

General Purpose Standing Committee No. 5

Feral Animals

Ordered to be printed 29 October 2002

New South Wales Parliamentary Library cataloguing-in-publication data:

New South Wales. Parliament. Legislative Council. General Purpose Standing Committee No. 5

Feral animals: [report] / General Purpose Standing Committee No. 5. [Sydney, N.S.W.] : The Committee, 2002. -177 p.; 30 cm. (Parliamentary paper; no.158)

Chair: Richard Jones.

“Ordered to be printed 29 October 2002”.

ISBN 0-7347-6415-4

1. Feral animals—New South Wales.
- I. Title.
- II. Jones, Richard.
- III. Series: Parliamentary paper (New South Wales. Parliament) ; 2002/158

632.6 (DDC21)

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Terms of Reference

That General Purpose Standing Committee No 5 inquire into and report upon:

- 1) the damage caused by feral animals to the environment across all land tenures;*
- 2) the current and future threat of feral animals to native flora and fauna across all land tenures, including national parks, private land holdings, other publicly owned land etc;*
- 3) the adequacy of current practices and resources for feral animal control;*
- 4) improvements for current practices, and alternative solutions for feral animal control; and*
- 5) any other relevant matters.¹*

These terms of reference were self-referred by the Committee on 30 May 2001.

¹ *Minutes of Proceedings No. 103, 5 June 2001, Item No.8.*

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New South Wales**

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Chair's Foreword

This inquiry concerns an issue of increasing significance for the State of New South Wales and for the nation as a whole. Feral animals cause extensive damage to Australia's natural resources and agricultural production and cost the nation hundreds of millions of dollars in lost agricultural production and conservation expenses. Feral animals threaten our native environment by destroying native plants and by preying upon and competing with native animals; they cause land degradation and are a serious potential threat for the spread and distribution of exotic diseases.

Rural communities bear the immediate, and often horrific, impact of feral animals. However, this does not mean that feral animal control can be seen simply as a rural problem. Indeed, the presence in urban areas of feral animals that are traditionally linked with the bush is becoming an increasing occurrence.

I was concerned to ensure that the Committee heard from local people who were affected by and were dealing with the feral animal problem. Public hearings were held in both Cooma and Armidale, and a number of regional sites were visited. I would like to thank all those individuals and organisations that contributed to the inquiry through lodging written submissions, giving evidence at hearings, or hosting or making presentations to the committee during its site visits.

At present rural communities contribute significantly to the cost of dealing with a problem that ultimately affects the entire State community. I believe that feral animals pose a serious enough threat to the environment and agriculture to justify an increase in funding of their control by the State Government.

The primary conclusion of this inquiry was the need for an overall strategic command of the problem as a means of achieving integrated regional feral animal control programs. The foundation for this is the recommendation of this inquiry for the NSW Government to take action to make the Pest Animal Council a statutory body, responsible for integrated regional feral animal management across the State.

I exhort the Government to implement this recommendation. It is essential in its own right and fundamental to many of the other issues that are raised in this report.

This inquiry makes a number of other important recommendations which encompass the numerous issues that contribute towards the effective control of feral animals. This inquiry makes recommendation regarding aerial 1080 baiting; the heinous and potentially catastrophic practice of pig-dogging; and the need for increased government agency funding, to name a few.

I would like to thank the Committee members for their interest in and commitment to the feral animal issue and their approach to the committee process over the life of the inquiry. I am pleased that the great majority of the report received the unanimous support of Committee members.

I would also like to thank the members of the Committee secretariat for their support. A number of Senior Project Officers were involved at different stages of the inquiry. Russell Keith coordinated the early stages of the inquiry, including the public hearings and site visits; Stuart Smith conducted research and produced the comprehensive initial draft report; John Young undertook the review process and assisted the Committee during the report's development to its final stage. I am also very appreciative of the work of Ms Ashley Nguyen and Ms Natasha O'Connor who have formatted this report and assisted

in the administration of all aspects of the inquiry, and for Director Steve Reynolds who provided procedural advice and support during the inquiry.

The Hon Richard Jones MLC
Committee Chair

Executive Summary

The Inquiry

On 30 May 2001, General Purpose Standing Committee No 5 resolved to inquire into and report upon the damage being caused by feral animals to the environment and the adequacy of current practices and resources used for feral animal control. This Inquiry was established as a self-reference, following concerns in regional areas about the impact of feral animals on their communities.

There was considerable public interest in the Inquiry, with 136 submissions received. The Inquiry held four days of public hearings. In order to ensure that local people affected by and working with feral animals were heard from, two of the hearings were held at the regional centres of Cooma and Armidale, and a number of regional site visits were conducted, including an aerial inspection of land affected by feral animals.

Feral animals in New South Wales

There are many different species of feral animals in New South Wales. There are some 25 species of mammals, along with many birds and fish that were not present in Australia prior to 1788 and which have established wild populations and are now considered feral pests. The principal feral animal species in the State are: foxes, dogs, rabbits, pigs, goats, cats, deer and horses.

The Minister for Agriculture may declare an animal a pest under the *Rural Lands Protection Act 1998*, and the pest may then be subject to a pest control order. To date three vertebrate animals are subject to a pest control order – wild dogs, feral pigs, and rabbits. In effect, all other feral animals are controlled on a voluntary basis.

During the Inquiry, concerns were raised about the few number of animals that have been declared as pests under the *Rural Lands Protection Act*. The Committee believes that the Minister for Agriculture should give urgent consideration to declaring foxes, feral deer, feral goats, and feral cats as pests under the Act.

Damage caused by feral animals

Feral animals cause extensive damage to Australia's natural resources and agricultural production and cost the nation hundreds of millions of dollars annually in lost agricultural production and conservation expenses. The major environmental impacts of feral animals involve predation of and competition with native animals and the destruction of native plants. Feral animals also cause land degradation, and are a potential threat for the spread and distribution of exotic diseases.

As well as the financial impact, feral animals can have a debilitating social impact on farming families and communities that have to deal with the consequences of feral animal attacks on farming stock.

There is no clear consensus on what are the most 'damaging' feral animals, largely because different regions of the State suffer from different feral animal problems. Problems also arise from the lack of accurate and complete data collection on damage caused by feral animals.

Responsibility and funding for control of feral animals

There is a diversity of players involved in the control of feral animals. Central to this control is the actions of landholders, including individuals, corporations and several public agencies with regulatory roles.

Overall the Committee found there is the need for increased funding for feral animal control in the State. For some public agencies there is a disparity between their responsibilities and the level of funding they provide.

Rural Lands Protection Boards

Rural Land Protection Boards are the primary 'government' agency in relation to control of certain feral animals. There are 48 Boards in the State, which administer the *Rural Lands Protection Act 1998*. The Boards are financed by levies on landholders, and the State Government provides no direct funding to them.

Approximately \$6 million is contributed by landholders to feral animal control under the Board system, which makes them as a group the largest contributor in the State. There is some regional variation in the ability of Boards to raise funds for feral animal control according to their rate base.

The Rural Land Protection Boards provide an important service for controlling feral animals and hence their levels of funding and resources are strategically very important.

NSW Agriculture

NSW Agriculture plays an important role in the environmental protection and sustainability of agricultural lands. It is responsible for conducting research into vertebrate pests; providing training and advisory programs to Rural Land Protection Board personnel; providing ongoing training in the safe use of vertebrate pesticides; and assisting in the planning and coordination in the management of key pest animals.

In 2000-2001, the expenditure by NSW Agriculture on pest animal management was \$2.24 million, including \$0.53 million received as external funding support for research programs.

National Parks and Wildlife Service (NPWS)

The NPWS is the lead agency for the protection and conservation of natural and cultural heritage in New South Wales. NPWS responsibilities extend to the care, control and management of national parks and other reserves under their control.

The NPWS manages 611 conservation areas with a total area of approximately 5.4 million hectares. Between 1994 and 2001, the land managed by NPWS increased by 35%. Over the same period, the total initial budget allocation increased by 138%, from approximately \$95 million to approximately \$225.5 million.

The NPWS pest budget for 2001-02 was \$15.738 million, with over \$2.5 million expected to be spent on 'on-ground' feral animal programs.

Despite allocating the largest budget for feral animal control among all the government land managers, the NPWS was subject to a considerable amount of criticism about feral animals spreading from national park estate. This criticism was not universal and indicated that different regions of the NPWS provided differing levels of feral animal control protection. In some regions, increased strategic efforts by NPWS were recognised by landholders.

The Committee acknowledges the increase in funding over recent years from \$15.80 to \$34.50 per hectare of national park for the NPWS, and supports this financial commitment. Nevertheless, the Committee cannot ignore comments by both national park estate neighbours and members of its own advisory committees that more funding is still necessary.

State Forests

State Forests manages approximately 2.8 million hectares of public forest in New South Wales. The *Forestry Act 1916* requires State Forests to conserve birds and animals and preserve native flora consistent with forestry purposes.

State Forests employs the equivalent of 12 employees dedicated to controlling feral animals on State Forest lands. In 2000-2001 total expenditure on feral animal control was \$430,203, of which the Community Service Obligation grants component, contributed by the State Government, totalled \$166,812.

The Committee is particularly concerned about the level of funding committed to feral animal control by State Forests. The Committee believes it is evident that this funding must be significantly increased for the next five years, followed by subsequent funding adequate to support maintenance of control programs.

Department of Land and Water Conservation (DLWC)

Approximately 65% of the land area in New South Wales is in public ownership, with some 53% being Crown land administered by the DLWC. Most of this DLWC administered land is leased, so that responsibility for feral animal control resides with the landowner.

Approximately 5% of New South Wales (about 4 million hectares) is the direct responsibility of DLWC. In the year 2001-02, DLWC budgeted up to \$300,000 for feral animal programs.

The Committee believes the funding commitment of the DLWC to feral animal reduction on its land holdings is in need of review given the size of its land holdings and the far more substantial funding commitments by other agencies.

State-wide government funding

The Committee received conflicting evidence on the adequacy of government agency budget allocations for feral animal control programs. Many submissions argued that the government as a whole has committed too few resources for effective feral animal control. However, the effectiveness of current expenditure could be improved by better integration and cooperation between stakeholders.

No clear picture has emerged on the overall required level of funding that is necessary, and this reflects the lack of any integrated State-wide feral animal control program.

The government's approach to noxious weed control, whereby a statutory body administers a fund for weed control activities across the State, was cited in evidence as a valuable model for feral pest control. Feral animals pose a serious enough threat to the environment and agriculture to justify an increase in funding for their control by the State Government. The Committee believes that the State Government should establish a fund, to assist appropriate feral animal control programs.

Current techniques for feral animal control

There is a range of techniques available for managing feral animals. The use of all of these techniques is subject to, at times controversial, public debate. This is because any technique must balance a number of requirements. A feral animal control technique must:

- Be cost and result effective and have as its over-riding aim the minimisation of feral animal impact on the environment and agriculture.
- Not, itself, have an adverse impact on native species, particularly threatened native species.
- Be humane and minimise suffering of feral animals.

Public debate on feral animal control has often suffered from an insufficient public education program on the damage caused by feral animals and the techniques used to control them. While the Committee saw evidence of a number of successful local issue-specific campaigns, it was concerned that no agency at present has responsibility for coordinating an overall approach to community education on feral animals and identifying gaps in current awareness.

New control techniques are being researched and proposed, including the work of the Cooperative Research Centre for Biological Control of Vertebrate Pest Populations to produce a vaccine to render certain feral animals infertile. However, it is recognised that application of these techniques are many years away, and that significant feral animal control work must be applied using currently available techniques.

The use of poison 1080 in aerial baiting

The benefits, in terms of its effectiveness, of the use of poison 1080 were strongly conveyed to the Committee; as were the dire consequences that would ensue should it be prohibited. One of the most controversial issues for the Inquiry was the aerial application of 1080 baits for wild dog control.

The National Parks and Wildlife Service has restricted the use of aerial baiting on its reserves. In addition, the South Coast Rural Lands Protection Board has stopped aerial baiting of wild dogs, and State Forests has also largely discontinued its use. This action has caused some controversy over the use of aerial baiting. The arguments are twofold:

- Whether aerial baiting presents unacceptable risks to non-target species, particularly various types of quoll.

- Whether the alternatives to aerial baiting, primarily mound baiting, are as effective in controlling wild dogs.

Research relating to this issue is currently underway. The national Registration Authority is undertaking a review of 1080; while the NPWS is undertaking research on the distribution and habits of quolls in the environment, where they move to and whether they take baits in a field situation.

The Inquiry received conflicting evidence on the use of aerial baiting for wild dog control. The Committee does not wish to rule out the possible future use of aerial baiting, if sufficient research becomes available to address current concerns. However, in the absence of conclusive research, the Committee believes the precautionary principle should prevail, and so supports the current approach by the NPWS.

Aerial culling of feral horses

Shooting of feral animals, when conducted properly by expert marksmen is regarded as humane since death is rapid if not instantaneous. Proper conduct includes the use of weapons of a suitable calibre and immediate follow-up to dispose of wounded animals.

However, one of the most contentious aerial shooting programs was that of the aerial cull of feral horses in Guy Fawkes River National Park, near Dorrigo, in late 2000. The culling received a great deal of adverse media coverage. It was also the subject of a court case, in which the RSPCA brought cruelty charges against the NPWS, charges which were ultimately dismissed except in the case of one of the 600 animals.

In response to this issue, an independent review of the protocols and procedures used in the Guy Fawkes National Park was commissioned. That review found that the culling operation was planned and carried out in a most professional manner on the part of all personnel involved.

The Committee acknowledges the reasons that led the Minister for the Environment to ban aerial culling of feral horses. The Committee considers that a range of feral horse control techniques should be available to the NPWS.

Practice of pig-dogging

A number of witnesses who gave evidence before the Committee expressed their dismay with the actions and behaviour of illegal pig-hunters, particularly those who engaged in 'pig-dogging', and the negative impact they often had on feral animal control programs.

In particular, the Committee heard evidence relating to some hunters releasing and re-introducing pigs into areas to ensure a source of hunting stock, and of dogs that are used in pig hunting being left behind and themselves becoming part of the feral animal problem.

The Committee believes that, as an exotic disease preventative measure and in the interests of effective and humane feral animal control, the Minister for Agriculture should take action to enforce a total ban on the practice of pig dogging and the illegal movement of pigs.

Strategic and Integrated regional feral animal control programs

Feral animals tend to be very mobile species and do not respect property boundaries. Effective feral animal control therefore requires cooperative programs between landholders on a regional basis. Without cooperative regional programs, isolated feral animal control programs are likely to waste both time and resources as feral animals will simply re-invade cleared areas.

Much feral animal control activity has tended towards reactive 'crisis management' rather than according to any strategic plan. Some of the major causes of feral animal control failure have been control measures that:

- Are undertaken in a reactive manner, that is, only once the feral animal in concern is creating a considerable financial or environmental impact.
- Are not followed up with any clean up of residual feral populations remaining after initial larger control programs measures have been completed.
- Do not include participation by all landholders in the problem area.

It is encouraging that the need for a strategic approach to feral animal management has been recognised as a necessity by land management agencies. Some strategic planning has begun to take place and numerous regional cooperative programs do exist. The importance of having strategic programs for all feral animal species cannot be underestimated.

Proposal for a Statutory Pest Animal Council

There was general agreement during the Inquiry for the need for the improved coordination of feral animal control State-wide. Currently, the NSW Pest Animal Council is charged with the responsibility of coordinating feral animal control. The Council is an 'ad hoc' committee that provides advice to the NSW Government through the Minister for Agriculture. The Council has no statutory basis.

At present the Council largely relies upon goodwill between agencies, meets infrequently and has no effective funding base. The Committee believes that now is an appropriate time to reassess the structure of the Council and to transform it into a statutory authority, meeting regularly, to, among other things, coordinate, fund and promote feral animal control programs across the State.

The Committee believes this action is fundamental to many of the other issues discussed in this report. To that end the Committee recommends that:

- The NSW Government introduce a Bill to make the Pest Animal Council a statutory body, responsible for coordinating feral animal control programs across the State.
- The NSW Government establish a fund for feral animal control. This fund to be administered by the Pest Animal Council who would assist in the funding of appropriate feral animal control programs as identified in the regional planning process.
- One of the first functions of the Council should be to develop the framework for effective regional feral animal control programs.

- The NSW Government provide adequate financial and administrative resources to the Council in order for it fulfil its functions.
- One of the functions of the Council should be to liaise with and coordinate feral animal control issues with adjoining States.
- One of the functions of the Council should be to monitor current agency research and fund and/or conduct feral animal research programs in areas of need.
- One of the functions of the Council should be to coordinate community education program about the damage caused by feral animals and why they must be controlled.

Summary of Recommendations

Recommendation 1 *page 25*

The Committee recommends that the State Council of the Rural Lands Protection Boards develop a standard protocol for landholders to formally report stock losses due to feral animal predation.

Recommendation 2 *page 25*

The Committee recommends that Rural Lands Protection Boards develop with the National Park and Wildlife Service collaborative surveys of native fauna, feral animals and stock losses from feral animal predation, based on the model of the Kempsey Rural Lands Protection Board survey.

Recommendation 3 *page 29*

The Committee recommends that NSW Agriculture, as a matter of priority, in conjunction with the appropriate agencies and landholders conduct a State-wide program of simulation exercises to develop and refine effective systems for countering outbreaks of exotic diseases in feral animals.

Recommendation 4 *page 32*

The Committee recommends that the Minister for Land and Water Conservation review funding for feral animal control programs within the Department with the view to increase funding to a level commensurate with landholder responsibilities of that Department.

Recommendation 5 *page 35*

While the Committee notes the significant funding provided by the National Parks and Wildlife Service for feral animal management, the Committee recommends that the National Parks and Wildlife Service receive increased funding and further review its funding commitment to feral animal management so that it has the capacity to better target major problem areas where feral animals are affecting neighbouring communities.

Recommendation 6 *page 37*

The Committee recommends that the Government increase its Community Service Obligation funding to State Forests so that State Forest's feral animal control budget is maintained at a level that is at least equal to that of the National Parks and Wildlife Service.

Recommendation 7 *page 37*

The Committee recommends that the Government develop and implement a calculation formula that will set the minimum feral animal control budget for each of the government agencies with responsibility for management of public land.

Recommendation 8 *page 44*

As a principle, the Committee recommends that before any feral animal control program commences, the most humane method of control appropriate to the management objectives for the identified species, the specifics of the situation and to the animal concerned is determined and applied.

Recommendation 9 *page 47*

The Committee recommends that the over-riding aim of all feral animal control programs should be to minimise feral animal impact on the environment and agriculture.

Recommendation 10 *page 48*

The Committee recommends that, in the absence of conclusive evidence that 1080 does not cause significant pain, that consideration be given to conducting a trial on the feasibility of incorporating an analgesic into 1080 poisoned baits.

Recommendation 11 *page 58*

The Committee recommends that research on the effect of aerial baiting of wild dogs on threatened species continue as a matter of priority.

The Committee recommends that until conclusive evidence demonstrates that threatened species are not affected by aerial baiting, the precautionary approach of restricting the use of aerial baiting should prevail.

The Committee recommends that the Pest Animal Council arrange for the development of a code of conduct for all aspects of mound baiting.

Recommendation 12 *page 60*

The Committee recommends that the National Parks and Wildlife Service regularly monitor the impact of horses in National Parks and develop an effective and humane management system to control numbers when necessary.

Recommendation 13 *page 68*

The Committee recommends that, as an exotic disease preventative measure and in the interests of effective and humane feral animal control, the Minister for Agriculture take action to enforce a total ban on the practice of pig-dogging and the illegal movement of pigs.

Recommendation 14 *page 70*

The Committee recommends that NSW Agriculture investigate developing its feral animal trapping training program into a formal course in conjunction with NSW TAFE.

The Committee recommends that National Parks and Wildlife Service, State Forests, Department of Land and Water Conservation and the Rural Land Protection Boards seek to employ additional trappers, particularly in problem areas such as the Monaro region.

Recommendation 15 *page 76*

The Committee recommends that NSW Agriculture consider conducting field trials to research the effectiveness of alpacas and llamas and guard-dogs as guardians of farming stock.

Recommendation 16 *page 80*

The Committee recommends that, until such time that a statutory Pest Animal Council is established, NSW Agriculture develop, in cooperation with National Parks and Wildlife Service, State Forests, Department of Land and Water Conservation, and Rural Land Protection Boards, integrated and strategic feral animal control plans, (similar to the fox threat abatement plan) for each of the major feral animal species, including rabbits, dogs, pigs and deer.

Recommendation 17 *page 83*

The Committee notes the success of the 'Brindabella & Wee Jasper Valleys Co-operative Wild Dog/Fox Program' which has resulted in a 68% reduction in sheep losses in one year, and recommends that the Government consider extending these programs to other areas of the State..

Recommendation 18 *page 91*

- (a) The Committee recommends that the Government introduce a Bill to make the Pest Animal Council a statutory body, responsible for coordinating feral animal control programs across the State.
- (b) The Committee recommends that the Government establish a fund for feral animal control. This fund would be administered by the Pest Animal Council who would assist in the funding of appropriate feral animal control programs as identified in the regional planning process.
- (c) The Committee recommends that one of the first functions of the statutory Pest Animal Council should be to develop the framework for effective regional feral animal control programs.
- (d) The Committee recommends that the Government provide adequate financial and administrative resources to the statutory Pest Animal Council in order for it to fulfil its functions.
- (e) The Committee recommends that one of the functions of the statutory Pest Animal Council should be to liaise with and coordinate feral animal control issues with adjoining States.

