

**REPORT ON THE CULL OF FERAL HORSES IN GUY
FAWKES RIVER NATIONAL PARK IN OCTOBER 2000
EXECUTIVE SUMMARY**

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REPORT ON THE CULL OF FERAL HORSES IN GUY FAWKES RIVER NATIONAL PARK IN OCTOBER 2000

Terms of Reference for Dr A.W. English dated 31 October 2000

1. Review the recent operation by the National Parks and Wildlife Service (NPWS) to cull feral horses in the Guy Fawkes River National Park.
2. Review the protocols used by the NPWS to cull feral animals, with particular reference to feral horses.
3. Report directly to the Minister for the Environment as soon as practicable, and in any case by no later than 15 December 2000.

In carrying out the review to:

- Take into account the results of the RSPCA's investigation of the Guy Fawkes operation.
- Have full access to all relevant files and staff involved in both the Guy Fawkes operation and NPWS culling policies and practices.
- Make an urgent on-site inspection at Guy Fawkes.

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3. Member of the Executive Committee and Secretary of the World Association of Wildlife Veterinarians (WAWV).
4. Fellow of the Australian College of Veterinary Scientists.
5. Member of IUCN (World Conservation Union)/Species Survival Commission (SSC) Veterinary Specialist Group, Conservation Breeding Specialist Group and Deer Specialist Group.

Summary of the Report

Introduction

1. This report deals with the culling by NSW National Parks and Wildlife Service (NPWS) of 606 feral horses in Guy Fawkes River National Park (GFRNP) between 22 and 24 October 2000.
2. The report looks at both why the culling of these horses was initiated by the Service and how it was planned and carried out.

Background

3. GFRNP covers some 62,700 hectares of wilderness about 100 km north east of Armidale. The Guy Fawkes River runs north-south

through a valley which rises on both sides to rugged escarpments and forested plateaus. The Park is home to numerous species of native animals and birds, but also has a population of feral horses and varying numbers of cattle which enter from adjoining properties.

4. The Park is part of the NPWS Dorrigo Plateau Management Area, administered by the North Coast Region based in Grafton. The Dorrigo Plateau headquarters is located in the Dorrigo Rainforest Centre, where NPWS staff include a Pest Species Management Project Officer who has responsibility for the control of pests in the Dorrigo Plateau Area, including GFRNP.
5. The current Pest Species Management Plan (PSMP) for the Dorrigo District was published in 1998. This plan identifies and prioritises the major pest species occurring in the District, and outlines the NPWS's statutory requirement for pest species management, its pest management philosophy and the major control programs running in the District. There is a section on feral horses in the Plan, that provides for erosion control works implemented to address the impacts of feral horses, and also to achieve reduction in the number of feral horses and ultimately their eradication.

Feral horses in Australia

6. Horses are members of a long list of pest species introduced to this country since white settlement. While they are not as widespread as the rabbit, feral pigs and wild goats, they are nonetheless a serious pastoral pest that also cause significant environmental damage (erosion, overgrazing, fouling of waterholes and competition with native fauna for scarce feed). Feral horses pose a complex management problem in Australia, with very diverse views in the community about how best to manage them. Horses generally do very well in Australia, and with no natural predators mortality is mainly associated with drought, which causes starvation, lack of water and consumption of toxic plants.

Control techniques for feral horses

7. The control techniques for feral horse management are:
 - 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.

Feral Animals Aerial Shooter Training Course (FAAST)

8. In NSW this training is conducted by teams of instructors drawn from the NSW Police Service, NSW Agriculture, the Rural Land Protection Board and the NPWS. These are rigorous 4-day activities that deal with: the aviation laws applicable to aerial shooting, the relevant laws applicable to government agencies, the use of the L1A1 SLR rifle, 12G shotgun and appropriate ammunition, ability to use firearm safely and competently from helicopters, ability to appreciate relevant animal welfare issues. To enter the course applicants must already be familiar with firearms, and a high standard of marksmanship is required to pass.
9. All the NPWS shooters in the Guy Fawkes operation were FAAST-trained, and are currently accredited. All have had extensive experience in the aerial shooting of pigs and goats.

