are driven out of aerial shooting control operations areas and result in increased road kills and risk of safety to motorists. (i.e., survey and record number of dead animals on all external and nearby roads before and after operations).

4. Non-Target Impacts

AHI wishes to draw to the Committee's attention the risk of secondary poisoning from lead cores in projectiles currently used in FFAST shooting operations in NSW. Recent research (Hampton *et al.*, 2023) confirmed that harmful lead is widespread in wedge-tailed eagles on mainland Australia. Lead poisoning is an underappreciated threat to populations of this iconic species and perhaps other raptors.

Preliminary data from this study suggests that mitigation of lead exposure in Australia should be a high conservation priority, especially given the ease with which lead can be removed from the landscape, and in contrast to the difficulty associated with reducing impacts from other anthropogenic activities. A simple way of reducing this exposure in high priority conservation areas such as KNP would be to use non-toxic copper or copper alloy projectiles such as Barnes X-bullets.

Recommendation 12. All aerial shooting and ground-based shooting operations where the carcass is left in-situ must use not use projectiles with a lead core. Only non-toxic copper or copper alloy projectiles to be used.

5. Long-Term Management

The effectiveness of aerial shooting as a population control method may be limited if it doesn't address the underlying factors leading to population growth. Long-term management strategies need to consider factors such as total population and annual population increase under varying environmental/ climatic and seasonal conditions.

Thorough and robust population surveys must be conducted before and after all control operations to inform future management decisions and ascertain if the treated/shot area becomes a sink for surrounding populations of the target species and quickly re-populated. All control operations must be cross-tenure involving landowners and land managers on National Parks, State Forests, Reserves, Crown Land and private land.

Recommendation 13. A thorough monitoring and evaluation plan must be a part of all long-term management of wild horses and feral animals in KNP.

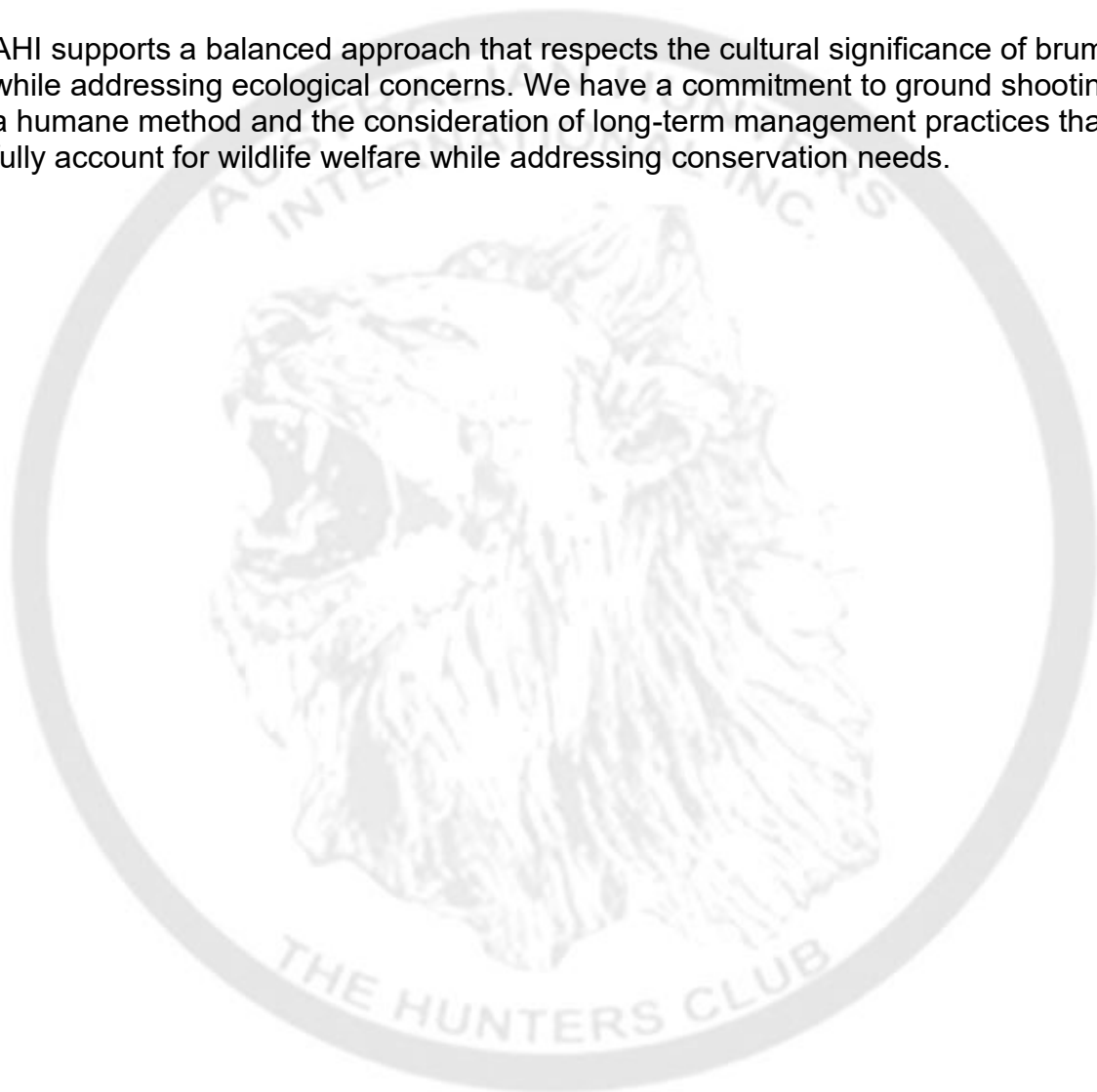


Recommendation 14. All control operations for wild horses and feral animals must be cross-tenure involving landowners and land managers on National Parks, State Forests, Reserves, Crown Land and private land.

Conclusion

In conclusion, AHI emphasises the importance of scientifically sound, humane, and ethically responsible wildlife management in Kosciuszko National Park. Our recommendations call for improvements in control operations, including the use of more powerful calibres, video monitoring, and enhanced oversight.

AHI supports a balanced approach that respects the cultural significance of brumbies while addressing ecological concerns. We have a commitment to ground shooting as a humane method and the consideration of long-term management practices that fully account for wildlife welfare while addressing conservation needs.





REFERENCES

Corey, A.J. *et al.*, 2023 *Aerial culling invasive alien deer with shotguns improves efficiency and welfare outcomes*
(https://www.researchgate.net/publication/367982542_Aerial_culling_feral_fallow_deer_with_shotguns_improves_efficiency_and_welfare_outcomes)

English, A.W., 2002. *Reports on feral horse management in national parks and reserves*. NSW National Parks & Wildlife Service, Hurstville, N.S.W.

Hampton *et al.*, 2023. *Lead exposure of mainland Australia's top avian predator*. *Environmental Pollution* 332 (2023) 122004