Recommendation 19 *page 94*

The Committee recommends that the Minister for Agriculture give urgent consideration to declaring foxes, feral deer, feral goats and feral cats as pests, either State-wide or by specific regions, under the *Rural Lands Protection Act 1998*, following the required notice and consultation process.

Recommendation 20 *page 95*

The Committee recommends that the Government investigate minimum fencing requirements for the control of farmed goats and farmed deer, to prevent their escape from farming enterprises.

Recommendation 21 *page 96*

The Committee recommends that NSW Agriculture, the Department of Land and Water Conservation, and the Rural Lands Protection Boards develop protocols to overcome any identified conflicts in legislation in regard to feral animal control.

Recommendation 22 *page 99*

The Committee recommends that one of the functions of the proposed statutory Pest Animal Council should be to monitor current agency research and fund and/or conduct feral animal research programs in areas of need.

Recommendation 23 *page 99*

The Committee recommends that NSW Agriculture make representations to their federal and State government counterparts about forming a national working body to determine priority actions for feral animal research projects.

Recommendation 24 *page 101*

The Committee recommends that one of the functions of the proposed statutory Pest Animal Council should be coordinating community information programs about the problems of feral animals, reasons for their classification as feral and why they must be controlled.

The Committee recommends that one of the functions of the proposed statutory Pest Animal Council should be to maintain a website that provides information on, and links to, all feral animal educational and program activity across the State.

Chapter 1 Introduction

Terms of reference

1.1 On 13 November 2000 the Acting Director of the Legislative Council's General Purpose Standing Committees received correspondence signed by three members of General Purpose Standing Committee No 5 requesting that a special meeting be convened to consider proposed terms of reference in relation to management of feral animals.

1.2 At a meeting on 30 May 2001, General Purpose Standing Committee No 5, in accordance with the procedure set out in paragraph 4 of the Resolution of the House of 13 May 1999 establishing that Committee, resolved to adopt the following terms of reference:

That General Purpose Standing Committee No 5 inquire into and report upon:

- 1) the damage caused by feral animals to the environment across all land tenures;*
- 2) the current and future threat of feral animals to native flora and fauna across all land tenures, including national parks, private land holdings, other publicly owned land etc;*
- 3) the adequacy of current practices and resources for feral animal control;*
- 4) improvements for current practices, and alternative solutions for feral animal control; and*
- 5) any other relevant matters.*

Conduct of the Inquiry

1.3 The Committee placed advertisements in metropolitan and rural newspapers during June 2001 calling for written submissions, with a closing date of 31 August 2001. There was considerable public interest in the inquiry; as a result the Committee accepted submissions after the initial closing date. In all the Committee received 136 submissions. The authors of submissions, except those who requested confidentiality, are listed in Appendix 1.

1.4 The Committee held four days of public hearings during this inquiry. As the Committee wished to ensure that it heard from local people in regional areas affected by and working with feral animals, the initial and final public hearings were held at the regional centres of Cooma and Armidale, on 7 February 2002 and 3 April 2002 respectively. The remaining two hearings took place at Parliament House on 25 and 26 March 2002. A total of 74 witnesses appeared before the Committee; their names and details are listed in Appendix 2. Full transcripts of the hearings are available on the Committee's website at: www.parliament.nsw.gov.au.

1.5 On 8 February 2002 the Committee undertook a site visit to examine fox control and wildlife protection programs in the Nowra area. The Committee inspected the Lake Wollumboola little tern project, and later received presentations and engaged in discussion at the National Parks & Wildlife Service Office, Nowra.

- 1.6** On 4 April the Committee conducted an aerial inspection of the Oxley River National Park and northern Barnard River area. The Committee also visited other land affected by feral animals in the New England area, during which the Committee viewed a demonstration of feral animal control techniques and had discussion with local landowners.
- 1.7** The Chair's draft report was circulated to Committee members for discussion at a meeting on 25 September 2002. The Committee subsequently adopted the report at a meeting on 24 October. The minutes of the Proceedings of the Committee are reproduced as Appendix 6.

Structure of this report

- 1.8** This report examines both the impact of feral animals on the environment and the community, and the effectiveness of the resources that are committed and techniques applied across the State to address and reduce that impact. This examination provides the context for identifying where improved and new approaches to current practice are required.
- 1.9** Chapter Two discusses some definitions of feral animals and problems of their classification; the main feral animal species in New South Wales; and the legislative and institutional context of feral animal control. Chapter Three outlines some of the main damage caused by feral animals to the environment and native flora and fauna, and the social impact of feral animals on rural communities.
- 1.10** Chapter Four assesses and compares the level of resources committed by each of the government and semi-government agencies with responsibility for feral animal control, and examines the overall adequacy of current resources.
- 1.11** Chapter Five looks at some of the main feral animal control techniques used across the State. The relative positives and negatives of the various techniques are discussed in terms of cost, effectiveness, and environmental consequences. The Chapter also highlights the differing views of various stakeholder groups with respect to some of these techniques.
- 1.12** Chapter Six discusses the reasons why isolated and reactive feral animal control programs are likely to fail and, therefore, why there is an essential need for cooperative feral animal control programs between landholders on a regional basis. The Chapter looks at the development of strategic programs to date and concludes by identifying the most appropriate institutional mechanisms to coordinate control programs State-wide.
- 1.13** Chapter Seven concludes the report by identifying suggested improvements in the areas of legislative reform, education and research.

Chapter 2 Background to feral animal management

How exactly a feral animal is determined or defined is central to their management. In reviewing submissions and evidence given to the Inquiry it became evident to the Committee that the term 'feral animal' means different things to different people. This is because people perceive 'pests' in different ways. This chapter discusses:

- Some definitions of feral animals and problems of their classification.
- The main feral animal species in New South Wales.
- The legislative and institutional context of feral animal control.

The definition and classification of feral animals

Various definitions of "feral"

2.1 The term "pest" is used in legislation and agency policy and guidelines and this term often refers to, or includes, feral animals. The Commonwealth Bureau of Resource Sciences has published a series of vertebrate pest management best practice guidelines. The Bureau notes that the word 'pest' is generally used to describe an animal that conflicts with human interests, and that a more workable definition would include only those animals that cause serious damage to a valued resource.²

2.2 The NSW *State of the Environment Report*, published by the Environmental Protection Authority, refers to 'introduced species', and defines these as:

...those species that are newly brought into an area. These include species that are not native to Australia (called alien or exotic species) and native species moved outside their natural range (translocated species). 'Pest' species are those that generally conflict with human interests or reduce environmental quality.³

2.3 The National Parks Association has incorporated the following definitions into their policy documents:

Exotic: Foreign, not native, and including locally exotic species, that is exotic to a region while being native to another region, and embracing feral animals.

Feral: Wild, have reverted from domestication, since 1788 (or any earlier introduction), including the progeny resulting from domesticated animals mating with ferals. The dingo should not be considered a feral or an exotic species.

Locally exotic Australian fauna: Strictly, native animals should be regarded as exotic when they are introduced to areas significantly distant from their home

² Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 13.

³ New South Wales Environment Protection Authority, *State of the Environment Report 2000*.

range. This is because minor differences in genetic make-up can make them technically different sub-species, and it is regarded as undesirable to introduce species from another provenance to a given area.⁴

2.4 In contrast to some of the above positions, Animal Liberation submitted to the Committee that non-indigenous (ie. feral) animals were brought to Australia for human comfort or use and then abandoned when that use was past. The base position of Animal Liberation is that these animals should be left alone.⁵

2.5 Ms Penny Olsen from the Bureau of Resource Sciences in *Australia's Pest Animals: New Solutions to Old Problems* notes that it is important to realise that people decide whether an animal is a pest or not – what is a pest to one person may be a resource to another. For example, feral pigs may be a pest to a farmer but a valuable resource to a shooter and game meat producer. Discussing the different perspectives of what a 'pest' is, Olsen writes:

Australians have inherited the consequences of past attitudes, which have left almost insurmountable pest problems. In the mid-1800s, settlers had a very different attitude toward many of the animals now regarded as pests. Between 1840 and 1880 alone more than 60 species of vertebrate animals were introduced into Australia. Many were brought in by English immigrants to bring a semblance of England to the new colony.... The members of acclimatisation societies worked actively and enthusiastically to spread the world's 'useful and bountiful' species. Rabbits, foxes, trout and deer were released for sport or food... Other introductions were accidental: captive stock, such as horses, pigs, goats and camels; and pets and ornamental species such as the cat and goldfinch, escaped and established feral populations.⁶

2.6 Another good example of how decisions are made as to whether an animal is a pest or not is provided by the issue of feral horses and feral deer. Mr Brian Gilligan, Director-General of the National Parks and Wildlife Service, noted problems of some members of the community having an affinity with certain feral animals. He told the Committee:

...We have, nonetheless, had to face up to the situation that feral horses in New South Wales do cause significant damage in many of the parks and reserves for which we are responsible. Whether we like it or not, and whatever comparison may be drawn between other continents and Australia in terms of other people's treatment of horses, we have to face the reality that the evolution of the modern horse happened on those other continents.

... That said, what we have to do is manage the parks and reserves for which we have statutory responsibility. We believe that we must treat feral animals in accordance with our statutory obligation. Horses are feral animals in the context of our management of parks and, therefore, we have to control them and remove them wherever possible. I would stress that we have had a fairly tough lesson in the Guy Fawkes experience in that we must acknowledge that the community, or

⁴ Submission No 122, Mr Andrew Cox, Executive Officer, National Parks Association, on behalf of the Environment Liaison Office. The definition came from National Parks Association Policy No 19 – Exotic and Feral Animals Affecting Natural Areas.

⁵ Submission No 100, Ms Jo Bell, Animal Liberation, at 5.

⁶ Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 13.

significant sections of the community, feels significantly differently about feral horses than they may feel about many other feral animals. The only others that come anywhere near to feral horses are probably deer and maybe that is the big brown eyes and the configuration of the face, but whatever it is, there is certainly a strong affinity that we must acknowledge.⁷

- 2.7** The Committee notes that the *Rural Lands Protection Act 1998* makes reference to 'pests', and section 143 of the Act enables the Minister to declare any non-human mammal or any bird, insect, amphibian, fish, reptile, arthropod, mollusc, crustacean or other member of the animal kingdom to be a pest. The Ministerial defined pest may then come under a regime of a pest control order.
- 2.8** The Committee acknowledges that the community's perception of what a feral animal is changes over time. It is also acknowledged that at any point in time there will be different perceptions in the community about what a feral/pest animal is. For the purposes of the Inquiry and this report a feral animal is defined as a member of a non-native (introduced) species that has reverted from domestication (gone wild) and which causes damage to native flora and fauna and other natural resources. This understanding of a feral animal will be used in the rest of the report unless otherwise stated.

The species of feral animals in New South Wales

- 2.9** There are many different species of feral animals in New South Wales. NSW Agriculture notes that there are some 25 species of mammals, along with many birds and fish that were not present in Australia prior to 1788, and which have established wild or feral populations and are now considered pests⁸. Submissions to the Inquiry identified the principal feral animal species in the State as:
- Foxes
 - Wild dogs
 - Rabbits
 - Feral pigs
 - Feral goats
 - Feral cats
 - Feral deer
 - Feral horses

⁷ Evidence of Mr Brian Gilligan, Executive Director, National Parks and Wildlife Service, 3 April 2002 at 49.

⁸ Submission No 115, Dr Regina Fogarty, New South Wales Agriculture, at 1.

- Mice.⁹

2.10 Most submissions to the Inquiry agreed with that the above animals were the principal feral animal species in the State. The threat of the cane toad and fire ant and some species of both birds and fish were also discussed in several submissions.¹⁰

2.11 The Committee could identify no clear consensus on what were the most ‘damaging’ feral animals, largely because different regions of the State suffer from different feral animal problems. The NSW Farmers’ Association noted:

“From the perspective of our organisation in terms of the impact of feral animals on agricultural enterprises, feral pigs are key to controlling any exotic disease outbreak—and, as such, are the key to any integrated pest animal control program and focus for funding by State and Commonwealth governments. Exotic disease outbreaks are a national issue. Following that, stock losses as a result of wild dogs are the next most serious issue facing farmers across New South Wales—the problem is not just isolated to the southern regions. Closely linked to the wild dog problem is the fox problem, and control programs for one seemed to be aligned with control programs for the other. So those two species are certainly interlinked. Moving down the list, rabbits and mice are an issue for the grain industry. Effective control of mice plagues is a serious issue for grain productivity.”¹¹

2.12 Sir Owen Croft, Chairman of the Armidale Rural Lands Protection Board, noted their feral animal control priorities:

Our entire eastern boundary is dog country. It is probably number one. Rabbits, dogs and foxes are very high on our list. There is possibly an emerging problem with deer through most of the eastern fore country right throughout New South Wales now and that has increased over the last few years from escapes and deliberate releases.¹²

2.13 The majority of submissions to the Committee documented concerns about land based vertebrate animals, and the Inquiry has concentrated its efforts on the control of these animals. The Committee in this report treats the problems caused by feral animals generically rather than focussing on specific animals, although Chapter Three will examine damage caused by particular animals.

⁹ This list was drawn primarily from Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 16; and Submission No 115, Dr Regina Fogarty, New South Wales Agriculture, at 1.

¹⁰ For example, the submission of the National Parks and Wildlife Service included cane toads as a pest with significant populations on National Park estates.

¹¹ Evidence of Ms Jacqueline Knowles, Senior Analyst, Conservation and Resource Management, NSW Farmers’ Association, 25 March 2002.

¹² Evidence of Sir Owen Croft, Chairman, Armidale Rural Lands Protection Board, 3 April 2002.

The institutional and legislative context of feral animal control

Commonwealth responsibilities

2.14 Feral animal control is largely a State responsibility. However, in recognition of feral animals being an issue across the continent, the Commonwealth Government established the National Feral Animal Control Program. It is a National Heritage Trust funded program, the agricultural component of which is administered jointly by Environment Australia and the Bureau of Resource Sciences. The objectives of the program are:

- To develop integrated, strategic approaches to managing the impacts of nationally significant pest animals.
- To develop and implement Threat Abatement Plans for managing pests that pose the greatest threat to the survival of endangered and threatened native species.
- To improve the effectiveness of control techniques and strategies for reducing pest animal impact.
- To produce guidelines for the management of nationally significant pests.¹³

2.15 The *Environmental Protection and Biodiversity Conservation Act 1999* (Cth) lists predation by foxes, feral cats, and land degradation by feral goats and rabbits as key threatening processes of native species. The Act provides statutory obligations on the Commonwealth to prepare threat abatement plans for each listed threatening process. The National Feral Animal Control Program has funded the development of four Threat Abatement Plans (feral goat, feral rabbit, European red fox; and the feral cat).¹⁴

2.16 The Commonwealth Government also provides financial support for the Co-operative Research Centre for Biological Control of Vertebrate Pest Populations, which was established in 1991.

State responsibilities

2.17 Several government departments and statutes regulate feral animal control in New South Wales. These agencies and their respective legislative responsibilities are explained in the sections below.

¹³ See Natural Heritage Trust website: <http://www.nht.gov.au/programs/ferals.html>. Accessed 5 June 2002.

¹⁴ See Environment Australia website: <http://ea.gov.au/biodiversity/invasive/pests/index.html>. Accessed 4 June 2002.

Rural Lands Protection Boards

2.18 The *Rural Lands Protection Act*¹⁵ established Rural Land Protection Boards, which are the primary 'government' agency in relation to the control of certain feral animals. There are 48 Boards in the State which administer the Act. Ratepayers elect eight directors on to each Board to run and manage the affairs of the Board. The Act also established the Rural Lands Protection Board State Council, a nine member executive body elected from the eight regions across the State. The Boards are financed by levies on landholders, and the State Government provides no direct funding to them. In relation to feral animal control the State Council of the Boards submitted:

The role of the Boards is to:

- Be the principal regulatory body at the local level in relation to pest animal control.
- Provide landholders with certain materials used in the control of such animals, including baits treated with 1080 poison (such materials are provided at cost price).
- Supply advice on suitable methodologies for the control of such pests.
- Undertake inspections of land to ensure that the requirements under the Act are being fulfilled.
- Carry out enforcement procedures as necessary, such as performing necessary work and then seeking to recover costs.¹⁶

2.19 The *Rural Lands Protection Act 1998* enables the making of pest control orders by the Minister for Agriculture. An order may:

- Impose a general destruction obligation on a landholder to eradicate the declared pest.
- Impose a limited destruction obligation on a landholder to eradicate the pest during specified stages of its development or life cycle.
- Impose a notification obligation requiring a landholder to notify the Board of the presence of the declared pest on their land.¹⁷

¹⁵ In 1989 Parliament passed the *Rural Lands Protection Act* which replaced the *Pastures Protection Act 1934*. Under the Act the Pastures Protection Boards and districts were renamed Rural Lands Protection Boards and districts. The 1989 Act was repealed and replaced by the *Rural Lands Protection Act 1998*.

¹⁶ Submission No 105, Mr Steve Orr, Chief Executive Officer, State Council of Rural Lands Protection Boards, at 4.

¹⁷ See s143-156 of the Act.

2.20 Landholders may be both private and public authorities. The Act also empowers a Board to serve pest eradication orders, either on an individual or general basis. Currently there are three vertebrate species subject to a pest control order - rabbits, wild dogs and feral pigs. This means that under the *Rural Lands Protection Act 1998*, landholders in the “controlled land” nominated in each order are required to ‘fully and continuously suppress and destroy’ declared pest animals.

2.21 The 48 Rural Land Protection Boards are self-funded by landholder levies. The State Council estimates that approximately \$6 million is contributed by landholders to feral animal control under the Board system.¹⁸ Across the State there is some variation in the ability of Boards to raise funds for feral animal control according to their rate base.

NSW Agriculture

2.22 NSW Agriculture plays an important role in the environmental protection and sustainability of agricultural lands. They are the lead agency in regard to feral animal control. Their submission to the Committee noted the following functions in regard to feral animal control:

- Establishment of a Vertebrate Pest Research Unit, located at the Department’s Orange Agricultural Unit. This Unit conducts research projects and collaborates with other national and international research institutions and agencies.
- Provide comprehensive training and advisory programs to Rural Land Protection Board personnel.
- Provide ongoing training in the safe use of vertebrate pesticides.
- Provides technical advice, develops policy for pest control on agricultural lands and assists in the planning and coordination in the management of key pest animals in New South Wales.¹⁹

2.23 Within NSW Agriculture, feral animals are managed as a sub-program of the Agricultural Protection Program. The sub-program has 19 staff including four researchers, eight research support staff, and seven extension specialists and other staff. The sub-program expenditure in 2000 – 2001 was \$2.24 million, including \$0.53 million received as external funding support for research programs.

2.24 The two most important Acts administered by NSW Agriculture in relation to pest animal management are the *Non-Indigenous Animals Act 1987* and the *Prevention of Cruelty to Animals Act 1979*. The latter Act aims to prevent cruelty to all animals regardless of their status.

¹⁸ Evidence of Mr Steve Orr, Chief Executive Officer, State Council of Rural Lands Protection Boards, 26 March 2002 at 1.

¹⁹ Submission No 115, Dr Regina Fogarty, NSW Agriculture, at 7.

National Parks and Wildlife Service

- 2.25** The National Parks and Wildlife Service (NPWS) advises that it is the lead agency for the protection and conservation of natural and cultural heritage in New South Wales. NPWS responsibilities extend to the care, control and management of national parks and other reserves under their control. The *National Parks and Wildlife Act 1974*, the *Wilderness Act 1987* and the *Threatened Species Conservation Act 1995* provide the statutory basis for the exercise of their responsibilities.
- 2.26** The *National Parks and Wildlife Act* states that the Director-General shall
- ...in the case of every national park, historic site, nature reserve and Aboriginal area...arrange for the carrying out of such works as he considers necessary for or in connection with the management and maintenance thereof...²⁰
- 2.27** Feral animal management programs are considered to be such works. In addition, plans of management for national park estate identifies key pest species present and the management actions that will be undertaken to address any pests.²¹
- 2.28** The NPWS manages 611 conservation areas with a total area of approximately 5.4 million hectares. In the past six years, land managed by the NPWS has increased by 35% - from 4.03 million hectares in 1994 to 5.4 million hectares in 2001. Over the same period, the total initial budget allocation for the NPWS has increased by 138%, from approximately \$95 million in 1994 to approximately \$225.5 million in 2001.²² The Committee notes that NPWS total expenses in 2002-3 are estimated at \$281.7 million.²³
- 2.29** The NPWS pest budget for 2001-02 is \$15.738 million.²⁴ This includes all costs associated with the planning, implementation, monitoring and reporting of all NPWS pest control programs. In terms of feral animal 'on-ground' field programs (ie excluding salaries and capital assets) over \$2.5 million is likely to be spent in 2001-02.²⁵
- 2.30** The main objective of the *Threatened Species Conservation Act 1995* is to conserve biological diversity, and, in particular, to recover threatened species, populations and ecological communities. One of the key mechanisms provided in the Act to achieve this goal is the listing of key threatening processes. The NPWS is then required to prepare a threat abatement plan to manage the threatening process so as to abate, ameliorate or eliminate

²⁰ Section 8(3).

²¹ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 15.

²² *ibid*, 10.

²³ *Budget Estimates 2002-2003, Budget Paper No 3 Volume 1*, at 4-19.