FAAST protocols for the shooting of feral horses

10. There are strict protocols laid down for the helicopter shooting of all pest species. The key points are: shooters may only fire at an animal when they are sure of an effective shot into the killing zone; animals must be killed as quickly and humanely as possible, with additional shots fired if necessary to be certain that an animal is dead; shooters must ensure that wounded animals are killed as quickly and humanely as possible, and if a line of animals is being shot and one is wounded, the helicopter must fly back to allow the shooter to kill the animal; prescribed firearms and ammunition must be used for each pest species, and for horses this is the L1A1 rifle in .308 calibre, fitted with an Aimpoint® red dot sight and using 150 grain soft point ammunition. This was the equipment and ammunition used in GFRNP.
11. The brain is a small mobile target well protected by bone, so the preferred killing shot is into the heart-lung area. Death is rapid due to massive tissue damage, haemorrhage and shock. The FAAST protocol requires that one or more shots are fired at the heart-lung area, followed by additional shots after the horse goes down, if required to ensure that it is dead. This was the practice adopted in GFRNP, with the pilot positioning the helicopter some 40-50 metres behind the target horse.
12. All 3 pilots used were experienced in helicopter mustering and aerial shooting.

Management of feral horses in GFRNP

13. Since the NPWS took over the Park in 1972 the number of feral horses has grown from only small numbers in the early days to become a significant pest species in the 1990s. From 1992 the NPWS undertook a series of mustering and trapping operations, using local horseman, NPWS staff and helicopters for mustering. Despite some success with traps made from heavy netting, only 156 horses were removed from the Park between 1992 and 1999, and there were a number of horses killed and injured in the process. Even for those that survived it was very stressful, especially in the way in which the newly trapped horses were handled and taken out of the valley. There were plans put forward in September 2000 to continue with mustering and trapping, but using vehicles to truck horses out. However, conditions in the Park as a result of drought and bushfires became so severe that helicopter shooting was considered for the first time in late October.
14. Severe bushfires had burnt out some 60% of the Park from early September, and increasing numbers of horses were seen along the Guy Fawkes River by helicopters involved in firefighting. The horses were noted to be in very poor condition.
15. An aerial survey was conducted by experienced NPWS staff on 18 October, with 283 horses and 151 cattle counted along the valleys of the Guy Fawkes and Sara Rivers. A number of dead horses were seen.
16. Detailed planning for an aerial cull of the feral horses in GFRNP began on 19 October, using the Incident Control System (ICS) to develop a plan, determine and allocate resources and to monitor the effectiveness of the operation.

Helicopter shooting of horses

17. The shooting was done over 3 days starting on 22 October, using a total of 3 helicopters and 3 teams of shooter and navigator. The navigator's duties were to use the GPS navigation system to ensure that all shooting was done within the Park boundary, to assist in the process of ensuring that every shot horse was dead and to plot the location and number of horses shot.
18. A total of 606 horses were shot – 326 on Sunday 22 October, 221 on Monday 23 October and 59 on Tuesday 24 October.
19. During a briefing on the morning of 22 October the FAAST protocols were emphasised, with the heart-lung target area verified in a telephone call to the FAAST Management Committee. The “fly back” rule was used throughout, with the helicopter flying back over every horse in group that had been shot, before a new group was sought. If there was any doubt that a horse was not dead, additional shots were fired at the head or heart-lung area. In this way many horses received 4 or more shots, but the great majority were killed by the first or second shot.

20. One horse was found alive on 1 November, despite having 2 bullet wounds in the killing zone. The projectiles had behaved in a quite bizarre way, failing to penetrate the chest cavity. This unfortunate incident places emphasis on the need for additional shots to be fired into every horse, unless conditions permit each one to be checked on the ground.