²⁴ This includes expenditure on weed programs as well as pest animals.

²⁵ Letter from Mr Brian Gilligan, Director-General, National Parks and Wildlife Service, to the Committee, 10 May 2002.

the adverse impacts of the process on threatened species, populations or ecological communities. To date, a threat abatement plan has been prepared for the red fox.²⁶

State Forests

- 2.31** State Forests manages approximately 2.8 million hectares of public forest in New South Wales. The *Forestry Act 1916* requires State Forests to conserve birds and animals and preserve native flora consistent with forestry purposes. Planning and implementation of feral animal control in State Forests is governed by Integrated Forestry Operations Approvals in regions subject to NSW Forest Agreements and by the *Environmental Planning and Assessment Act 1979* in other regions.²⁷
- 2.32** State Forests employs the equivalent of 12 employees dedicated to controlling feral animals on State Forest lands. The State Government contributes to the funding of feral animal control by providing Community Service Obligation (CSO) grants. In 2000 – 2001 total expenditure on feral animal control was \$430,203, of which the CSO component totalled \$166,812.²⁸

Department of Land and Water Conservation

- 2.33** Crown land is administered under the *Crown Lands Act 1989* or under the *Western Lands Act 1901*. Approximately 65% of the land area in New South Wales is in public ownership, with some 53% being Crown land administered by the Department of Land and Water Conservation (DLWC). Most of this DLWC administered land is leased, so that responsibility for feral animal control resides with the landholder.
- 2.34** While most Crown land is directly leased, certain lands have been set aside from leasing through a reserve system, generally managed by a Trust which has responsibility for management of the reserve, including pest management. Crown land under the control of DLWC includes Crown reserves (without Trusts), some public roads, marine lands and all vacant (untenured, unreserved) Crown land. Approximately 5% of New South Wales (about 4 million hectares) is the direct responsibility of DLWC.²⁹
- 2.35** In the year 2001-2002, DLWC budgeted up to \$300,000 for feral animal programs, comprised of allocations to: State-owned land and research centres (\$50,000); NSW Biodiversity Strategy pest programs (\$15,000); Fox Threat Abatement Plan implementation (\$30,000); Wild Dog research (\$5,000); and wild dog exclusion and eradication (\$200,000).³⁰

²⁶ See: NSW National Parks and Wildlife Service, *Threat Abatement Plan for Predation by the Red Fox (Vulpes vulpes)* NSW National Parks and Wildlife Service, 2001.

²⁷ Submission No 86, Mr Michael Bullen, State Forests of NSW.

²⁸ *ibid.*

²⁹ Submission No 116, Mr Joe Cummins, Department of Land and Water Conservation, at 2.

³⁰ *ibid.*, 12.

2.36 The Minister for Land and Water Conservation is also responsible for the Wild Dog Destruction Board. The Board was established under the *Wild Dog Destruction Act 1921*, which was enacted to oversee the management of wild dogs in the Western Division of New South Wales and maintenance of the 600km Dog Fence along sections of the New South Wales border with South Australia and Queensland. The *Wild Dog Destruction Act* imposes a duty on the owner or occupier of land in the Western Division to destroy all dogs upon such land. It also requires landholders with more than 1,000 hectares to pay an annual rate to support the activities of the Board.³¹

NSW Pest Animal Council

2.37 The NSW Pest Animal Council is an 'ad hoc' committee which provides advice on vertebrate pest issues to the NSW Government through the Minister for Agriculture. The Committee has no statutory basis. The objectives of the Council are as follows:

- To identify all pest animal species and their impacts, and prioritise resource allocation.
- To encourage the development and application of best practice, cost effective and humane control methods.
- To identify deficiencies in and disseminate knowledge about integrated pest animal control to both land managers and the public.
- To provide advice on pest animal control to Ministers and non-government organizations.
- To improve the cost efficiency of pest animal control / eradication by improving liaison and co-ordination and reducing duplication across government and non-government agencies.
- Report and advise on Government decisions on pest animal control to constituent bodies.³²

2.38 The current representation on the NSW Pest Animal Council is as follows:

- NSW Agriculture – 3 positions including Chairperson and Secretary.
- National Parks and Wildlife Service.
- State Forests.
- NSW Farmers.

³¹ *ibid*, 5.

³² Submission No 115, Dr Regina Fogarty, NSW Agriculture, at Appendix 1.

- Landcare.
- Department of Land and Water Conservation.
- NSW Nature Conservation Council.
- Local Government.
- CSIRO.
- Rural Lands Protection Board State Council (two positions).
- RSPCA.
- Environment Protection Authority.
- Game Management Council of NSW (GameCon).

Regulation of poisons

2.39 The regulation of poisons for feral animal control involves both State and federal legislation. Vertebrate pest poisons are classified and controlled on the basis of their status as dangerous goods, hazardous substances or pesticides. The vertebrate pest poison baits in use in New South Wales such as 1080 are not classified as either dangerous goods nor hazardous substances as the amount of active ingredient in the baits is below the cut-off level set by relevant legislation. The use of vertebrate pest poisons is also controlled in New South Wales by the Environment Protection Authority under the *Pesticides Act 1999*. On a federal level the sale of registered pesticides is controlled by the National Registration Authority.³³

2.40 Many submissions to the Inquiry noted the increasing complexity of feral animal management. For instance, NSW Agriculture submitted:

Pest animal control occurs under an increasingly complex suite of environmental assessment requirements, which constrain or moderate the way in which pest animal control activities occur. This inevitably means that pest animal control functions will become increasingly reliant on more expensive control techniques...³⁴

2.41 The Committee acknowledges the diversity of players involved in the control of feral animals. Central to this control is the action of landholders, including individuals, corporations and public agencies. The damage caused by feral animals is discussed in the next chapter, and how the above groups work together to control feral animal damage is discussed in chapter Four.

³³ Submission No 115, Dr Regina Fogarty, NSW Agriculture, at 6.

³⁴ *ibid.*

Chapter 3 **The environmental, social and economic damage caused by feral animals**

This chapter outlines some of the main damage caused by feral animals to the environment, including native flora and fauna. During the course of the Inquiry, it became evident to the Committee that the social and economic costs of feral animals are also very important, and these areas are also discussed in this chapter. Concluding this chapter is a discussion on the risk of feral animals spreading exotic diseases.

Environmental impact of feral animals

- 3.1** Feral animals cause extensive damage to Australia's natural resources and agricultural production. Ms Penny Olsen of the Commonwealth Bureau of Resource Sciences notes that introduced animals cost the nation hundreds of millions of dollars annually in lost agricultural production and conservation expenses. Olsen also argued that of all the animals introduced into Australia, rabbits have probably caused the most damage.³⁵
- 3.2** The major environmental impacts of feral animals involve predation and competition with native animals and grazing of native plants. Feral animals also damage the environment in a more general way by altering vegetation, soil and hydrology, thereby changing the habitat of native species and causing land degradation. Changes in the composition and cover of the vegetation caused by grazing of feral animals are also likely to influence populations of invertebrates and micro-organisms that may in turn lead to adverse impacts on natural processes and soil structure.³⁶
- 3.3** However, it is acknowledged that the environmental impacts of threats to the survival of native species through competition and predation are hard to establish and quantify. This is because the threat posed by feral animals is only one of several factors threatening native species – habitat disturbance, changed water and fire regimes are also significant impacts on many native species that are also threatened by feral animals. The magnitude of the impact of feral animals on the environment and biodiversity is reflected in their being recognised as broad threats under Commonwealth and State threatened species legislation.³⁷
- 3.4** The environmental impact of each of the major feral animals in New South Wales are discussed below, and summarised in Table 3.1.

³⁵ Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 52.

³⁶ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 21.

³⁷ *ibid.*

Rabbits

3.5 The State Council of the Rural Lands Protection Board noted that rabbits are arguably the most serious feral animal problem in New South Wales. Rabbits are prescribed 'pests' under the *Rural Lands Protection Act 1998*. The Board noted in their submission:

The damage they [rabbits] cause includes -

- Reduction in vegetation cover. This includes native and improved pasture and crops. In some circumstances rabbits can also inhibit or prevent tree growth by eating young trees or ringbarking older trees.
- Promotion of soil erosion. This is a very serious problem created by the burrowing of rabbits. It is very common for very large rabbit warrens to be dug by rabbits. They are denuded of vegetation and, together with the excavation below ground level, leave the soil subject to progressive water and/or wind erosion. Vast areas of New South Wales have been devastated by this process.³⁸

3.6 The National Parks and Wildlife Service submitted:

The decline and extinction of many of Australia's small mammals (defined as less than 5 kg) is closely associated with the introduction and spread of rabbits and foxes. Rabbits reduce the regeneration of native vegetation, compete with native fauna for food and shelter, and support populations of wild dogs, foxes and feral cats.

The National Threat Abatement Plan for Competition and Land Degradation by Rabbits lists 17 native plants for which rabbits are a known or perceived threat. The disappearance of many trees and shrubs in arid and semi-arid areas has been associated with overgrazing by rabbits...

Rabbits also threaten the survival of a number of native animal species. Within New South Wales rabbits are believed to have contributed to the decline of the greater bilby by changing vegetation structure and composition, reducing the availability of food resources, displacement from burrows and attracting introduced predators such as foxes.³⁹

Foxes

3.7 The spread of foxes across southern Australia coincided with declines in the distribution of several medium-sized ground dwelling mammals, including: the greater bilby; brush-tailed bettong; burrowing bettong; rufous bettong; Tasmanian bettong; numbat; bridled nailtail wallaby and the quokka. Many of these species now persist only on islands or areas of the mainland where foxes are rare or absent.

³⁸ Submission No 105, Mr Steve Orr, Chief Executive Officer, State Council of Rural Lands Protection Boards, at 8.

³⁹ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 25.

- 3.8** Predation of native fauna by foxes has been listed as a key threatening process under the *Threatened Species Conservation Act 1995* and the National Parks and Wildlife Service has prepared a Threat Abatement Plan for foxes. The plan identifies species most at risk from fox predation, and 81 priority sites for fox control have been identified across the State, providing recovery measures for 34 threatened species.⁴⁰
- 3.9** The distribution of foxes is all over mainland Australia except the tropical north. In New South Wales the highest rural densities occur along the tablelands with densities decreasing into the more arid parts of the State. Urban foxes are also becoming more common in larger cities. The nocturnal and elusive nature of the fox makes population density estimates difficult to determine and are often inaccurate.⁴¹

Pigs

- 3.10** Feral pigs impact on the environment by consuming or destroying native plants and animals or their habitat. Soil disturbance is often associated with moist or swampy areas where pigs wallow in and foul dams and waterholes. The effect of feral pigs on threatened plants and on plant succession⁴² is poorly documented. Animals eaten by feral pigs include a wide range of invertebrates as well as frogs, lizards, snakes, turtles and ground nesting birds and their eggs.⁴³
- 3.11** The number of feral pigs Australia wide is somewhere between 3.5 and 23.5 million animals. Fluctuations occur due to food availability and control efforts. In New South Wales their distribution and impact is primarily associated with the river systems in the west of the State, and with forests and woodlands in the more inaccessible parts of eastern NSW. Population densities of between 8 - 24 pigs/ km² occur in wetlands such as the Macquarie Marshes, 0.2 - 5.5 pigs/ km² in semi-arid areas, and between 1.1 - 2 pigs/ km² on the Great Dividing Range.⁴⁴

Dogs

- 3.12** Wild dogs, including dingoes, cause economic losses to rural industry through predation of livestock, the cost of control programs, de-stocking of areas prone to attacks, and costs associated with repairing fences, moving livestock and attending to injured animals. In terms of their impact on native animals, it is recognised that dingoes and wild dogs are the top order predator in natural ecosystems in Australia. Hence they prey on a wide diversity of species. It has been reported that on the NSW south coast, the main prey species for dingoes were medium sized mammals such as wallabies, rabbits and possums. In Kosciuszko National Park their main prey was found to be wombats, wallabies and rabbits.

⁴⁰ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 22.

⁴¹ Submission No 115, Dr Regina Fogarty, New South Wales Agriculture, at 19.

⁴² Plant succession is the gradual replacement of one plant association with another, caused by the slow changes in the environmental factors which influence the establishment, development and survival of plants (see Von Nostrand's *Scientific Encyclopaedia* 7th edition Vol 2 at 274.)

⁴³ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 26.

⁴⁴ Submission No 115, Dr Regina Fogarty, New South Wales Agriculture, at 11.

None of these species are listed as threatened under the NSW *Threatened Species Conservation Act 1995* and it is considered that dingoes are unlikely to be having major impacts on them at the population level.⁴⁵

- 3.13** Threatened species known to be at risk from predation by wild dogs include brush-tailed rock wallabies and koalas. In most cases the threat is greatest where the populations of threatened species reside in small remnant areas of bushland. There is little documented evidence on the impact of wild dogs on quolls. It is considered that competition for resources such as prey and den sites is likely to have a more significant impact on quoll numbers than direct predation.
- 3.14** As well as native animal predation, wild dogs also prey on sheep, cattle and goats. The wild dogs not only kill their prey, but very often also leave them alive with horrendous injuries. The Rural Land Protection Board noted that wild dogs cause significant impacts on both agriculture and the general environment.⁴⁶
- 3.15** The number of wild dogs in New South Wales is unknown but their distribution is along the Great Dividing Range and the land to the east. Highest densities and greatest damage occur in areas adjacent to the eastern escarpment of the northern tablelands and adjacent to Crown lands in southeastern NSW.⁴⁷

Goats

- 3.16** Feral goats contribute to damage to vegetation, soils and native fauna. Feral goats affect perennial vegetation by eating established plants and by preventing the regeneration of seedlings. Browsing by goats can kill established plants by defoliation. Feral goats can damage fences and contaminate water bodies. They affect native fauna primarily by competition for resources such as food, water and shelter, and by contributing to changes in ecosystems.⁴⁸
- 3.17** Feral goats are mainly distributed in the semi-arid pastoral zone of western NSW but also occur at high densities in inaccessible areas of the high rainfall tablelands further east.⁴⁹

Deer

- 3.18** Feral deer have major impacts on conservation areas through trampling, ring barking and grazing of native vegetation, fouling of water holes, accelerating erosion, damage to fences and the potential for transmission of exotic diseases. Flora surveys in Royal National Park

⁴⁵ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 23-24.

⁴⁶ Submission No 105, Mr Steve Orr, Chief Executive Officer, State Council of Rural Lands Protection Boards, at 41.

⁴⁷ Submission No 115, Dr Regina Fogarty, New South Wales Agriculture, at 26.

⁴⁸ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 27.

⁴⁹ Submission No 115, Dr Regina Fogarty, New South Wales Agriculture, at 29.

indicate that high population densities of deer have a significant impact on the diversity and abundance of plant species.⁵⁰

3.19 The number of feral deer in the State is impossible to estimate but about five new wild herds, of various sizes, are reported to agencies such as NSW Agriculture every week. Feral deer tend to be located on the tableland and coastal districts of New South Wales with large colonies being found in New England, Port Macquarie, Royal National Park and Lake George areas.⁵¹

Horses

3.20 Feral horses (also referred to as 'brumbies') adversely impact on the environment through:

- Acceleration of erosion by removal of vegetation, soil disturbance and horse pads.
- Trampling and overgrazing.
- Fouling of water holes.
- Collapsing of wildlife burrows.
- Restriction of the distribution of native fauna through competition for food and shelter.
- Spread of weeds through dung or mane.⁵²

3.21 The majority of feral horses in New South Wales are distributed in central and southern Kosciuszko National Park and in surrounding State forests. Populations also persist in and around Guy Fawkes River National Park, Oxley Wild Rivers National Park, Barrington Tops and Pilliga Forest. The total population in New South Wales is estimated to be between 5,000 and 10,000.⁵³

Cats

3.22 Feral cats predate on native fauna. On the Australian mainland, 38 species of mammals, 47 species of birds, 48 species of reptiles, and 3 species of amphibians have been recorded in the diet of feral cats. However, sound evidence that feral cats exert a significant effect on native wildlife throughout the mainland is lacking. The nature and extent of the threat posed by feral cats to native wildlife remains poorly understood.⁵⁴

⁵⁰ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 28.

⁵¹ Submission No 115, Dr Regina Fogarty, New South Wales Agriculture, at 31.

⁵² Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 28.

⁵³ Submission No 115, Dr Regina Fogarty, New South Wales Agriculture, at 34.

⁵⁴ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 27.

3.23 Table 3.1 summarises the damage caused by some of the most prevalent feral animals in New South Wales.

Table 3.1: Summary of damage caused by most prevalent feral animals in New South Wales

| Species | Damage Caused to Environment | Current and Future Threats to Native Flora and Fauna |
|---------|--|---|
| Foxes | <ul style="list-style-type: none"> • Predation of stock and native fauna. • Impact on agricultural production variable across regions and is related to climate, season, rainfall and susceptibility of the enterprise.³ | <ul style="list-style-type: none"> • The spread of foxes in southeastern Australia coincided with declines in the distribution of a suite of medium sized ground dwelling mammals. • Predation by foxes has been listed as a key threatening process and a Threat Abatement Plan was released in December 2001.² • Anecdotal evidence of a major increase in fox numbers over last decade.¹ |
| Dogs | <ul style="list-style-type: none"> • Predation of sheep, cattle, goats and wildlife.¹ • Numbers and value of stock killed each year highly variable. • Value of damage to New South Wales sheep industry around \$8 million per annum.³ | <ul style="list-style-type: none"> • Dingoes and wild dogs are top order predators in natural ecosystems. • Greatest threat of predation to those threatened species that reside in small remnant bushland. • Competition for resources such as prey and den sites is likely to have a more significant impact on species such as quoll rather than direct predation. • 'Non-dingo' wild dogs result in dilution of dingo gene pool, resulting in an adverse effect on pure dingo population.² |
| Rabbits | <ul style="list-style-type: none"> • Reduction of vegetation cover. • Promotion of soil erosion and land degradation.¹ • Significant cost to agricultural industries – difficult to quantify but approximately \$200 to \$300 million annual cost in lost wool production.³ | <ul style="list-style-type: none"> • Reduce the regeneration of native vegetation. • Compete with native fauna for food and shelter. • Support populations of wild dogs, foxes and feral cats.² |
| Pigs | <ul style="list-style-type: none"> • Soil erosion. • Predation of sheep, goats and wildlife. • Spread of weeds. • Damage to crops. • Vector of diseases such as foot and mouth.¹ | <ul style="list-style-type: none"> • Consume and destroy native plants and animals. • Destroy or damage habitats particularly along drainage lines or swampy areas. • Destroy nests of larger ground-nesting birds such as scrubfowl.² |
| Goats | <ul style="list-style-type: none"> • Destruction of vegetation. • Soil erosion. • Carriers of disease.¹ • Degradation of farm infrastructure.³ • Impact on cultural heritage, especially Aboriginal rock art sites.² | <ul style="list-style-type: none"> • Eating established plants and preventing regeneration of seedlings. • Compete with native fauna by competition for resources such as food, water and shelter.² |

| Species | Damage Caused to Environment | Current and Future Threats to Native Flora and Fauna |
|---------|---|---|
| Cats | <ul style="list-style-type: none"> Virtually no impact on agriculture.¹ | <ul style="list-style-type: none"> Predation of native animal species – 38 species of mammal, 47 species of birds, 48 species of reptiles and 3 species of amphibians have been recorded in the diet of feral cats. Nature and extent of feral cat predation remains poorly understood.² |
| Deer | <ul style="list-style-type: none"> Compete with livestock for food, water and shelter. Damage to fences. Carrier of disease.³ | <ul style="list-style-type: none"> Trampling, ring barking and grazing of native vegetation. High population densities have a significant impact on diversity and abundance of plant species.² |
| Horses | <ul style="list-style-type: none"> Compete with cattle for feed and water. Foul water sources, damage fences.³ | <ul style="list-style-type: none"> Acceleration of erosion by removal of vegetation, soil disturbance and horse pads. Collapsing of wildlife burrows. Spread of weeds in dung or manes and tails.² |
| Mice | <ul style="list-style-type: none"> Significant problems in grain growing regions of Australia. Mice can damage all types of crops by digging into loose soil immediately after sowing, where they establish nests and feed on sown seed and emerging seedlings. Mice can thrive in grain and produce storage facilities, also causing major damage to vehicle and domestic wiring, upholstery and electric motors.³ | |

Sources:

1. Submission No 105, Mr Steve Orr, Chief Executive Officer, State Council of Rural Lands Protection Boards.

2. Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service.

3. Submission No 115, Dr Regina Fogarty, NSW Agriculture.

The lack of accurate feral animal damage data

3.24 The damage caused by feral animals to the environment and agricultural enterprises has not been well quantified. Olsen writes that often little is known about the relationship between pest density and the level of damage caused. While it is usually assumed that reducing the numbers of the pest will reduce the amount of damage, this is not necessarily the case.⁵⁵ For example a single dog can cause enormous losses and create extreme animal welfare problems for livestock all of which continue until the dog is removed.⁵⁶

3.25 The lack of accurate data about the damage caused by feral animals both to the environment and agricultural systems was most apparent to the Committee. The Committee received a considerable amount of anecdotal evidence about the damage caused

⁵⁵ Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 54.

⁵⁶ Submission No 115, Dr Regina Fogarty, New South Wales Agriculture, at 27.

by feral animals, as well as submissions noting attempts to quantify damage such as stock losses.

3.26 For instance, Mr Gerard O'Connor of the Northern Slopes Rural Lands Protection Board told the Committee:

...this Board has a focus on feral pigs as they cause huge financial losses to landholders in the central and north of the Board where land has been intensively improved and feral pigs have a far greater financial impact.

We could provide to this Committee a truckload of anecdotal evidence as to feral pig damage in the board if we could get landholders to sit down and document their losses. One landholder reports losses of 400 to 500 lambs last year alone through fox and pig predation.⁵⁷

3.27 Dr Anthony Fleming of National Parks and Wildlife Service noted the difficulty of accessing accurate data about sheep kills by dogs in the southern areas of the State. He stated:

There seems to be a lot of speculation and relatively little hard evidence about where a lot of the dogs came from and the numbers of kills over the years. I have seen records from the Rural Land Protection Boards but a number of people tell me that those records would be an underestimate of sheep take because a lot of people do not bother reporting, so I do not know how reliable a lot of those records are. What I have seen suggests fluctuation over a long period.⁵⁸

3.28 Mr Brent Livermore of Tumbarumba Shire Council, noted the following concerns upon the establishment of the Shire's Feral Animal Working Group:

One issue that we first identified when the group was originally formed is that traditionally reporting [of stock losses through dog predation] has not been accurate. There was a lot of anecdotal evidence about stock losses and that did not tally with the official reports given to the rural lands boards. One of the projects of the working group was to survey landholders and ask them to come back to giving reports.⁵⁹

3.29 In an attempt to substantiate claims of stock losses from dogs, the Monaro Landholders Wild Dog Committee commissioned their own survey of landholders. It was found that 3,300 sheep were killed in 2001 due to dog attacks. Mrs Susan Litchfield, Secretary of the Wild Dog Committee, noted in evidence:

Over the years it has been hard to substantiate what has been going on. Out of sheer frustration, last April we formed this landholders group. A pretty good statistician and several others put these figures together. We did a survey and we were constantly told that we did not know what was going on. So we, as a small

⁵⁷ Evidence of Mr Gerard O'Connor, Senior Ranger, Northern Slopes Rural Lands Protection Board, 3 April 2002, at 2.

⁵⁸ Evidence of Dr Anthony Fleming, Director, Southern Region, National Parks and Wildlife Service, 7 February 2002, at 11.

⁵⁹ Evidence of Mr Brent Livermore, Manager, Environmental Services, Tumbarumba Shire Council, 7 February 2002, at 19.

group of people, conducted a survey which we paid for out of our own pockets. We surveyed 142 landholders. We had 65 replies and those are the figures, which are accurate.

... Three thousand sheep have been killed. The cost to landholders on average was \$7,580. So there has been over \$1.75 million in losses. At least 24,000 hectares of grazing country is out of production or it has a reduced earning capacity. That is a very conservative figure. We know that a lot more country than that is out of production...⁶⁰

3.30 In an attempt to quantify stock losses from dog attacks, the South Coast Rural Lands Protection Board has resorted to visual confirmation of losses by Board staff. Mr Raymond Lennon of the Board noted:

“We work on the basis that we will not take anecdotal evidence of animals attacked or killed by any other species, unless we can confirm it. It is important for us to know the exact figures of attacks or killings before we can put any submissions to government agencies or departments to ask for finance to continue programs. The only way that we can get reasonably accurate figures is to confirm the reports that come in. There is no point in any organisation saying that it has been reported that five months ago X sheep or calves have been attacked or killed.”⁶¹

3.31 In terms of reporting stock losses, Mr Lennon continued:

“Many years ago I tried to implement a formatted document for farmers to complete and return on a monthly basis. That practice was not continued because of lack of completion by individual farmers. We then reverted back to the farmer phoning the board or contacting the board by any method. We would then respond by going to the property and confirming what he had reported to the board.”⁶²

3.32 With feral animal control programs in place, and according to their policy of confirming all stock losses, the South Coast Rural Lands Protection Board noted that no confirmed stock losses have occurred since 1994 in their area.⁶³

3.33 However, the Committee also heard evidence that some people do not report feral animals killing farm stock due to the opinion that it devalues their land. For instance, the Committee heard:

Sometimes people will not report the kills to the PPB [Pastures Protection Board], because they think it devalues their land. If it is seen that land has suffered great

⁶⁰ Evidence of Mrs Susan Litchfield, Secretary, Monaro Landholders Wild Dog Committee, 7 February 2002, at 31.

⁶¹ Evidence of Mr Raymond Lennon, Managing Ranger, South Coast Rural Lands Protection Board, 7 February 2002, at 4.

⁶² *ibid.*

⁶³ *ibid.*

stock losses, and the farmer is desperate to get out, he [the prospective buyer] will go to the PPB to ask about the land.⁶⁴

3.34 The Committee also heard a considerable amount of evidence that, in order to reduce wild dog attack, farmers have resorted to moving their sheep away from paddocks that neighbour national park or Crown land reserves. For instance, Mr Green, a grazier and director of the Cooma Rural Lands Board, gave evidence to the Committee about the reduced movement of sheep to the Snowy Plains area in summer, due to wild dog attacks. In 1970 12,000 sheep went to the Snowy Plains for summer grazing, yet in 2001 only 1,200 sheep went up. Mr Green stated:

... Bearing in mind that there have been surges in the wool and sheep market, and surges with cattle. ... largely the reason that sheep are not going to Snowy Plain, not being exposed to the park country to the eastern side is because of the amount of killing that is going on and it is increasing.⁶⁵

3.35 Out in the far west of the State, wild dogs in Sturt National Park have also been responsible for stock losses on neighbouring properties. Mr Geoff Wise, Western Lands Commissioner, told the Committee:

Yes, there have been reports of sheep attacks in that area, only odd reports, but I would have to say that some land holders adjoining the park have used as an excuse the fact that dogs are there and dogs attack their stock to change enterprises from sheep to cattle. Now it is very difficult to really substantiate to what extent it was a genuine and valid reason for them changing enterprises or whether there were any other factors that led to them changing enterprise, but there is no doubt very few of the properties that now adjoin Sturt National Park run any sheep at all.⁶⁶

3.36 The Committee notes the collaborative work of the Kempsey Rural Lands Protection Board and the National Parks and Wildlife Service in their survey of feral animals and agricultural losses due to feral animal attack in the Board's area. The submission of the Board notes that the survey was the first known attempt to collate information on the current and future threat of feral animals to native flora and fauna and farm management. The survey documents that in the year 2000-2001, 383 farm animals with a value of \$45,000 were killed by wild dogs, and another 145 were mauled.⁶⁷

3.37 Mr Stephen Orr, Chief Executive Officer of the State Council of the Rural Lands Protection Board told the Committee:

... the boards now prepare an annual pest animal management plan. The question is how do we go about measuring our performance in a valid way, and sure you get a lot of anecdotal evidence in terms of what is going on and the like, but there is no clear scientific way of gathering that information across the State so that we

⁶⁴ Evidence of Mrs Susan Mitchell, Chairman, Cooma District Council of NSW Farmers, 7 February 2002, at 25.

⁶⁵ Evidence of Mr Michael Green, Grazier, Director, Cooma Rural Lands Board, 7 February 2002, at 11.

⁶⁶ Evidence of Mr Geoff Wise, Far West Regional Director, Western Lands Commissioner, Department of Land and Water Conservation, 26 March 2002, at 52.

⁶⁷ Submission No 52, Mr J Egan, Chairman, Kempsey Rural Lands Protection Board.

can present a State-wide view as to what is happening. For instance, the number of wild dog attacks in relation to stock loss, the number of feral pigs in the State at the moment, we cannot do that with any degree of validity at the moment, and that is of concern, particularly when it comes to addressing inquiries such as this, and also in terms of measuring our performance as to how we are actually progressing with feral animal control across the State.⁶⁸

- 3.38** The Committee is greatly concerned that in many areas of the State effective feral animal control is hampered by lack of adequate and rigorous data on what feral animals are present and what, if any, economic damage they are causing. There appears to be very significant problems in establishing workable reporting mechanisms. The Committee commends the work that some collaborative groups have done in an effort to redress this problem, such as the Kempsey Rural Lands Protection Board/NPWS initiative. The Committee also acknowledges recent moves such as the commissioning of a socio-economic survey of landholders adjoining Kosciusko National Park by the National Parks and Wildlife Service. The Committee believes these examples are a starting point on which to encourage better reporting and improved data collection.
- 3.39** The Committee notes the recent announcement of \$3.5 million funding, over three years, for the Rural Lands Protection Boards to upgrade their information technology systems. This funding will allow the establishment of an integrated State-wide IT system for Rural Lands Protection Boards, enabling better information collection and data sharing on pest species and exotic diseases.

Recommendation 1

The Committee recommends that the State Council of the Rural Lands Protection Boards develop a standard protocol for landholders to formally report stock losses due to feral animal predation.

Recommendation 2

The Committee recommends that Rural Lands Protection Boards develop with the National Park and Wildlife Service collaborative surveys of native fauna, feral animals and stock losses from feral animal predation, based on the model of the Kempsey Rural Lands Protection Board survey.

⁶⁸ Evidence of Mr Stephen Orr, Chief Executive Officer, State Council, Rural Lands Protection Board, 26 March 2002, at 13.

The social and emotional impact of feral animals on farming communities

3.40 Feral animals do not just impact financially on farming communities; they also have a social impact. The Committee was presented with considerable evidence on the impact of feral animal predation of farming stock on families. For instance, Ms Anne Rolfe of Nerriga submitted to the Committee:

We have dealt with feral animal problems first hand and we are still having problems with it.

Just recently we had sheep killed and mauled. It's the ones that are not killed you feel the most for because they die in agony. It is heart-breaking to find sheep still alive standing in a dam trying to get away from dingoes / dogs only to get them out of the dam and find that they have had the flesh eaten from their neck, stripped to the bone along the vertebra...Having to put some of the animals down is a hard thing to do seeing they fought so hard to stay alive.⁶⁹

3.41 Similarly from Mr Brian and Mrs Jan Mitchell, graziers in the Monaro region:

On a foggy, overcast May morning, Brian Mitchell walked into a paddock of 193 lambing ewes on the eastern side of the property to find a scene of carnage. Dead lambs littered the paddock. Feral dogs in a frenzy, killing at will, had pursued the flock across the paddock before cornering them and killing every lamb in the mob. Shocked ewes were still standing where the mob had been cornered; others were trying to 'mother up' to dead lambs, others yet to lamb died as a result of the trauma. So began the nightmare that should never have been....

We spent over two months in a living hell, watching our stock being destroyed despite our best efforts...⁷⁰

3.42 Mr Craig Allen of Jindabyne noted in a submission:

An aspect of the impact of feral animals, and especially feral dogs and foxes, not often mentioned includes a significant impact on personal health, motivation as well as relationships.

Personally we have experienced the total frustration of not knowing what to do next whilst dog attacks occurred. It is impossible to know what is the correct action to take for your animals' welfare – do you continue on in hope (leading to your stock being horribly mutilated and killed), do you sell out and face even greater financial penalties (but your stock don't suffer and you merely move the problem to your neighbour). Whilst all this is going on relations with your partner/family/friends/neighbours become strained and may break. You don't sleep well and your general health suffers.⁷¹

⁶⁹ Submission No 42, Ms Anne Rolfe, landholder, Nerriga, at 1.

⁷⁰ Submission No 55, Mr Brian and Mrs Jan Mitchell, landholder, Numbla Vale, at 3.

⁷¹ Submission No 25, Mr Craig Allen, landholder, Jindabyne, at 7.

- 3.43** The Committee acknowledges the debilitating impact, both economic and social, on families and communities of feral animal predation of farming stock. While the Committee heard most about the emotional impacts of wild dog attacks, the Committee is fully aware of the impact of other animals such as feral pigs destroying newly sown crops. These impacts provide a great impetus to ensure that feral animal control programs are effective. The adequacy of current practices is discussed further in Chapter Four.

Feral animals and the economic and health risks of exotic diseases

- 3.44** Many feral and native wild animals are potential carriers of exotic diseases, and should exotic diseases become established in feral animals they could be difficult to detect and eradicate.⁷² NSW Agriculture noted the following in their submission:

Primary industries continue to make a significant contribution to the Australian economy and balance of trade, in part because of freedom from the major animal diseases that impact significantly on livestock productivity and market access, including access to premium markets.

Most species of introduced pest animals are susceptible to one or more serious endemic or exotic animal diseases. Many of these represent serious risks to human health and/or livestock industries. For example, foxes are the main wildlife reservoir for Hydatids in many New South Wales environments, and form the main wildlife reservoir for Rabies in Europe and North America. Similarly, horses are the main hosts for the exotic diseases Glanders and Equine Viral Encephalomyelitis, both of which cause serious disease in humans.

The recent outbreak of Foot and Mouth Disease (FMD) in the UK has highlighted Australia's vulnerability to the incursion of exotic animal diseases and the potential role of pest animals (all species of cloven-hoofed animals but particularly pigs, the main amplifying host for FMD) in their maintenance and spread...FMD would directly threaten Australia's \$5 billion plus meat and livestock export trade.⁷³

- 3.45** The NSW Farmers' Association noted the risk of spreading exotic diseases by cloven-hoofed animals, and particularly noted problems with deer. The Association stated:

Deer have the potential to contract and spread diseases such as Bovine Johnes Disease (BJD). Many cattle producers on the Far North Coast of NSW (who are in a control zone for BJD) have spent a considerable amount of time and money testing animals for BJD in an attempt to elevate the regions 'Control zone' status to 'Protected'. This will enable more flexibility for these producers to trade. However, the ability of these producers to elevate their zone status has been compromised by the inability of government agencies to undertake effective control of feral deer herds. The major hurdle to control of feral deer is the legal classification as stock under the *Rural Lands Protection Act*. This prevents the

⁷² Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 36.

⁷³ Submission No 115, Dr Regina Fogarty, New South Wales Agriculture, at 9.

implementation of timely control measures and in some cases any control activities at all.⁷⁴

3.46 In regards to feral dogs spreading disease, Mr John Alcock, President of the Monaro Merino Association, noted:

One of our major concerns is that feral dog populations carry hydatid, as do the foxes. Landholders spend a considerable amount of money on dogs to protect our children and ourselves from hydatid. Dogs being allowed to roam are a real contamination threat. Another worry is that a lot of tourists go to the camping areas where there is a real risk. Anyone can pick up hydatid from dogs that gather around camping areas.⁷⁵

3.47 However, it is evident that there are many variables when assessing the risk of feral animals spreading exotic diseases. Mr Eric Davis of NSW Agriculture noted:

...this is a key point – the presence of pest animals does not automatically imply significant risks [of spreading exotic diseases]. The risks depend on the disease susceptibility, population density, contact rates between animals and other factors such as environmental conditions. It is important to maintain the expertise and systems required to recognise and understand these risks and ability to implement a timely and competent response.⁷⁶

3.48 In relation to how prepared Australia and New South Wales is to respond to an outbreak of foot and mouth disease, Mr Geoffrey File of NSW Agriculture replied:

... There is no doubt that, since the United Kingdom outbreak, Australia as a whole has identified a number of deficiencies in terms of how well we would respond to an outbreak of foot and mouth disease [FMD]. That varies from little or no policy in terms of vaccination for foot and mouth disease; no zoning policy for a foot and mouth disease outbreak in Australia with our trading partners—which means that if you have foot and mouth disease in Tasmania it would stop trade from all of Australia; and, probably until 18 months ago, what was a reasonably lax importation policy, in terms of checking people at the barriers. But, in the last six months the work that has been done and the new money invested, [I] believe is starting to close a lot of those loopholes. The comments from visiting Americans and Europeans a month ago were that Australia is probably better prepared than most countries to take on an outbreak of foot and mouth disease.⁷⁷

3.49 In relation to direct feral animal control in the event of an outbreak of foot and mouth disease, Mr Davis of NSW Agriculture added:

The first thing is identifying whether or not there is a feral animal problem that needs to be taken care of or needs to be managed in association with an exotic disease response, using FMD for the example. There are a couple of things going

⁷⁴ Submission No 98, Mr Matthew Crozier, NSW Farmers' Association, at 4.

⁷⁵ Evidence of Mr John Alcock, President, Monaro Merino Association, 7 February 2002, at 33.

⁷⁶ Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002, at 4.

⁷⁷ Evidence of Mr Geoffrey File, Executive Director, Regulatory Services, NSW Agriculture, 25 March 2002, at 15.

on here. The first is that there is training for our epidemiologists. ... Part of that training looks at the possible involvement of feral animals—including pigs, especially—firstly whether or not they need to be controlled in conjunction with a control program in a particular location. Then, ... what the control options might be ...: poisoning, aerial shooting, electric fencing would be the main ones, and ground shooting.⁷⁸

- 3.50** The Committee notes the potential impact that feral animals can have on the spread and distribution of exotic diseases. The Committee believes the State Government needs to continue to give priority to maintaining feral animal control programs on those species that pose a risk of spreading exotic diseases. The potential harm to the economy and the public health risk may also justify the running of practice exercises in local areas, in which agencies run through their response plans, to ensure any co-ordination problems are addressed before an actual crisis arrives.

Recommendation 3

The Committee recommends that NSW Agriculture, as a matter of priority, in conjunction with the appropriate agencies and landholders conduct a State-wide program of simulation exercises to develop and refine effective systems for countering outbreaks of exotic diseases in feral animals.

⁷⁸ Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002, at 15.

Chapter 4 **The adequacy of current resources for feral animal control**

The Committee heard and received a considerable amount of evidence on the adequacy of resources for feral animal control. It is evident to the Committee that, State-wide, significant resources from both public and private landholders have been applied to the control of feral animals annually. However, the level of interest in the Committee's proceedings suggests that feral animal control continues to be a major concern for many sectors of the community. Chapter Two of this report highlighted the number of government agencies involved in feral animal control, and this chapter determines whether these agencies commit adequate resources to achieve feral animal control.

Financial commitment of agencies to feral animal control

Funding by Department of Land and Water Conservation

4.1 Chapter Two highlighted significant variations in levels of funding for feral animal control from the various government agencies involved. In reply to a question whether government agencies are adequately funded for feral animal control, Mr Eric Davis of NSW Agriculture replied:

...because I would not like to make the comment that agencies are under funded. That is really a matter for government and those departments. Certainly, the Department of Land and Water Conservation has very little funds available for pest animal control. State Forests has a commercial focus so the amount of funds that it has to allocate for pest animal control—I will put it this way: I am certain it would like more funds to control pest animals. The National Parks and Wildlife Service is rather better funded and in the case of some specific programs like the fox threat abatement plan they are very well funded.⁷⁹

4.2 As can be seen from Chapter Two, the level of funding contributed by the Department of Land and Water Conservation is \$300,000 compared to \$2.5 million by National Parks and Wildlife for on the ground feral animal programs (\$15.7 million in overall pest reduction); \$2.24 million from NSW Agriculture and \$6 million contributed by landholders through the Rural Lands Protection Boards.

4.3 During the hearing held on 26 March 2002, Mr Donald Martin, Regional Director from the Department of Land and Water Conservation, was questioned about whether the Department was making sufficient contribution to feral animal programs:

CHAIR: Is the \$300,000 budgeted for feral animal control enough for 4 million hectares?

Mr MARTIN: You need to actually break down how all of that land is managed. The biggest chunk is the leased land which the Crown control and management has

⁷⁹ Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 5.

been vested to those land holders. Then you work down through trusts where you have both community trusts and corporate trusts who take the next jump. As you keep working down the land that DLWC actually has under its control, there is really only a small portion of reserves that do not have a trust, some vacant Crown land and the foreshore lands and research centres, so it is quite a small parcel of land, so in that context \$300,000 is a reasonable sum of money. Yes, like anybody else, you can always do more if you have more, but from our agency's perspective I think that integrated approach means why is it necessary that DLWC has those monies, as long as those moneys get delivered on the ground with integrated pest management.

CHAIR: Are you satisfied, though, that the control of feral animals on the land directly under your control is as good as State Forests and National Parks and Wildlife Service?

Mr MARTIN: I do not have any information to be able to compare between national parks and forests and ourselves. The issue I guess for us, and the easiest way to explain is if I look at my community, the central west, they have been through a process of developing catchment blueprints. It is about how to restore some of our natural resources back to a better condition given that 200 years of management decisions may not have aligned with our landscape and both catchments in my area, and I understand that it is similar around the State, have come up with strategies about integrated pest management. They have not looked and said State Forests need to lift their game, National Parks need to lift their game, land holders or DLWC. What they have said is that there is a dire need for integrated pest management.⁸⁰

- 4.4** While it does not appear that landholders are currently placing pressure on the Department to increase its funding commitment, the Committee believes the current funding commitment of the Department of Land and Water Conservation to feral animal reduction on its land holdings is in need of review, based upon the size of its land holdings and the far more substantial funding commitments by other agencies.

Recommendation 4

The Committee recommends that the Minister for Land and Water Conservation review funding for feral animal control programs within the Department with the view to increase funding to a level commensurate with landholder responsibilities of that Department.

Funding by National Parks and Wildlife Service

- 4.5** Many landholders, especially those neighbouring national park estates, considered that government agencies have not committed enough resources to feral animal control. Particularly around the Kosciuszko National Park region, the Committee noted a considerable amount of anger directed at the National Parks and Wildlife Service for the

⁸⁰ Evidence of Mr Donald Martin, Regional Director, Department of Land and Water Conservation, 26 March 2002 at 48.

continual migration of feral animals such as wild dogs from national park areas onto neighbouring farming properties. For instance, Mrs Weston, a neighbour of the Park submitted to the Committee:

...the primary source of feral animal infestation had its origins within the Kosciusko National Park as far back as thirty-five years. In all that time, there has been no level of appropriate measure of either eradication or control, else the growth [of feral animal numbers] would never have been able to escalate to current proportions.