Field investigation

21. A field investigation was carried out on 2 November, and again on 10 November. A total of 27 horses were examined on the first visit, and 12 on the second. There was no evidence to support a claim that the horses had not been killed humanely, and no evidence of indiscriminate targeting away from the killing zone. A local veterinarian who looked at 67 horses on behalf of the RSPCA indicated that he had come to the same conclusion, in a discussion concerning our findings. We had agreed that we would work together in this way. This total number of horses examined provided a valid sample of the animals that were shot, selected at random as they were.

Conclusions

22. As a result of this inquiry I have come to the following conclusions:
 - a. That the use of aerial shooting in Guy Fawkes River National Park was an appropriate technique under the circumstances,
 - b. That the shooting was carried out in a humane way, under approved protocols designed to kill the horses as quickly as possible,
 - c. That the culling operation was planned and carried out in a most professional manner on the part of all personnel involved,
 - d. That all 3 shooters had been trained on an approved Feral Animals Aerial Shooters Training (FAAST) course, are currently accredited to act as aerial shooters, and have all had extensive experience in the shooting of feral animals from the ground and from the air,
 - e. That all 3 pilots had extensive experience of aerial mustering and shooting, and were selected on that basis,
 - f. That the conditions that prevailed in the Park by late October, as a result of severe drought and bushfires, had resulted in a significant animal welfare problem for the feral horse herd,
 - g. That the large number of horses in the Park, as well as the hundreds of cattle, posed a significant threat to the native flora and fauna in the Park,
 - h. That the adverse impacts of these horses are both long term (including erosion, overgrazing, pollution of the rivers and dispersal of weeds), but also short term in their competition with native animals for available feed after the drought and bushfires earlier this year,

- i. That the Service had used a number of management options since 1992 in attempts to reduce the number of feral horses in GFRNP, including roping, mustering, trapping and darting,
- j. That despite the use of local horseman and experienced Service staff, only 156 horses were removed by these methods, at significant risk to the people concerned and with major animal welfare problems as well,
- k. That there was a proposal in September 2000 to seek additional funds for a large scale mustering operation, using heavy netting enclosures and vehicles suitable for trucking horses out of the valley,
- l. That the large number of horses which began to congregate along the river valley in mid-October, in seeking the few remaining unburnt grassed areas, presented an opportunity to remove a large number by a concentrated aerial culling operation,
- m. That helicopter shooting by suitably qualified and experienced teams was the best method available to achieve this, and also to kill horses humanely before they starved to death,
- n. That it would have been prudent for the Service to have sought the involvement and cooperation of the RSPCA in planning and carrying out the operation, with emphasis on both the welfare of the horses and the significant ill-effects of the large horse herd on native flora and fauna if nothing was done,
- o. That local land owners should also have been involved in some way from the outset, to ensure that they knew what was happening and why.

Recommendations

90. As a result of this inquiry I make the following recommendations:
- a. That aerial shooting of pest animals, including feral horses, be retained as method of control under appropriate circumstances, providing that everything possible is done to ensure that it is carried out humanely,
 - b. That the FAAST Management Committee be tasked with a review of current aerial shooting protocols for all species, with a view to achieving improvements where required,
 - c. That funding be made available for studies on improving the methods for assessing the impacts of feral horses in Australia, and on options for their management in a range of habitats,
 - d. That a Code of Practice for the capture and transport of feral horses be developed and enforced,
 - e. That efforts be made to further reduce the number of horses remaining in GFRNP, by a range of means including aerial shooting,
 - f. That the community continue to be made aware of the need for effective control of feral animals in Australia by all appropriate means, including aerial shooting. The recent stark images of shot horses, and the emotive language used by some commentators,

must be countered by effective education concerning the threatening processes confronting our native fauna.

A.W. English
15 November 2000