Until farmers became the victims...there was no indication by Park Managers that a problem even existed; yet any responsible Freehold Land Manager knows exactly what is happening on his land; when it is happening; and where.⁸¹

4.6 Mr and Mrs Maguire, Monaro farmers, noted:

Over a relatively short period of time wild dog and feral pig numbers have significantly increased in the KNP due to ineffective management and control. This has in turn impacted upon neighbouring properties in terms of stock losses and stress...⁸²

4.7 Comments from National Parks and Wildlife Service Advisory Committees have also provided insights to levels of feral animal control funding. Mr Roy Stacy, Chairperson of the National Parks and Wildlife Service Riverina Region Advisory Committee, noted the well managed feral animal control programs of the Service within its region. However, Mr Stacy commented:

However, the Committee is concerned that while the Region manages to maintain a level of control of these pests, it often does not have the resources to make real forward progress. In the case of goats in the Cocoparra National Park, for example, despite annual shooting, the numbers remain static.

The Committee is also aware that the Region cannot afford to run many programs it has identified as priorities. For example, in 2001/2002, pig, cat and rabbit control will not occur in Willandra National Park...

The Committee is of the opinion that the Region does the best it can with the resources at its disposal and that the staff are committed to conservation of the reserves and protection of neighbouring property by controlling feral animals on its estate. However, without adequate resources we also recognise that the Service can do little other than attempt to cope with criticism from the community.⁸³

4.8 Mr Terry Moody, Chairperson of the National Park and Wildlife Service Northern Rivers Region Advisory Committee, submitted to the Committee:

The Committee recognises the impacts of both vertebrate and weed pests upon our unique ecosystems, and believes that NPWS Northern Rivers Region is

⁸¹ Submission No 102, Mrs June Weston, neighbour of Kosciusko National Park at 2.

⁸² Submission No 109, Mr and Mrs Maguire, Monaro farmers, at 3.

⁸³ Submission No 20, Mr Roy Stacy, Chairperson, Riverina Region Advisory Committee (of National Parks and Wildlife Service), at 1.

committed to delivering high standard co-operative pest programs to the best of its ability, given the severely under-resourced budget.

NPWS has been responsible for lifting the public profile of pest species management with the region through the establishment of educational and awareness programs...These programs are however impacted by fluctuating budgets and usually cannot be continued due to lack of available resources.⁸⁴

- 4.9** It was evident to the Committee that while the National Parks and Wildlife Service was subject to a considerable amount of criticism about feral animals spreading from national park estate, amongst all the government land managers it allocated the largest budget for feral animal control. In response to criticisms that the Service does not have resources to adequately manage feral animals on its lands, the Director-General, NPWS, told the Committee:

I would answer it by highlighting the increases in resources allocated to the Service in recent years for management. I would also stress that, whilst we would always like to have more resources, what we are demonstrating, especially through programs such as the fox threat abatement plan, is that it is not the total quantum of dollars that is significant in so many of these areas, but it is the strategic targeting of the work that is undertaken, and also making sure that the work is collaborative, given that so many of the most troublesome species are so mobile. If you are slaving away and doing a great job but your neighbour is not doing such a great job, obviously things are not going to be effective. So, I think being strategic and being collaborative are the two key answers, and within that context I believe that the resources we have enable us to achieve a great deal."⁸⁵

- 4.10** The NSW Farmers' Association, while still critical in some areas, has also recognised the increased effort by the National Parks and Wildlife Service in regards to wild dog control around Kosciuszko National Park. The two groups have developed a review panel for feral animal control programs in the region, and Mrs Susan Mitchell of the Association noted:

That has come about as part of the strategy that NSW Farmers and National Parks have been involved in recently. The National Parks and Wildlife Service is really trying to do something about this and it is terribly important that each person is responsible for their borders and for the stock within their boundaries.⁸⁶

- 4.11** The Committee also heard evidence that different regions of the National Parks and Wildlife Service provided differing levels of feral animal control protection. For example, Mr Donald Cameron of the NSW Farmers Association Armidale Branch noted that his property has two bordering national parks, each administered by different regions of the National Parks and Wildlife Service. Mr Cameron told the Committee:

There is a variation in that will [to control feral animals]. To give you a bit of an idea, my property lies just immediately to the west of the McRae property on that map. You will notice there is a National Park about halfway down this side, the

⁸⁴ Submission No 120, Mr Terry Moody, Chairperson, National Park and Wildlife Service Northern Rivers Region Advisory Committee, at 1.

⁸⁵ Evidence of Mr Brian Gilligan, Director-General, National Parks and Wildlife Service, 3 April 2002, at 36.

⁸⁶ Evidence of Mrs Susan Mitchell, Chairman, Cooma District Council of NSW Farmers, 7 February 2002, at 25.

Oxley Wild Rivers National Park, and another out on that side, the Cathedral Rocks National Park. They are controlled by different branches of the National Park. The Oxley Wild Rivers is controlled from Armidale. We get very good co-operation from them. The Cathedral Rocks National Park is controlled from Dorrigo, and they do not understand because we are on the far-western end of their area. I do not really know whether they realise they have a problem.

...I think it is a lack of understanding thing, really. They have a different priority for the whole thing. Dorrigo is not a sheep area. Ours is a sheep area. They do not know the effect of wild dogs on sheep.⁸⁷

- 4.12** The Committee acknowledges the increase in funding over recent years, from \$15.80 to \$34.50 per hectare of national park, for the National Parks and Wildlife Service, and supports this financial commitment. Nevertheless, the Committee cannot ignore comments by both national park estate neighbours and members of its own advisory committees that more funding is still necessary.

Recommendation 5

While the Committee notes the significant funding provided by the National Parks and Wildlife Service for feral animal management, the Committee recommends that the National Parks and Wildlife Service receive increased funding and further review its funding commitment to feral animal management so that it has the capacity to better target major problem areas where feral animals are affecting neighbouring communities.

Funding by State Forests

- 4.13** The Committee is particularly concerned about the level of funding committed to feral animal control by State Forests. For example, Mr Graham Hillyer, a ranger of the Bombala Rural Land Protection Board, noted:

In our area funding to National Parks has improved. However, a big problem is emerging with forestry not having enough funding to be able to properly implement feral animal programs.⁸⁸

- 4.14** The Snowy River Interstate Landcare Committee submitted to the Committee:
- More resources need to be allocated to feral animal control. There are currently inadequate resources allocated to wild dog control...

⁸⁷ Evidence of Mr Donald Cameron, Vice-chair, Armidale Branch NSW Farmers Association, 3 April 2002 at 19.

⁸⁸ Evidence of Mr Graham Hillyer, Ranger, Bombala Rural Land Protection Board, 7 February 2002, at 9.

- State Forests and private plantation companies need to take more responsibility for feral animal control.⁸⁹

4.15 Mr Andrew Phillips, a Ranger of the Northern Slopes Rural Lands Protection Board, noted:

Mr PHILLIPS: We have interagency work with the National Parks and Wildlife Service and it works very well. They are easy to work with. One thing I would like to make clear today is that we have had a lot of trouble working with State Forests. It is like hitting your head against a brick wall. One of the biggest landholders who said no was State Forests and the landholders look at me and say, "Why the hell would I join if State Forests won't". They are extremely hard to work with in pig control.

The Hon. JOHN JOBLING: What reason did they give you?

Mr PHILLIPS: Money.⁹⁰

4.16 It was evident to the Committee that State Forests needs to increase its funding commitment to feral animal control. Mr Michael Bullen of State Forests explained in evidence of what could be done with extra funding for feral animal control:

I think where we would put additional funding would be to supplement our existing programs in dog and pig control activities and as well extend it to wild dogs, pigs and deer control programs. I think also with additional resources we could carry out targeted baiting programs to enhance threatened species populations for conservation kernels, the approach that Paul was talking about, and enhance our buffering of State Forests.

I think that we would also like, if there was additional funding, to try and gather some more hard data and increase our monitoring of the effectiveness of programs. That would be worthwhile. There is a particular area of research identified in the fox threat abatement program about fragmentation, where we would put additional funding as well. I think generic activities would be the monitoring, the distribution and abundance of feral animals, implement follow-up baiting programs, research into alternate control and some liaison.

We have estimated that somewhere in the order of a million dollars a year for five years would enable a very sizeable additional program to be undertaken, and then after that initial five year period, it is likely that that amount of funding would drop because of hopefully successful outcomes, and we would then be able to put it on a more of a maintenance and lower level of activity.⁹¹

⁸⁹ Submission No 15, Mr Robert Belcher, Chair, Snowy River Interstate Landcare Committee, at 1.

⁹⁰ Evidence of Mr Andrew Phillips, Ranger, Northern Slopes Rural Lands Protection Board, 3 April 2002 at 8.

⁹¹ Evidence of Mr Michael Bullen, Director, Environmental Management and Forest Practices Directorate, State Forests of NSW, 26 March 2002, at 43.

Recommendation 6

The Committee recommends that the Government increase its Community Service Obligation funding to State Forests so that State Forest's feral animal control budget is maintained at a level that is at least equal to that of the National Parks and Wildlife Service.

Parity of funding between agencies

- 4.17** The Committee notes the disparity of views on the adequateness of government funding for feral animal control works. No clear picture has emerged on the required level of funding that is necessary, and this reflects the lack of any integrated State-wide feral animal control program. The answer to how much funding (from either government or private landholders) to strategically control feral animals across the State is simply not known.
- 4.18** This Chapter has highlighted the significant variations in levels of funding for feral animal control of the various government agencies involved. Currently there is no set feral animal control expenditure requirement for these agencies. The Committee believes that development and application of at least a *minimum* baseline of funding/expenditure calculated against the size of the land area for which each agency is responsible would achieve some parity.

Recommendation 7

The Committee recommends that the Government develop and implement a calculation formula that will set the minimum feral animal control budget for each of the government agencies with responsibility for management of public land.

Need for improved integration of funding

Inadequate funding or misdirected resources?

- 4.19** The Committee received conflicting evidence on the adequacy of government agency budget allocations for feral animal control. In more general terms, many submissions argued that the government as a whole has committed too few resources for effective feral animal control. For instance, Mr Jeff McQuiggin of the Mudgee-Merriwa Rural Lands Protection Board submitted:

It is evident that, despite excellent co-operation by local government agency managers and personnel, the man power and resources available to these local people is simply not sufficient to effect a long term and effective reduction in feral

animal numbers. Indeed the perception is that the administrators of Government Agencies have little conception of the 'hands on' work that is required, especially in extensive areas of difficult terrain, to effectively control feral animals.⁹²

4.20 The Snowy River Shire Council noted in its submission to the Inquiry:

The State Government must recognise that problems like feral animals (and weeds) cannot be managed with the funds currently being made available.

The agencies with responsibility for feral animals have willing and skilled managers. They are simply not well funded to meet even the minimum requirements of the environment and community.⁹³

4.21 In contrast, Mr Lance Beamish, General Manager of the South Coast Rural Lands Protection Board argued that the total quantum of resources for feral animal control was adequate if applied 'correctly'. He submitted:

The resources currently provided State wide are adequate if used correctly, at present a great deal of time and money is squandered by inefficient work practices, until such time as inter and intra agency jealousy and rivalry is managed correctly NO advances are possible in feral animal control.

Current practices and resources are spread over many Agencies all with different priorities and control methods, until such time as one Agency with overriding Regulatory Authority and Government Funding for feral animal control is established the status quo will remain.⁹⁴

4.22 The Rural Lands Protection Boards provide an important service for controlling feral animals, and hence their levels of funding and resources are strategically very important. Mr Stephen Orr, Chief Executive Officer of the Rural Lands Protection Board State Council, highlighted to the Committee the organisations' commitment to feral animal control:

...the board system is funded by landholders and ratepayers, we do not receive funding from the NSW Government, and we estimate that the board system investment in feral animal control is roughly around \$6 million. ...Conversely, when it comes to pest plants or weed control there is a statutory body in relation to weed control and the NSW Government expends roughly \$7 million per annum in relation to providing funding for weed control activities across the State, so there is, in our opinion, some inequity between pest animal control and pest plant control and we would certainly strongly support the establishment of NSW Government funding for pest animal control programs.⁹⁵

⁹² Submission No 19, Mr Jeff McQuiggin, Administrative Officer, Mudgee-Merriwa Rural Lands Protection Board, at 4.

⁹³ Submission No 107, Mr Charles Litchfield, Natural Resources Coordinator, Snowy River Shire, at 1.

⁹⁴ Submission No 16, Mr Lance Beamish, General Manager, South Coast Rural Lands Protection Board, at 5.

⁹⁵ Evidence of Mr Stephen Orr, Chief Executive Officer, State Council, Rural Lands Protection Board, 26 March 2002, at 2.

4.23 As Rural Lands Protection Boards are funded by their ratepayers, it is to be expected that some Boards will be able to commit more resources than others to feral animal control according to their rate base. Ms Lisa Wellman of Newrybar Swamp Feral Pig Management Committee noted:

One point the committee would like to stress is that rural land protection boards do not always have a great rate base, and they may not be paid for the work they undertake. It is out of the goodness of their heart that they do some of this work.⁹⁶

4.24 In relation to feral animal control as a whole for the State, the Committee recognises that there has been no attempt to quantify how much expenditure will be required to adequately control feral animals across the State. In relation to the development of threat abatement plans for various feral animals, Mr Hurt of the Australian Deer Association told the Committee:

... other than we need more resources, the typical response of most private and public bureaucracies, there has been little attempt to quantify either current resources and expenditure and compare that, which may be required, in any totally co-ordinated fashion.⁹⁷

4.25 Mr Andrew Cox of the National Parks Association told the Committee:

We have given an estimate ... of the need for an increase each year of the order of \$30 million to \$50 million in additional funding across all land tenures to control feral animals.⁹⁸

4.26 The NSW Farmers' Association considered that government funding for pest animal control programs was inadequate, and recommended that:

- 1) Funding for active land management activities such as pest animal weed control be increased to accurately reflect the real cost of managing land.
- 2) Increased funding be allocated to pest control on Crown Land to permit the expansion of successful control programs such as training of trappers...
- 3) That no further National Parks be proclaimed until such time that current parks are adequately resourced to enable effective bushfire, weed and feral animal management.
- 4) A Pest Animal Control Fund be established and adequately resourced to meet the costs of implementing agreed plans of management.
- 5) An approach be made to the Commonwealth for funding to control feral animals that pose a threat in the event of an exotic disease outbreak, and to

⁹⁶ Evidence of Ms Lisa Wellman, Chairperson, Newrybar Swamp Feral Pig Management Committee, 3 April 2002.

⁹⁷ Evidence of Mr Stephen Hurt, Committee Representative, Australian Deer Association, 26 March 2002, at 56.

⁹⁸ Evidence of Mr Andrew Cox, Executive Officer, National Parks Association of NSW, 25 March 2002, at 49.

implement pest control as a result of listings under Federal threatened species legislation.⁹⁹

4.27 Ms Jacqueline Knowles of the NSW Farmers' Association explained to the Committee the Association's position:

...Agencies have various levels of funding and differing abilities to commit to time frames of funding for particular programs. As Committee members would well know, under the *Rural Lands Protection Act*, Crown land managers have an obligation to eradicate pests to the extent necessary to minimise damage to any land. Yet, as we can see, at the moment they are unable to discharge this obligation, primarily due to funding constraints. It is not just a question of funding dollars, but the way in which funding is allocated and the ways in which managers are able to spend that funding.

As an association, we propose that a pest animal control fund, similar to the noxious weeds fund that currently operates under the *Noxious Weeds Act*, be implemented and that that fund be administered by the Pest Animal Council, which is the primary policy advisory body to the Minister for Agriculture on pest animal control. We see this fund as a resource for land managers to use to implement the agreed plans of management that are currently being developed. We regard this as a mechanism for government to account for the money currently being spent and to be spent in the future, and we see it as a mechanism to break down the inequity between agencies and their levels of funding.¹⁰⁰

Fund administered by statutory body

4.28 As will be discussed later in this report, feral animal control programs are most effective when done in cooperation with other parties. In regard to the development of co-operative feral animal control programs, Mr Roger Anderson, Chairman of the Tumbarumba Shire Feral Animal Working Group, noted:

We need to inform the State Government that this is the real cost that it must bear, and it must be prepared to allocate extra funds to State Forests and National Parks for the implementation of co-ordinated co-operative control programs.¹⁰¹

4.29 Chapter Six looks at the importance of developing a strategic, regional approach to feral animal control with a statutory basis. In that chapter the Committee proposes a statutory Pest Animal Council and outlines some of its functions in that and the following chapter. However, to be successful, such a body or indeed any other strategic improvements to feral animal control are likely to require additional funding from that currently allocated by agencies.

⁹⁹ Submission No 98, Mr Matthew Crozier, Director, Conservation and Land Management, NSW Farmers' Association, at 3.

¹⁰⁰ Evidence of Ms Jacqueline Knowles, Senior Analyst, Conservation and Resource Management, NSW Farmers' Association, 25 March 2002, at 22.

¹⁰¹ Evidence of Mr Roger Anderson, Chairman, Tumbarumba Shire Feral Animal Working Group, 7 February 2002, at 20.

4.30 The amount of funding required is not clear to the Committee. In reply to how much funding might be required for more strategic feral animal control, Mr Davis of NSW Agriculture replied:

Just tossing balls in the air, I would say a couple of million dollars. The problem with answering that question is that some of the dedicated regional planning which would identify those costs, we have never had the opportunity to undertake those sorts of processes so I would not like to be specific....

We have never had a system that linked funding and resourcing directly with that regional approach. We have never had the opportunity to sit down at a table and say, "Let us do the regional plan. Let us make the strategy. We know there is dollars here independent of agencies. We know that there is dollars to target the problem."¹⁰²

4.31 The Committee sees merit in the proposal by the NSW Farmers Association to establish a fund for pest animal control. This fund could be the basis for the operations of the proposed statutory Pest Animal Council, which is to assist in the funding of appropriate feral animal control programs as identified in the regional planning process – there is a recommendation to this effect in Chapter Six. The Committee believes that feral animals pose a serious enough threat to the environment and agriculture to justify an increase in funding of their control by the State Government.

¹⁰² Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 6.

Chapter 5 **Current techniques for feral animal control**

The control of feral animals is fraught with difficulty. This is because: they tend to be very mobile; changes to the landscape provide favourable conditions for their survival; they can rapidly increase in number under favourable conditions; and there are a scarcity of predators and diseases that might have otherwise reduced their numbers. This chapter looks at some of the main feral animal control techniques used across the State.

Principles of feral animal control

Main range of techniques

5.1 The current range of techniques available for managing feral animals is surprisingly limited. Currently there are five approaches that are useful for controlling feral animal damage. These are:

- Killing or removing by poisoning, shooting, trapping or mustering.
- Exclusion.
- Biological control.
- Habitat manipulation.
- Other management practices (such as switching to alternative farming products or techniques that are less susceptible to local feral animal damage).¹⁰³

5.2 The most successful of these techniques have relied on their strategic application at the most critical time in the agricultural cycle or when feral animals are most vulnerable to control, such as after their numbers have been reduced by drought. Successful control of feral animals also requires the application of a whole suite of feral animal control techniques, rather than just relying on one method.

Minimising animal suffering

5.3 The Committee also recognises the growing expectations in society that minimising animal suffering should be an integral part of any feral animal control program. NSW Agriculture notes that wherever possible the most humane control methods that are consistent with efficiently protecting livestock, agricultural resources and the environment should be utilised.¹⁰⁴

¹⁰³ Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 56.

¹⁰⁴ Submission No 115, Dr Regina Fogarty, NSW Agriculture, at 40.

5.4 Ms Jo Bell representing Animal Liberation NSW told the Committee of some of the concerns as to the suffering of animals under some forms of pest animal control:

...under the name of getting rid of feral animals because they are such a threat, we use myxomatosis, which I have read if it were now put forward for authorisation it would be refused, such is the appalling cruelty of it; calicivirus, which is said to be the quiet death but is not - the rabbits scream as they die; phosphate on pigs, which the gentleman who was giving evidence here before mentioned, which in fact burns the guts of the still living animal and they can take a great many days to die¹⁰⁵

5.5 In relation to pest animal control programs, Mr Davis, Program Leader, Vertebrate Pest Management in NSW Agriculture told the Committee:

...current pest animal control programs reflect years of research and field experience with ongoing research and reappraisal. They do represent the best options given current technology and resources and the lack of, as yet, non-lethal alternative control methods. Nevertheless, they seem to be under continual threat from some groups that are philosophically opposed to the destruction of animals as well as some Green groups and sections of the media. This may reflect a lack of understanding about current pest animal control techniques, the situations in which they are used or their importance in protecting agriculture and the environment. As indicated, there are also groups that are philosophically opposed to the destruction of animals. Many control techniques and management programs are caught up in the resulting debate that follows. It is often polarised on philosophical grounds.

NSW Agriculture is concerned that the debate often overlooks the fact that pest animal control is conducted as humanely as we can given current technology and resources and that control programs comply with any relevant environmental assessments. There is also considerable investment in research to improve animal welfare outcomes, including the prospect of non-lethal controls. It is vitally important that the community understand these issues.¹⁰⁶

Recommendation 8

As a principle, the Committee recommends that before any feral animal control program commences, the most humane method of control appropriate to the management objectives for the identified species, the specifics of the situation and to the animal concerned is determined and applied.

¹⁰⁵ Evidence of Ms Jo Bell, Vice President Animal Liberation NSW, 26 March 2002 at 16.

¹⁰⁶ Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 3.

Main methodologies

5.6 The *Rural Lands Protection Act 1998* under s143 gives the Minister the power to prescribe methodologies for the control of noxious pests. The Rural Lands Protection Board has advised that these methodologies are:

- The use of pesticides registered by the National Registration Authority, or the use of which is otherwise permitted or authorised by the *Pesticides Act 1999*, for the purpose of suppressing and destroying animals of the species concerned.
- Fumigating.
- Digging in or out.
- Ploughing in or out.
- Use of explosives by the holder of a certificate of competency as a powderman under the *Construction Safety Act 1912*.
- Trapping (cage or soft-jawed).
- Removing or destroying the habitats and refuges of noxious animals.
- Ripping (filling in or destroying rabbit warrens).
- Shooting, including shooting from aircraft.¹⁰⁷

5.7 The Rural Lands Protection Board notes that the methodology chosen for a particular feral animal control program depends on the species involved and the environment in which it is located.¹⁰⁸

Eradication compared to management

5.8 It is also important to distinguish between the eradication of pests and their management. NSW Agriculture submitted:

The terms eradication and control are often used interchangeably but the distinction is crucial in understanding the rationale for pest animal control. Eradication is the removal of every last animal and implies that control measures can cease when the last animal is gone. Conversely, control or management involves measures to reduce or suppress the population without necessarily removing every last animal, usually because it is not possible to do so.¹⁰⁹

¹⁰⁷ Submission No 105, Mr Steve Orr, Chief Executive Officer, State Council of Rural Lands Protection Boards, at 4.

¹⁰⁸ *ibid*, 5.

¹⁰⁹ Submission No 115, Dr Regina Fogarty, NSW Agriculture, at 38.

5.9 Olsen also notes:

It is sobering to note that, despite years of effort, no widely established, common pest animal has been eradicated from Australia. Given that most established pests are widespread and common, and that there are relatively few techniques to control them, usually the best management goal is to reduce the level of damage to an acceptable level rather than to attempt eradication. Killing more pests than is needed to achieve this goal is expensive and wasteful when budgets are limited.¹¹⁰

Harvesting

5.10 One solution that favours management over eradication is to “harvest” feral animals, using them as a potential source of income. The Bureau of Resource Sciences has reported that commercial harvest of feral animals such as horses, goats and pigs is worth more than \$100 million a year to Australia in exports.¹¹¹ Clearly harvesting involves different assumptions as to the desirable level of the feral animal population compared to other approaches to control.

5.11 The Committee heard evidence that feral animal control is often in conflict with the commercialisation and harvesting of feral species. The submission of NSW Agriculture noted:

Pest animal control and commercial use usually have incompatible goals in that management seeks to eradicate the pest animal or to minimise damage, usually by reducing its numbers. Commercial use seeks to make a profit, which inevitably requires a sustainable yield. This means it is not in the best interest of those doing the harvesting to reduce population size to a level that reduces yield. The goals of control and commercialisation are actually antagonistic in any situation where pest animals cause unacceptable damage at lower population densities than those needed for profitable and sustainable yield. Unfortunately, the damage threshold for most pest species is lower than the population density required for sustainable yield. This issue is further complicated by the cyclical nature of commodity prices and seasonal conditions, and the consequent value of agricultural production relative to commercial returns from harvesting of pest species.

...There needs to be a clear recognition that managing pest animals to minimise damage and harvesting for commercial use are generally not compatible.¹¹²

5.12 The State Council of the Rural Lands Protection Board also noted problems of harvesting of feral animals, and stated:

There is harvesting of feral pigs undertaken in parts of New South Wales, particularly in the Western Division...At times this harvesting can have adverse effect on efforts to control feral pigs because the pig hunters, in order to ensure that their work can continue into the future, often leave younger pigs untouched.

¹¹⁰ Olsen P, *Australia's Pest Animals: New Solutions to Old Problems*, Bureau of Resource Sciences and Kangaroo Press, 1998, at 104.

¹¹¹ *ibid*, 30.

¹¹² Submission No 115, Dr Regina Fogarty, NSW Agriculture, at 39.

This of course has the effect of perpetuating feral pig populations in the local area.¹¹³

- 5.13** The Committee agrees with the above comments of NSW Agriculture and the State Council of the Rural Lands Protection Board, and supports the notion that the aim of all feral animal control programs should be to minimise their impact on the environment and agriculture, rather than the commercialisation of pest species. The Committee also notes that the commercialisation and harvesting of feral animal species may be antagonistic to the primary objective of feral animal control.

Recommendation 9

The Committee recommends that the over-riding aim of all feral animal control programs should be to minimise feral animal impact on the environment and agriculture.

- 5.14** The remainder of this chapter outlines some of the main feral animal control techniques, including current issues of some controversy.

Poisons and the use of 1080 in controlling feral animals

- 5.15** Poisons were one of the first techniques used to control pests in Australia, and Olsen notes that they remain a primary method. While a variety of poisons have been used, the predominant one now in use is sodium fluoroacetate, generally known as 1080.
- 5.16** Once ingested, 1080 disrupts the oxidative metabolism cycle and results in death within 4 to 24 hours after ingestion, and there is no known antidote for a lethal dose of 1080. As explained in the submission from NSW Agriculture:

Depending on the species, death from 1080 results from cardiac failure (humans and rabbits), convulsions or subsequent respiratory paralysis (dogs) and central nervous system dysfunction, or a combination. Many species show symptoms consistent with central nervous system dysfunction ranging from tremors and muscular spasms, through to running, 'padding' and convulsions. The perception of whether an animal feels pain during this process is greatly influenced by the perception of the person observing these symptoms. Although 1080 poisoning causes central nervous system dysfunction, these effects are similar to those experienced by humans during epileptic fits. Animals eventually lose consciousness in an equivalent way to human epileptics undergoing *Grand Mal Seizures*. It has therefore been inferred that the symptoms of central nervous system stimulation caused by fluoracetate [1080] poisoning in *canids* (dogs and foxes) are not associated with significant pain. There is limited objective evidence with which to validate this assessment. However, one person who survived accidental 1080 poisoning subsequently reported feeling no pain, even during very

¹¹³ Submission No 105, Mr Steve Orr, Chief Executive Officer, State Council of Rural Lands Protection Boards, at 28.

severe convulsions. This account is consistent with the epilepsy analogy mentioned previously.¹¹⁴

- 5.17** Nonetheless, the Committee is aware that some members of the community perceive animals poisoned with 1080 to die in pain. There is no conclusive research in relation to animals which can either confirm or deny this to be the case. In the absence of conclusive evidence that no pain is caused, the Committee believes that consideration should be given to incorporating an analgesic into 1080 poison baits

Recommendation 10

The Committee recommends that, in the absence of conclusive evidence that 1080 does not cause significant pain, that consideration be given to conducting a trial on the feasibility of incorporating an analgesic into 1080 poisoned baits.

- 5.18** The National Registration Authority for Agricultural and Veterinary Chemicals is undertaking a review of the chemical 1080 (sodium fluoroacetate). The use of 1080 has been banned in the United States, and the poisoning of non-target species is a concern. However, the dire consequences of prohibiting the use of 1080 for feral animal control in Australia were strongly conveyed to the Committee. For instance, Mr Green, a grazier at Nimmitabel, told the Committee what would happen if 1080 was banned:

Two things would happen. The first point is that I think that everybody these days is aware of the impact of foxes on our native fauna. The second point is that 1080 has been such a wonderful chemical to use. We heard the word "strychnine" used earlier on. There is any amount of substances that are not illegal. There is any amount of substances on the shelves in Woolworths or at the local garden supplier. There is any amount of substance out there that is cheap. It is not selective, but it will kill dogs and it will kill foxes. The most brutal way for me to do that is for me to crush up a glass and put it into some mincemeat and I could kill every dog and fox that there is in the district. That is what would happen.¹¹⁵

- 5.19** Sir Owen Croft of the Armidale Rural Lands Protection Board told the Committee:

The use of 1080 of course has made life very much easier. I do not think there is any doubt that because it is a very specific poison we can aim it at a target. It is probably the most safe poison that is available. If it does come off the market, Lord help us, because people would use poisons that are far worse and that have far worse effects on native species particularly. My observation as far as native species are concerned—we have been doing fox baiting on my land and my

¹¹⁴ Submission No 115, Dr Regina Fogarty, NSW Agriculture, at Appendix 3 – The Use of 1080 poison as a vertebrate pesticide in New South Wales.

¹¹⁵ Evidence of Mr Green, grazier, Nimmitabel, 7 February 2002.

Landcare group is one of the early ones that did the very large-scale ones—we have seen the reappearance of a lot of native species.¹¹⁶

5.20 Similarly, Mr Donald Cameron, Vice-chair Armidale Branch of the NSW Farmers' Association, stated:

... 1080 is the best available method [for feral animal control]. Considerable research was put into its development years ago. It is a poison that is derived from a native species so, to a large extent, it is a natural type of poison. It degrades well in the environment and I do not think there are any other poisons that are of equal value. It really gives me the horrors to think what might happen if 1080 is taken off the market. People could use any number of poisons in a haphazard manner to try to poison foxes and dogs and I think that would be a disaster for the environment. I think 1080 is just so important.¹¹⁷

5.21 One of the dangers of any poisoning program is that it is hard to be target specific, and the killing of non-target species is a concern. Mr Eric Davis of NSW Agriculture noted how the application of best practice protocols helps reduce non-target kills when using 1080.

... While there is no single procedure which guarantees that 1080 will always be totally target-specific, the combination of correct dose rate, correct bait type and placement strategy greatly enhances target specificity and reduces the risk to non-target animals. It is also important to understand that similar or perhaps higher non-target risks would exist if another pesticide were used instead of 1080. For example, foxes and dogs are much more sensitive to 1080 than native animals. So use of an alternative pesticide that did not have that difference in sensitivity would increase the non-target risks to other native carnivores. New non-lethal and fertility-based control is, at best, many years away. So the issue is whether society is able to understand and appreciate the issues regarding 1080 use and balance these against the enormous damage that pest animals have caused to agriculture and the environment without 1080.¹¹⁸

5.22 The Cooperative Research Centre noted that feral animal resistance to 1080 poisons is possible. Their submission stated:

There is some evidence that rabbits are now developing resistance to the chemical [1080]. Combined with the observation that native species in WA have a natural tolerance to 1080, it is possible that in the long term the effectiveness of 1080 for controlling pest species will be diminished.¹¹⁹

¹¹⁶ Evidence of Sir Owen Croft, Grazier and Director, Armidale Rural Lands Protection Board, 3 April 2002 at 4.

¹¹⁷ Evidence of Mr Donald Cameron, Vice-chair Armidale Branch, NSW Farmers' Association, 3 April 2002 at 22.

¹¹⁸ Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 4.

¹¹⁹ Submission No 112, Dr Anthony Peacock, Chief Executive Officer, Cooperative Research Centre for the Biological Control of Pest Animals.

The use of 1080 in aerial baiting

5.23 One of the most controversial issues for this Inquiry was the aerial application of 1080 baits for wild dog control. The aerial baiting program was described as follows:

Aerial baiting with 1080 for control of wild dogs in eastern NSW occurs under conditions specified in a Permit issued by the National Registration Authority. These programs are restricted to the northern and southern tablelands areas where rugged terrain makes ground baiting very difficult to undertake. Each regional baiting program is undertaken between May and early July each year and is a cooperative process involving RLPBs, wild dog control associations, and government agencies such as SFNSW, DLWC and the NPWS. NSW Agriculture coordinates the programs and prepares a submission for approval of the NSW Minister for Agriculture.¹²⁰

5.24 The National Parks and Wildlife Service has restricted the use of aerial baiting on its reserves. This action has caused some controversy over the use of aerial baiting. The arguments are twofold:

- Whether aerial baiting presents risks to non-target species.
- Whether the alternatives to aerial baiting are as effective in controlling wild dogs.

5.25 In relation to these risks the National Parks and Wildlife Service submitted:

All pest control activities proposed on NPWS land require an assessment of their environmental impacts....

The NPWS contracted a consultant in 1999 to prepare a SIS [species impact statement] on the effects of aerial 1080 baiting of wild dogs on threatened species in five of its reserves. The consultant engaged was Dr John McIlroy, formerly Principal Research Scientist with the CSIRO Division of Wildlife and Ecology...

Based on the evidence reviewed in the SIS, Dr McIlroy concluded that according to current information aerial baiting posed too great a risk to populations of the spotted-tailed quoll in three of the areas examined, Kosciuszko, Werrikimbe and Willi Willi national parks. Dr McIlroy considered that the method was acceptable in the Washpool and Oxley Wild Rivers National Park, provided certain conditions were met.¹²¹

5.26 Dr Anthony Fleming, Director, Southern Region of National Parks and Wildlife Service, explained to the Committee some of the research work being performed to determine the effect of aerial baiting on threatened species:

We conducted aerial baiting until a couple of years ago when it was suspended as a result of a Species Impact Statement that raised serious issues about the non-target species impact that aerial baiting was having. Specifically, it raised concerns about

¹²⁰ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 35.

¹²¹ *ibid.*

impacts on the tiger quoll. As a result, we adopted a range of alternative baiting techniques, including extensive use of mound baiting.

We now need to focus on research to satisfy the community about whether we can safely undertake aerial baiting. The research program is about addressing that issue front on. We need to understand the distribution and habits of quolls in the environment, where they move to and whether they take baits in a field situation. The initial commitment to that research program is \$140,000 and that money will come from areas of the budget other than the feral animal control program. Our committee also looked at adjusting control techniques and focused on one area to see whether we could come up with a package that works better.¹²²

5.27 Dr Fleming continued:

It is a difficult issue. There is evidence that 1080 will kill quolls. The key issue is whether or not in a field situation the delivery of baits, either aerially or through ground-based baiting, will kill quolls and, even if that kills some individual quolls, whether it will kill a significant number and affect the population of that species. That is what the research is aiming to find out. It is pretty clear that 1080 is toxic to quolls and they will die if it is ingested. There is some evidence, but it is not conclusive for the part of the world that we are talking about, that quolls will take aerial baits and they will die, and it has the potential to have a significant impact on their population. There is some evidence over in the Tallagandra area that is not conclusive and that is why we want to undertake the research program that has been described.¹²³

5.28 Providing further evidence on the effect of aerial baiting on tiger quoll populations, Dr Chris Belcher of Ecosystems Environmental Consultants submitted to the Committee:

I have been studying a population of spotted-tailed quolls in Badja and Tallaganda State Forests since 1996. In 1998, an adult male quoll, showing symptoms of 1080 poisoning was trapped about four days after 1080 aerial baiting by the adjoining Rural Lands Protection Board. The quoll subsequently died...The finding was significant as it was the first confirmed instance of a quoll dying after consuming a 1080 poison bait from aerial baiting.

... My other concern is buried bait programmes. Research on buried bait taken by quolls has found that they are capable of regularly taking baits to a depth of 10 cm. Most of the bait mounds that I have found have been totally inadequate, with baits placed on the ground with as little as 2-5 cm of soil or sand covering the bait. At the moment there is no legislative requirements covering buried baits, nor importantly any independent auditing of baiting practices.

The spotted-tailed quoll is listed as 'vulnerable' nationally and in New South Wales under the *Threatened Species Act* and 'Endangered' in Victoria. The species is still declining in both range and abundance. If the threatening processes responsible for the species continuing decline are not addressed, the species is likely to become extinct in the medium term. Inappropriate baiting techniques are clearly one of the major factors responsible for the species decline. Three species of quoll were

¹²² Evidence of Dr Anthony Fleming, Director, Southern Region, National Parks and Wildlife Service, 7 February 2002, at 41.

¹²³ *ibid*, 42.

present in New South Wales and Victoria at the time of European settlement. The spotted-tailed quoll is now the sole surviving quoll in both states.¹²⁴

5.29 The Committee also heard evidence from Dr Andrew Leys, National Parks and Wildlife Service, of research indicating that quolls rejected 1080 poison baits:

This morning you heard of the work undertaken by the National Parks and Wildlife Service research scientists – Bob Harden’s group here at Armidale – and that work was to determine the impact of 1080 baits in the commercial foxoff medium and look at the impact of 1080 baits on the quoll populations. We know from research that has been done previously that quolls will eat foxoff baits, at least unpoisoned foxoff baits...We know that there is sufficient 1080 in a foxoff bait to kill a quoll or at least have a high chance of doing so, but what the research that Bob Harden undertook to do was to say what the impact of putting out those baits in the field. Will the quolls take them? If they do take them, what is the impact on the population.

...The results of that were very exciting because they indicated that where the baits had 1080 loaded into them, the quolls rejected them. That is very significant and could have significant implications for us with regard to fox baiting.

If the final analysis of this work indicates that the quolls are not at risk as much as we thought, it obviously has major implications for the time, labour and expense of our fox control in areas where quolls exist...It may also have implications for 1080 baits in non-foxoff baits. What we have to awfully careful of doing here is extrapolating too far at this stage. They are only preliminary results.

...You have already heard about the next step from Tony Fleming in Cooma. One other thing that the Cooma advisory panel would be doing is investigating the impact of dog baits. As you will be aware, dog baits have double the amount of 1080 that fox baits have.¹²⁵

5.30 The findings of the research conducted by Dr Bob Harden’s group which indicates that quolls will reject loaded 1080 baits is further discussed at paragraph 5.42.

5.31 The South Coast Rural Lands Protection Board has stopped aerial baiting of wild dogs. Mr Ferguson Thomson, Director of the Board, explained to the Committee:

I suppose that we are different from other areas of the State in that we oppose the use of helicopter and ground baiting from vehicles. We oppose that as we believe that there is no ability to monitor dog takes from helicopter baiting. We are unable to determine the presence or otherwise of non-target species and live baits are only on the ground for a short period or a number of days as opposed to up to 150 days with our mound baiting programs. We are all involved in the monitoring operation with National Parks using transects. We work with them in monitoring population numbers in the national parks and State forests. We do this before

¹²⁴ Submission No 123, Dr Chris Belcher, Ecosystems Environmental Consultants.

¹²⁵ Evidence of Dr Andrew Leys, Pest Management Coordinator, National Parks and Wildlife Service, 3 April 2002, at 45.

baitings and we do it after baitings. So we have a greater knowledge of what is out there in the country that we are operating in.¹²⁶

5.32 Mr Raymond Lennon, Senior Ranger of the South Coast Board added:

It is the belief of all staff and directors of our board that it does not matter how much bait we put out by air, we can never demonstrate the numbers of dogs or foxes killed. It is supposition, it is conjecture. We can demonstrate, using mound baiting techniques and trapping techniques, the number of baits that are taken by various species. ... In the aerial baiting situation, I would be grateful if anyone could demonstrate how they can calculate the number of baits taken by any species.¹²⁷

5.33 State Forests have also largely discontinued the use of aerial baiting. Mr Michael Bullen of State Forests told the Committee:

What I would say is that, as a policy, State Forests do not now undertake aerial baiting. We still allow aerial baiting to occur on State forest where it is part of an integrated program with the Rural Lands Protection Boards, and some good examples of that are in the northern tablelands area where lessees are on the forest, and I think the best example about where the abandonment and replacement of aerial baiting has been effective is in the southern tablelands area....¹²⁸

5.34 Mr Paul Meek of State Forests noted:

I think one of the other things we need to look at with aerial baiting is that there are areas where aerial baiting has advantages over ground baiting and that is where you cannot get access. However, getting back to our data issue again, we still do not really know - and a lot of rural lands people will say the same thing - how many baits actually hit the deck. A lot of baits dropped from a plane are hung up in trees. We still do not know how many baits are taken and we do not know what took them. We do not know how many animals are killed. All we can qualify it with is the reduction in livestock if they are measuring that to a high standard, so I think that is the area we need to focus on if we are going to continue down that avenue, we need to have more rigorous assessments of the real benefits of it because we know that ground baiting is effective, we can measure the benefits of what we have been undertaking by putting bait stations out.¹²⁹

5.35 In response to whether stock losses increased in neighbouring properties after State Forests stopped aerial baiting, Mr Bullen replied:

... Certainly there is some anecdotal evidence that stock losses may have increased adjacent to the Tallaganda-Badja end when we stopped the aerial baiting, but now

¹²⁶ Evidence of Mr Fergus Thomson, Director, South Coast Rural Lands Protection Board, 7 February 2002, at 2.

¹²⁷ Evidence of Mr Raymond Lennon, Managing Ranger, South Coast Rural Lands Protection Board, 7 February 2002, at 3.

¹²⁸ Evidence of Mr Michael Bullen, Director, Environmental Management and Forest Practices Directorate, State Forests of NSW, 26 March 2002, at 38.

¹²⁹ Evidence of Mr Paul Meek, Regional Ecologist, State Forests of NSW, 26 March 2002, at 39.

that we have carried out a very effective mound baiting program and so on the numbers have actually started to come back and our controls are effective in controlling the dog numbers in those State forests.¹³⁰

5.36 The Committee also heard evidence about: the effectiveness of aerial baiting controlling wild dog populations and the ramifications of prohibiting it; how the placement of aerial baits is becoming increasingly precise; and that native fauna is most abundant in areas where aerial baiting has taken place. For example, Mr Brian Tomalin, Vice-President of the Barnard River Wild Dog Committee told the Committee:

... The strategic nature of aerial baiting is quite important. We can place the baits exactly where we need to control the dogs and to minimise the impact on other non-target species. It is cost effective. As Don Noakes said, over the years since aerial baiting started in about 1962, it has developed up until the last two years into a buffer between the wild dog population in the gorge country to the east and the sheep country to the west. A buffer zone has created basically a dispersal sink that gets baited once a year to take out the wild dogs in that area over about a 12-month period by baiting dogs from the eastern parts and moving them to recolonise. Then they are picked up again the next year before they do too much damage to the grazing country in the west.

The side effect of dog control is fox control. We believe—and a lot of our experience tells us—that the aerial baiting program that we have had for nearly 40 years is quite environmentally sensitive. Areas where we have been baiting continuously or for a long period are places where we find our best concentration of the small native wildlife. When I talk about historical methods—trapping, fencing and shooting—that was done by farmers in the past up until we had aerial baiting. We got control of the dogs again and people can run sheep in places where they could not in the 1950s and 1960s. Unfortunately we are now being asked to return to the use of methods which have been ineffective in the past.

...Current methods that are being employed now, which are going back to ground baiting, include mound baiting, which is an improved method of ground baiting which is what we had in the past. We are being asked to go back to trapping and fencing which are all methods that failed previously. Our experience in mound baiting is that if you have got pigs present, you get about five to six mound baits and the pigs take all the bait anyway. After a long period of mound baiting, it becomes ineffective.¹³¹

5.37 NSW Agriculture noted that aerial baiting can be a very effective method of feral animal control. Mr Davis told the Committee:

It is worth making the point that even in some areas where there are alternative access it is often useful to have a co-ordinated program that does everything all at once, which aerial baiting allows. That is the first point. The second point is the alternative methods, such as ground baiting, are very much more expensive.¹³²

¹³⁰ Evidence of Mr Michael Bullen, Director, Environmental Management and Forest Practices Directorate, State Forests of NSW, 26 March 2002, at 44.

¹³¹ Evidence of Mr Brian Tomalin, Vice-President, Barnard River Wild Dog Committee, 3 April 2002 at 9.

¹³² Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 12.

5.38 Mr Geoffrey File of NSW Agriculture also noted:

The other thing that is important to note with aerial baiting is the GPS [Global Positioning System] that is certainly a lot more precise in the delivery of the bait. Whereas before, from fixed-wing aircraft in particular, it was reasonably haphazard. Now they have to put in a GPS track where they are going to put it before they can get their permit. That means that all the neighbourhood is notified precisely of where the bait is going. The problems that we once had with domesticated dogs et cetera getting access to baits has been overcome because everyone is now notified, and the baits are precisely located.¹³³

5.39 Mr Bruce Moore, Secretary of the Barnard River Wild Dog Association, explained to the Committee about the cost effectiveness of aerially baiting a buffer zone to protect agricultural production. He stated:

The point of that it is that in the times when we really had bushmen who were very skilled and who were engaged in that full time, it took them as long as 12 days to catch a dog. There seems to be a move back to using trappers as well as the other methods. We say that by going back 50 years, we have proved on our own property that we basically went broke relying on full-time trappers. If that again becomes one of the main tools, it will make sheep producers non-viable.

.... But when we are talking about this buffer zone and large scale baiting, we are talking about a narrow strip on the eastern fringe of sheep country from Singleton to Tenterfield on the eastern side of the Tablelands. It is about 10 to 20 kilometres wide where there is strategic bait placement with a helicopter.

...We went from large quantities with fixed-wing planes down to less than two tonne with a much more co-ordinated baiting system. Your neighbouring association was doing it at the same time, but they were also targeting specific dog movement paths. Rather than just fixed-wing planes, you flew over the country with a helicopter and you went to locations where the old-timers told you that was where to trap a dog. We were able to reduce our amount of poison dramatically from four tonne to 1½ tonne and achieve the same level of control. In the last two years our predation is starting to increase again. We are seeing it because that strategic bait placement procedure is being compromised. Our access to those specific wild dog paths has been restricted. That sheet contains information about where we are suffering stock losses and where we are trapping the dogs. Most of that activity is either within or next to forest areas. Regardless of their tenure they are forest areas. Wild dog predation is associated with forest country.¹³⁴

5.40 An alternative sometimes suggested to aerial baiting is mound baiting, in which the poisoned baits are placed in a hole then covered over. This method is used in New South Wales as part of the fox threat abatement plan. In regards to whether mound baiting could ever be as efficient as aerial baiting, Mr Moore noted:

No, I do not believe it could ever be as efficient, going back on the earlier evidence about the amount of manpower there. Mound baiting is not unlike a dog trap and three trappers running in that area full time for 12 months would set less than three traps for the one dog because the time to get from one location to

¹³³ Mr Geoffrey File, Executive Director, Regulatory Services, NSW Agriculture, 25 March 2002 at 12.

¹³⁴ Evidence of Mr Bruce Moore, Secretary, Barnard River Wild Dog Association, 3 April 2002 at 11.

another is so great. The main difficulty with mound baiting across the State is that it is a success in some areas and a failure in others is because of the terrain and access. In our country access is impossible. It is horseback or an overnight type situation. Can that be done every three days to maintain a bait trail? You just do not do it. People would go out of business. In some areas east of Armidale you will see a barrier fence and mound baiting, along with other methods, has a major role to play but in broken escarpment country physical access is impossible not only because there are no roads but also in the wet climate, when there is 15 inches of rain in forest country, vehicle access is also impossible.¹³⁵

5.41 Extensive ground baiting has replaced aerial baiting in national parks. The submission of the National Parks and Wildlife Service notes:

Ground baiting with 1080 is widely used and strategic placement of baits maximises the chances of uptake by wild dogs. This means that fewer baits are used than in aerial baiting.

Fleming et al (2001) found the effectiveness of ground baiting depended on the number of baits available, the availability of other food sources, removal of baits by non-target animals, removal of multiple baits by a single dog and the attractiveness of the bait...

Burying baits can reduce their uptake by non-target species... All NPWS ground baiting programs use the buried bait system.

When used in association with a bait station, an area of sand under which a bait is buried, the identity of species taking baits may be surmised by assessing prints and other signs left in the sand. By preceding toxic baiting with a period of free feeding, the selectivity of baiting can be increased by avoiding stations where non-target species have been recorded.¹³⁶

5.42 A report on the findings of research conducted under the auspices of Dr Bob Harden, and provided to Environment Australia and the NSW National Parks and Wildlife Service (referred to in paragraph 5.29) found no impact of fox baiting on tiger quoll populations in North-Eastern NSW. The report concluded:

In these three experiments, fox baiting clearly did not threaten the tiger quoll population. However, the primary reason for this was that quolls did not consume any bait, and thus the question of whether they can survive bait consumption was not resolved. It appears that quolls find Foxoff baits unpalatable, either because of the 1080 or because of the bait matrix itself. Regardless of the reasons for bait rejection, deep burial of bait, the daily monitoring of bait stations and free feeding prior to baiting appear to be unnecessary as long as this specific bait type is used.¹³⁷

5.43 In regard to a feral animal and native animal survey in cooperation with the National Parks and Wildlife Service, Mr Michael Thorman, Noxious Animal Control Ranger, Kempsey

¹³⁵ Evidence of Mr Bruce Moore, Secretary, Barnard River Wild Dog Association, 3 April 2002 at 14.

¹³⁶ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 36.

¹³⁷ Kortner, G. and Gresser, S. *Impact of fox baiting on tiger quoll populations*. Final Report to Environment Australia and the New South Wales National Parks and Wildlife Service. Project ID:00016505.

Rural Lands Protection Board, noted the following about the presence of quolls and aerial baiting:

[the survey] shows an abundance of wildlife species and native species, including quolls in areas that have been traditional baiting areas. It also shows noxious animals, foxes, wild dogs and their influx right across the board area from the coastal strip right through to mountain areas....[and in regard to the impact of aerial baiting on quolls]...On that information it does not appear to be affecting the quolls.¹³⁸

5.44 Mr Thorman also made reference to the point of view that aerial baiting can, in the long run, be beneficial to native species:

They [requests to use aerial baits] are now being declined because of the *Environmental Planning and Assessment Act*, which says we must not bait in areas where there is a quoll habitat, but it has never really been proved one way or the other because the money or time has never been spent on it...You have heard today there is a school of thought that baiting is helping wildlife species to survive at a better rate simply because they are not being attacked by a higher order predator.¹³⁹

5.45 It is unclear whether the threat posed to quolls by dogs and foxes is primarily one of predation or one of competition for resources:

There is very little documented information on the impact of wild dogs on quolls. However, it is known that the diets of wild dogs, foxes and feral cats in eastern Australia overlap with that of the spotted-tailed quoll. Competition for resources such as prey and den sites is likely to have a more significant impact on quoll numbers than direct predation. It is also likely that foxes have a greater impact than wild dogs because their diet more closely resembles that of the quoll.¹⁴⁰

5.46 The Committee notes the sometimes conflicting evidence on the use of aerial baiting for wild dog control. In relation to aerial baiting on national park estate in particular, it is pertinent to note the comments of Dr Leys:

...A review of 1080 is being undertaken by the National Registration Authority and I think it would be prudent for us as the lead conservation agency in New South Wales to make certain that if we are going to aerial bait in our reserves—because it is important in some areas and is part of an integrated program off park—that we undertake an appropriate level of environmental impact assessment, because if we do not that will give more and more ammunition to those who want 1080 banned. We have to use it carefully. We are looking at the environmental impacts and where it is crucial for it to be used, where the environmental impact assessment says that it can be used without risks then it can be considered.¹⁴¹

¹³⁸ Evidence of Mr Michael Thorman, Kempsey Rural Lands Protection Board, 3 April 2002 at 34.

¹³⁹ *ibid*, 35.

¹⁴⁰ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 24.

¹⁴¹ Evidence of Dr Andrew Leys, Pest Management Coordinator, National Parks and Wildlife Service, 25 March 2002 at 40.

- 5.47** The Committee does not wish to rule out the possible future use of aerial baiting, if sufficient research becomes available to address current concerns. However in the absence of conclusive research, the Committee believes the precautionary principle should prevail, and so supports the current approach by the National Parks and Wildlife Service.

Recommendation 11

The Committee recommends that research on the effect of aerial baiting of wild dogs on threatened species continue as a matter of priority.

The Committee recommends that until conclusive evidence demonstrates that threatened species are not affected by aerial baiting, the precautionary approach of restricting the use of aerial baiting should prevail.

The Committee recommends that the Pest Animal Council arrange for the development of a code of conduct for all aspects of mound baiting.

Shooting

- 5.48** Shooting of feral animals, when conducted properly by expert marksmen is regarded as humane since death is rapid if not instantaneous. Olsen writes that, although common, ground shooting of feral animals is not considered to be a highly effective technique for most feral animals because it is time consuming and shooters can only cover a relatively small area. Welfare concerns make shooting unacceptable in areas where it is not possible to follow-up and dispose of injured animals.¹⁴²
- 5.49** Terrain, as it affects a marksman's line of sight, is an important consideration when determining whether humane and efficient destruction is possible. The Chairperson of the Newrybar Swamp Feral Pig Management Committee described this issue, as it applies in Newrybar, to the Committee:

Shooting is not an option in our area, either. The Police Service has advised us that because of the line of sight and the type of vegetation within the area, and also proximity to the urban area, it is not advisable to discharge firearms in there except for the actual destruction of a pig caught in a trap. Basically, that leaves us with trapping, which is acceptable to the community, to destroy these animals once we trap them.¹⁴³

¹⁴² Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 59.

¹⁴³ Evidence of Ms Lisa Wellman, Chairperson Newrybar Swamp Feral Pig Management Committee, 3 April 2002, at 32.

- 5.50** Shooting from helicopters is used to control populations of several feral animals including horses, donkeys, goats and pigs. Olsen writes that the National Consultative Committee on Animal Welfare reluctantly accepts helicopter shooting as an efficient control technique provided that it is done by trained shooters using weapons of a suitable calibre, and that there is immediate follow-up to dispose of wounded animals.¹⁴⁴
- 5.51** In New South Wales, government agencies and Rural Lands Protection Board staff involved in aerial culling operations are trained and operate under very strict Feral Animal Aerial Shooters Training (FAAST) protocols. These protocols detail the methods and technical standards along with training and accreditation required by those implementing aerial culling programs. The NSW Pest Animal Council has a FAAST Management Committee as a sub-committee of the Council.
- 5.52** In New South Wales aerial shooting is extensively used for controlling feral pig and goat populations. However, one of the most contentious aerial shooting programs was that of aerial culling of feral horses in Guy Fawkes River National Park, near Dorrigo, in late 2000. The culling received a great deal of adverse media coverage.¹⁴⁵ It was also the subject of a recent court case, in which the RSPCA brought cruelty charges against the NPWS, charges that were ultimately dismissed except in the case of one of the 600 animals.
- 5.53** In response to the issue of culling feral horses in national parks, Dr Tony English, Faculty of Veterinary Sciences at the University of Sydney, was commissioned to provide an independent review of the protocols and procedures used in the Guy Fawkes River National Park cull. His report concluded:
- That the use of aerial shooting in Guy Fawkes River National Park was an appropriate technique under the circumstances;
- That the shooting was carried out in a humane way, under approved protocols designed to kill the horses as quickly as possible;
- That the culling operation was planned and carried out in a most professional manner on the part of all personnel involved.¹⁴⁶
- 5.54** Despite these findings, the Minister for the Environment banned any further aerial culling of horses in national parks. The National Parks and Wildlife Service submission to the Inquiry noted:
- Despite Dr English's findings, the strong cultural attachment to horses by sections of the community was clearly highlighted by this operation and, for this reason, the Minister for the Environment announced that aerial culling operations will not

¹⁴⁴ Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 59.

¹⁴⁵ See for example: "Where need can't justify the method" in *The Daily Telegraph*, 17 November 2000; "Brumby cull reaction mounts" in *The Australian*, 2 November 2000.

¹⁴⁶ English, A.W. *Report on the Cull of Feral Horses in Guy Fawkes River National Park in October 2000, Executive Summary*, 15 November 2000, at 6.

be considered as an option in any future horse management programs on NPWS estate.¹⁴⁷

5.55 Dr English was also commissioned to prepare a general report on the management options to control feral horses in national parks.¹⁴⁸ In reviewing different regions of the national park estate, Dr English canvassed options such as trapping of horses using salt licks and mustering. However, it is pertinent that for the Blue Mountains area he wrote:

There are believed to now be fewer than 100 feral horses in this region, but the terrain is very rugged with very limited access to most of it. NPWS and SCA [Sydney Catchment Authority] have had a policy of removing these animals for some time now and there is every reason to continue this approach. The nature of much of this country makes mustering extremely difficult, but in the absence of aerial culling as an option there are few other alternatives.¹⁴⁹

5.56 The Committee acknowledges the reasons that led the Minister for the Environment to ban aerial culling of feral horses. The Committee considers that a range of feral horse control techniques should be available to the National Parks and Wildlife Service.

Recommendation 12

The Committee recommends that the National Parks and Wildlife Service regularly monitor the impact of horses in National Parks and develop an effective and humane management system to control numbers when necessary.

Category D firearm licences

5.57 Several submissions to the Inquiry noted the difficulty of primary producers being refused a 'category D' firearm licence. These firearms, being self-loading, are considered the most suitable for shooting large feral animals such as feral pigs. Mr Keith Allison, State Councillor, Rural Lands Protection Board Broken Hill, told the Committee:

An example more recently is the attitude and the interpretation of the *Firearms Registration Act*. I do not know whether you are conversant with this, but the policy of the registration department at present in the interpretation of that act has changed. The D class licence holders in the past, at the beginning of that legislation, were issued with licences. Currently, they are being denied those licences, ... because a licence has to be current, stops possession of that rifle and stops the necessity of those people who have got them in controlling feral animals. I do not know if you have ever been in the situation of walking into a lignum swamp or creek, et cetera, and only having a single shot rifle or a repeating rifle - ... and have a pig come at you. You take your life in your own hands or you

¹⁴⁷ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 45.

¹⁴⁸ English, A.W. *A Report on the Management of Feral Horses in National Parks in New South Wales*, ND.

¹⁴⁹ *ibid*, 17.

do not feel like keeping your legs because he will take it as he walks past; it is an essential. Likewise, if you have got a wild dog problem which sets you in the sights of a dog, with a semi-automatic you can get three bullets off before you get one off with a repeating rifle. So in certain circumstances they are required.¹⁵⁰

5.58 Mr Colin Skennar, a sugar cane farmer at Lennox Head, submitted to the Committee his reasons for needing a category D shooting licence:

Due to the danger of eradicating large feral pigs in a standing crop of sugar cane, in most cases 1 – 2 metres between myself and the feral pigs. Before this year I used a self-loading centre fire rifle which I had well before the gun legislation. This year was the 4th renewal of my licence, which was refused solely on the grounds that no government authorised campaign existed in this area. There has been no need for an authorised campaign because I had controlled them myself.¹⁵¹

5.59 The Firearms Registry of the NSW Police Service provided Mr Skennar with a statement of reasons why his licence was refused. It read:

...there has been no suggestion by the Commissioner that you have been other than a responsible holder of a firearms licence and your good character is not in question....

I have also taken into account that fact that you hold your firearms licence for the genuine reason of primary production, and that this allows you to maintain your livelihood....

However, the legislation is clear in its intent regarding restrictions on issuing Category D licences, in that it specifies that this category of firearm is only available, in the case of primary producers, if the applicant is "participating in an authorised campaign conducted by or on behalf of a government agency or public authority to eradicate large feral animals or animals ...

In addition, the Registry's adjudication guidelines for this category of firearm have been strengthened to better reflect the legislative requirements. These guidelines stipulate that you must provide documented proof that you are participating in the said campaign.¹⁵²

5.60 While the relevant Rural Lands Protection Board supported in writing Mr Skennar's application for a category D firearm licence, as there was no formal eradication campaign run by the Board, Mr Skennar's application was refused.

5.61 Ms Jacqueline Knowles of the NSW Farmers' Association informed the Committee:

It is our understanding that the registry is looking to revise this system. We are very keen to ensure that primary producers will still be able to obtain those sorts of licences, because in the event of the Rural Lands Protection Board developing a campaign in which primary producers can be involved it is essential that primary

¹⁵⁰ Evidence of Mr Keith Allison, State Councillor, Rural Lands Protection Board, Broken Hill, 26 March 2002, at 4.

¹⁵¹ Submission No 32, Mr Colin Skennar, Lennox Head.

¹⁵² *ibid.*

producers are able access these weapons and be licensed to use them year round, as opposed to just within the period of an actual campaign.¹⁵³

- 5.62** The Committee acknowledges the difficulty of balancing the objectives of the *Firearms Act 1996* and the safety of primary producers attempting to control potentially dangerous feral animals on their land. These difficulties reinforce the importance of having integrated feral animal control programs in place, across all land tenures. Before the conclusion of this Inquiry this issue was resolved by a mechanism which will now allow farmers to apply for a category D licence through their local Rural Land Protection Boards. The NSW Farmers Association has expressed support for this new application process.¹⁵⁴ The Committee notes that the Government took action which addressed issues that were raised in evidence given to the Inquiry. The 'Category D Firearm Licences – Adjudication Policy for Primary Producers' which came into effect from 16 July 2002 is attached as Appendix 4.

The role of recreational shooters and hunters

- 5.63** A number of submissions to the Inquiry argued that recreational hunters and shooters should have a role to play in the control of feral animals.

- 5.64** Mr John Mumford, Chairman of the Game Management Council of NSW, told the Committee:

Hunting is recognised around the world as a conservation tool and one that can have an immediate impact on the protection of the native animal and we would like to see hunting incorporated into the control processes and programs of pest animals within the State of New South Wales.¹⁵⁵

- 5.65** Similarly, Mr Stephen Hurt of the Australian Deer Association stated:

Despite the assertions of emotional individuals who oppose hunting for any reason on ideological grounds, man has been hunting on this planet without cessation for a very long time. Hunting is a natural part of the psyche of mankind. To deny this and alienate the majority of hunters who are not employed in Government feral animal control bureaucracies is to court misunderstanding, frustration, antagonism and subversion. To embrace this natural drive and resource would enable the planners to create a better level of co-operation, engender greater public education and support, provide immediate major resources to an otherwise slow and under-funded natural resource and heritage objective and provide a control mechanism for those in the community with a less responsible attitude towards these objectives.¹⁵⁶

¹⁵³ Evidence of Ms Jacqueline Knowles, Senior Analyst, Conservation and Resource Management, NSW Farmers' Association, 25 March 2002, at 21.

¹⁵⁴ Press Release NSW Farmers Association "Win on Pest Control" 8 July 2002.

¹⁵⁵ Evidence of Mr John Mumford, Chairman, Game Management Council of NSW, 26 March 2002, at 58.

¹⁵⁶ Evidence of Mr Stephen Hurt, Committee Representative, Australian Deer Association, 26 March 2002 at 57.

5.66 In regard to government agencies that are responsible for feral animal control, there is some diversity of opinion as to the role of recreational shooters and hunters. Mr Orr, Chief Executive Officer of the Rural Lands Protection Board, told the Committee:

I think recreational shooters can certainly play a role. The question or the issue which has been made clear throughout our presentation is the need for coordinated and planned control campaigns and, in terms of feral animal control, I guess our view would be that they are important in terms of playing a role in controlled and planned campaigns.

...From our point of view, it would come down to a local level whereby recreational shooters, if they wished, would have the opportunity to be involved in feral animal control programs coordinated by the local Rural Lands Protection Boards and I do not think we have any issue with that. The concern which has been raised in the past has been the impact of these people on such programs as they are taking place where they come into an area and start blasting away with their rifles and have an impact on a control program which is going on in that area, so that is of concern, but we would certainly hope that we could get greater coordination with recreational shooters in terms of what we do and in terms of coordinated feral animal control programs within our district.¹⁵⁷

5.67 In regard to the use of recreational shooters in State Forests, Mr Paul Meek noted:

It is another tool that we can use as part of a broader control program. ... there are provisos on that, and that is that we need to be forming, once again, collaborative groups with these people to make sure that the groups that are going to be participating with us have ownership over programs, that they are regulated, that they have codes of conduct which set out guidelines for their behaviour in the forest.

In terms of operational, I think the role of the hunting fraternity could be that they come in at various stages throughout a program to supplement the broader control programs that we have already undertaken. Another example may be - one of the issues in northern NSW, ... is we are seeing more deer in some of our forests and we also have a few more pigs in a couple of places, which is seasonal. There is also the opportunity for the hunting groups to be involved in those sorts of programs where they are isolated and they can target those particular species, but obviously, once again, under controls from within State Forest regions as well as their own organisation.¹⁵⁸

5.68 Dr James Shields of State Forests explained to the Committee:

One avenue we are interested in exploring is the European model of hunting using hunting clubs, where it is self-regulated, where we enter into contracts with specific organisations to carry out specific tasks to achieve specific objectives. It also has the advantage of being self-regulating in a sense, that the club to whom you let the contract has an interest in preventing other people from ruining their

¹⁵⁷ Evidence of Mr Stephen Orr, Chief Executive Officer, State Council, Rural Lands Protection Board, 26 March 2002, at 12.

¹⁵⁸ Evidence of Mr Paul Meek, Regional Ecologist, State Forests of NSW, 26 March 2002, at 42.

contract and their good standing. As I say, we are interested in developing this. That is one way of dealing with it.¹⁵⁹

5.69 Mr Gilligan put forward the reasons why hunting would not be allowed in national parks:

...I do not believe that it is an appropriate way to achieve feral animal control. If you have a look at the experience of, say, South Australian national parks, particularly in the Flinders Ranges and the Gammon Ranges where they close the parks for a period each year. I question whether they are getting effective value for money and effective control. The experience I have, even with some of our programs where we use contractors for goat control, for example, I think there is an almost irresistible temptation on the part of the contractor to leave enough there to make sure that there is a job next year. Similarly with some of the hunting activity and the recreational activity you would finish up with that temptation again, "We don't want to take them all out because we want to leave some for next time." That may be okay in some of the other land tenures in a broad sense but on a national park if we have targeted an area for a control program we want to get as effective a control in that area as we possibly can.

... but I think [recreational shooting] is inconsistent in terms of national parks and reserves because I think we need a higher level of commitment to actually achieve a conservation objective.¹⁶⁰

5.70 It was submitted to the Committee that the regulation of hunting in New South Wales has been historically very poor. Mr Hurt of the Deer Association stated:

I would contest the fact that hunting has in fact been well regulated at any point in time, particularly in New South Wales. It has probably been the worst regulated State for hunting practice in Australia and Australia has probably got the worst regulation of hunting practice anywhere in the western world. From what I have seen overseas, I cannot think of any complimentary terms or even kind terms to look at the way hunting is regulated in this country, in particular in New South Wales.¹⁶¹

5.71 However, in reply to a question whether the proposed Game Bill¹⁶² before the Parliament would be of any assistance to feral animal control, Mr Gerard O'Connor, Senior Ranger, Northern Slopes Rural Lands Protection Board had a single word reply: "Nil".¹⁶³

5.72 The objects of the yet to be proclaimed *Game and Feral Animal Control Act 2002* are to provide for the effective management of introduced species of game animals; and to promote the responsible and orderly hunting of those game animals on public and private land and of certain pest animals on public land.

¹⁵⁹ Evidence of Dr James Shields, Wildlife Manager and Principal Ecologist, State Forests of NSW, 26 March 2002, at 42.

¹⁶⁰ Evidence of Mr Brian Gilligan, Executive Director, National Parks and Wildlife Service, 25 March 2002, at 47.

¹⁶¹ Evidence of Mr Stephen Hurt, Committee Representative, Australian Deer Association, 26 March 2002 at 59.

¹⁶² The *Game and Feral Animal Control Act 2002* received assent on 10 July 2002. As at 29 August 2002, the Act had not yet been proclaimed to have commenced.

¹⁶³ Evidence of Mr Gerard O'Connor, Senior Ranger, Northern Slopes Rural Lands Protection Board, 3 April 2002 at 7.

5.73 Section 7 of the Act constitutes the Game Council of NSW as a statutory body for the purposes of the Act. The functions of the Game Council will include:

- Administering the licensing system under the Act for game hunters (including the granting of licences and the enforcement of the Act).
- To make recommendations to relevant Ministers for the purposes of declaration of public lands available for hunting game.
- To liaise with the Pest Animal Council, Rural Lands Protection Boards and other relevant bodies in connection with their respective functions.

5.74 The Committee notes the diversity of opinion it received about the potential role of recreational shooters and hunters in the control of feral animals, and acknowledges it will be the task of the Game Council to engage in thorough liaison to determine those circumstances when recreational shooter access meets the respective needs and feral animal control priorities of local land tenures.

Pig dogging

5.75 The Southern Region Pig Catchers Association submitted to the Committee:

The majority of our members use dogs to hold and bail the pigs until they can get to it to dispatch it quickly. Over the years this has proved to be quite an effective means of feral pig control with pig hunting becoming more and more popular...

In the past hunters have been able to obtain permits to hunt pigs in State Forests by paying a fee. A recommendation that we would like to put forward is that permits to hunt should only be given to hunters who can prove that they are a current member of a registered hunting club.¹⁶⁴

5.76 However, a number of witnesses who gave evidence before the Committee expressed their dismay with the actions and behaviour of illegal pig hunters (particularly those engaged in “pig-dogging”) and the negative impact they often had on feral animal control programs.

5.77 The Committee received some anecdotal evidence that hunters have reintroduced pigs into areas where they had been previously cleared. Questioned about these practices, Mr Mumford of the Game Management Council told the Committee:

The reality is that that is true, Mr Chairman. In any group anywhere, it does not matter what the social group or demarcation might be, there are always going to be some people who are not prepared to abide by the rules or the objectives, whatever they happen to be. We still get drink drivers, we still get people doing the wrong thing in a wide range of areas. The fact that people within the hunting community have done that and continue to do that is not questioned, there is too much evidence to substantiate that, but it is already happening and it has been happening for a long time and it will probably continue to happen regardless of

¹⁶⁴ Submission No 9, Mr Pat Daniel, Southern Region Pig Catchers Association.

the law unless the law is enforced and it is the position of the association that a structure be implemented to see that law enforced.¹⁶⁵

5.78 Section 55 of the *Game and Feral Animal Control Act 2002* will introduce an offence of releasing animals for the purpose of hunting. A maximum of 50 penalty units will apply to a person who releases a game animal into the wild for the purpose of hunting the animal or its descendants. While the establishment of this penalty acknowledges the significant adverse impact of this practice by some hunters, it is apparent that effective enforcement will be the key to it achieving its objective.

5.79 The Chairperson of the Newrybar Swamp Feral Pig Management Committee related to the Committee some of the difficulties encountered in trying to curb illegal activity:

Four-wheel drives turn up in the middle of the night with spotlights and their dogs. They get out, then they go ranting and raving through the bush and they can never catch up with them [the dogs]. Because they are coming down at all sorts of hours of the night then take off, they are not able to get registration details or anything like that. As soon as anybody turns up they are off. Landholders are really keen to try to stop that kind of trespassing. They are seeking the assistance of local police to do that...We know that feral pigs are transported and illegally dumped in our area. At the end of last year in Toonumbar National Park two boars were released. Trapping is currently underway to try to trap those two animals. No feral pig population is known to be anywhere near that area. That is a real concern to us.¹⁶⁶

5.80 Mr Lewis Hathway of Mullaley wrote to the Committee about his problems of unauthorised shooters trespassing on to his property to shoot pigs. He wrote suggesting that the commercial exploitation of feral animals for monetary gain be discouraged, and:

We have the dilemma of unauthorised entry to our property by people who catch adult pigs to be sold. The smaller ones are of no commercial value so they are not eradicated. The popular method of catching pigs is with dogs. This disperses mobs of pigs and reduces the effectiveness of trapping pigs.¹⁶⁷

5.81 The Committee heard further evidence of dogs that are used in pig hunting being left behind and themselves becoming part of the feral animal problem:

It is a problem. I look at it in two ways. Pig hunting is a great release for young blokes in town. First, it gets them out of town and they do not seem to get into trouble when they are chasing a few pigs. Second, a certain cult of people chase pigs. The worst example of pig hunting is when the fellows who do not use dogs cut off the ears of the pigs so that the dogs cannot get them. The pig-hunting cult is pretty ordinary. Some pretty ordinary people are involved. A lot of the dogs that turn up are dogs out of pounds in Canberra, Sydney or Cooma. Some people who release their dogs when they are chasing pigs never see those dogs again. Some professional shooters who turn up have dogs with radio collars on them. Those dogs are pets or companion animals. They value those dogs and they ensure they

¹⁶⁵ Evidence of Mr John Mumford, Chairman, Game Management Council of NSW, 26 March 2002, at 58.

¹⁶⁶ Evidence of Ms Lisa Wellman, Chairperson, Newrybar Swamp Feral Pig Management Committee, 3 April 2002, at 33.

¹⁶⁷ Submission No 88, Mr Lewis Hathway, Mullaley.

never leave their dogs behind. But there is a group of people who, unfortunately, leave their dogs behind.¹⁶⁸

5.82 The practice of illegal hunters removing the ears of pigs to ensure a source of hunting stock was outlined in a recent media article:

These illegal hunters, far from helping to eradicate the destructive, feral pests, are being accused of deliberately stocking forests and national parks with pigs.

When pig dogs catch prey for their owners, they drag the boars and sows to the ground by their ears. The restrained pig is then either shot or has its throat cut.

Hunters wanting to establish populations of pigs in coastal areas, however, catch piglets in the outback, cut off their ears and release them closer to Sydney.

The theory is that the earless pigs are harder for the dogs to catch and form core-breeding colonies. Their offspring provide a bountiful supply for hunters.¹⁶⁹

5.83 The release of pigs into the wild close to urban and residential areas increases the risk of exotic disease. The situation in the Ballina area was explained to the Committee:

One of the main concerns to the [Newrybar Swamp Feral Pig Management] committee is the proximity of the feral pigs to the urban areas, which are quite substantial in terms of population, and their proximity to the regional airport.

There are a number of services that operate between Sydney and Ballina on a daily basis so there are quite a lot of visitors and people who are using that facility. They are also around the waste management facility which is a burial tip so there are exposed areas and pigs frequent that area. This particular site in New South Wales is a priority because of the location of the tip, the airport and the eastern seaboard. Vessels may pass through on the ocean side and the establishment of foot and mouth disease as well as other diseases is of a very high concern to all of us. This has been raised particularly with the New South Wales feral pig coastal task force. I understand in my position that the Ballina site was one of the high priority sites for the whole of New South Wales with regard to the establishment of foot and mouth disease.

...The other thing we wanted to try to encourage them [residents] to do was to cover their compost heaps. In extremely wet periods when pigs were traversing some of the residential areas, they were eating out of people's compost heaps. It was a really high threat. The chance of something establishing was potentially very high. We have put together a brochure, which is in print at the moment...It will go out to all the ratepayers within the study area to advise them of what they can do to help us to reduce the risks of disease, and also safety, helping us to do the best job we can in the area.¹⁷⁰

¹⁶⁸ Evidence of Mr Michael Green, Director, Cooma Rural Lands Board, 7 February 2002, at 16.

¹⁶⁹ "Ears hacked off in bloody boar war" in *The Sydney Morning Herald*, 3 August 2002.

¹⁷⁰ Evidence of Ms Lisa Wellman, Chairperson, Newrybar Swamp Feral Pig Management Committee, 3 April 2002, at 30-32.

- 5.84** The Committee is concerned at these reports of the actions of some recreational hunters who engage in “pig dogging”. Not only do these actions run contrary to the objective of feral animal control, at times they have also directly affected the effectiveness of local control activities and increased the risk of exotic disease outbreak.
- 5.85** The Committee notes that the *Game and Feral Animal Control Act 2002* provides for the Game Council to promote responsible and orderly hunting of game animals and certain pest animals on public land. Section 22 will provide that game-hunting licences will be subject to such conditions as are prescribed by the regulations. Section 24 provides that the Minister is to approve a code of practice for the holders of game hunting licences.
- 5.86** The Committee believes that the problems and risks posed by illegal pig doggers are too great to ignore. In addition the Committee believes that the use of pig dogs is not the most humane method of control appropriate to the species.

Recommendation 13

The Committee recommends that, as an exotic disease preventative measure and in the interests of effective and humane feral animal control, the Minister for Agriculture take action to enforce a total ban on the practice of pig dogging and the illegal movement of pigs.

Trapping

- 5.87** Trapping is an important component in any feral animal control campaign. Small traps have proved to be especially useful in controlling ‘rogue’ wild dogs that have become bait shy and continue to attack farm stock. Due to animal welfare concerns, steel jawed traps are now prohibited and have been replaced with soft-jawed traps. In relation to the trapping of problem dogs, Mr Davis of NSW Agriculture explained:

It is very important for individual problem dogs. Once you get a dog out there in amongst the sheep and it is killing, baiting is not generally a useful approach. It is often almost impossible to find the dog to shoot the dog. Trapping can be a very important method in those situations. There are odd dogs that cannot be shot or cannot be poisoned, even if those things would otherwise be possible for another dog. It is very important.¹⁷¹

- 5.88** Mr Timothy Russell, a dog trapper, explained to the Committee:

Usually my round could be seven or eight traps but if it is a bigger area I could go in with 12 traps. I select the areas very positively. I do not need many traps at all. As far as checking them is concerned, by law you have to go round every day now

¹⁷¹ Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 11.

anyway. But the thing with the dog is that they run on a pattern, and the pattern is that he might come in and kill every two days or he might come in once a week or once a fortnight. That makes it very difficult for me as a professional dogger. I have so many restrictions on me. I cannot go back into the park any more than four kilometres whereas the dog can go back 10 kilometres or 15 kilometres. I have to wait for him to come back. I am not allowed to go in after him, so he has got all the advantages behind him.¹⁷²

5.89 In relation to non-target species being caught in a trap, Mr Russell noted:

That issue is very close to my heart, the non-target species. As a professional dogger, I take specific care to avoid the non-target species. A good professional dogger knows how to go about setting up to avoid the non-target species.

You have to select your site. If you want to set up in a tree and there is a possum using that tree, what is the point in it? You would pick a better site. You have to be careful around waterways and various other areas where animals are tracking such as wallabies and whatever else. The telltale signs are there, so one takes particular notice and care to avoid the non-target species. It is important to me to go out with a couple of traps, not a lot, and spend all day. You might only get two, three, or four traps set, but you really have to pick a special site where you are going to pick up a dog whereas fewer traps are less likely to pick up non-target species anyhow. It is a bit of a specialty, how you go about it.¹⁷³

5.90 Questioned on the total number of trapped animals, what proportion would be dogs, Mr Russell replied:

I hope to think it would be 95 per cent dogs. [in relation to the non-target species caught if they can then be safely released] Yes, particularly with the rubber-jaw traps, yes.

... The wombat is the most difficult of the whole lot. They are curious. They cannot help themselves. They have to come and have a look. Most times they will spring a trap before they get caught and normally they are not a problem. They are easily released. It does not really have much effect on them.¹⁷⁴

5.91 The trapped wild dogs are then shot, resulting in instantaneous death. Asked if trapping and shooting were the most effective, humane way of controlling unwanted dog populations, Mr Russell agreed.

5.92 The Committee heard evidence that the skills of trapping and on the ground pest control work are slowly disappearing from the community. Mr Peter Southwell, Deputy Chair, Yass Rural Lands Protection Board told the Committee:

I believe that we are facing a crisis at this point in time in training people who can do work on the ground. We need a fully funded training course for our wild doggers or pest animal officers. These people can be employed across a wide area. They can be employed in forestry, National Parks and in Rural Land Protection

¹⁷² Evidence of Mr Timothy Russell, Primary Producer, Adaminaby, 7 February 2002, at 64.

¹⁷³ *ibid.*

¹⁷⁴ *ibid.*, 65.

Boards. If we do not do something about training in the next five or six years we will lose people like Bill. We will lose their skills and those skills will not be passed on.¹⁷⁵

5.93 Mr Davis of NSW Agriculture explained that his organisation has commenced a formal training program for new trappers:

... the old trappers are getting older. NSW Agriculture has recognised that. We participate in the South-East Wild Dog project. Part of the objective of the project is to train new trappers. We are currently on our third trapper. But we do not put new trappers with old ones, we try to do it a bit better than that. We actually give them some training in pest animal management technology...

...It is the experience and skills that catch the dog. It is having the whole suite of information behind you as to when to trap, when to poison, all those sorts of things, and some understanding of dog behaviours and things like that. We do not just put trappers out with a single old trapper. The new ones go out with a whole heap of different old trappers. We try to give them broad experience.¹⁷⁶

5.94 The Committee notes the negative consequences if the skills of trapping animals such as wild dogs are left to die out of the community, and considers it vitally important that training programs for trappers be maintained and promoted.

Recommendation 14

The Committee recommends that NSW Agriculture investigate developing its feral animal trapping training program into a formal course in conjunction with NSW TAFE.

The Committee recommends that National Parks and Wildlife Service, State Forests, Department of Land and Water Conservation and the Rural Land Protection Boards seek to employ additional trappers, particularly in problem areas such as the Monaro region.

5.95 The Committee notes and endorses the recent practice of the National Parks and Wildlife Service of providing Rural Lands Protection Board licensed dog trappers access into National Parks for the purpose of pursuing and destroying identified feral dogs responsible for attacks on domestic livestock from adjoining agricultural land.

¹⁷⁵ Evidence of Mr Peter Southwell, Deputy Chair, Yass Rural Lands Protection Board, 7 February 2002 at 37.

¹⁷⁶ Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 11.

Mustering

5.96 Large pest animals such as feral horses and goats can be mustered, which has the advantage that the animals can be sold. Mustering can be carried out by horseback, motorbike or helicopter, or by a combination of both aerial and groundwork.¹⁷⁷ NSW Agriculture notes that the mustering and harvesting of goats continues to represent the most important control over current goat populations but will not succeed in eradicating them.¹⁷⁸

5.97 Dr Tony English of the Faculty of Veterinary Sciences, University of Sydney, was commissioned to produce a series of reports for the Minister for the Environment.¹⁷⁹ In regard to the mustering of horses in national parks, Dr English stated:

This is likely to be the most commonly utilised method of removing horses from national parks, as long as aerial culling is banned. There are a number of prerequisites for success:

1. Appropriate terrain.
2. A good knowledge of horse behaviour and movement patterns.
3. Suitably experienced local horse riders who are capable of finding and bringing feral horses into an enclosure.
4. Well-sited yards and wing fences designed to expedite the movement of horses into yards.
5. Possible use of helicopters and/or motor cycles for part of the mustering process, depending on terrain and vegetation.
6. Possible use of 'coacher' horses to assist in running mobs into the yards.

When well planned, suitably resourced and properly conducted this method has the potential to capture significant numbers of feral horses. Once the horses are captured there is still the issue of handling them, and of their transport to a vehicle for transport away from the site – whatever their destination. Strict application of the Code of Practice should minimise the potential for animal welfare concerns during all stages of this process.¹⁸⁰

5.98 Under the direction of the draft *Wild Horse Management Plan for the Alpine Area of Kosciuszko National Park*, the National Parks and Wildlife Service is trialing a variety of methods to remove horses. This includes trapping, roping and mustering using horse riders. The first 'batch' of feral horses has recently been removed. *The Sydney Morning Herald* reported:

Once wild bush horses, the brumbies are more like mild bush horses as a result of the care, patience and attention of Kerry Rayer and Brian Seears..

¹⁷⁷ Olsen,P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 61.

¹⁷⁸ Submission No 115, Dr Regina Fogarty, NSW Agriculture, at 31.

¹⁷⁹ English,A.W. *A Report on the Management of Feral Horses in National Parks in New South Wales*, ND, at 5.

¹⁸⁰ *ibid*, 7.

... “They’re not aggressive, nasty horses,” says Ms Rayer... “You get addicted to the feeling you get when they first come in...They’re in such poor condition. But within no time at all, with a bit of TLC, they’ve become quite magnificent horses...People keep saying ‘you’re going to have to start selling them’. But that’s going to be the hardest part. I don’t think I’ll ever let them go completely.”¹⁸¹

5.99 The issue of what to do with horses once mustered or trapped and removed from a national park was canvassed by Dr English. He noted:

Some feral horses that are captured will be taken for adoption and used as saddle horses or pets, but experience both here and elsewhere suggests that this will apply mostly to young horses. ... The fact is that a majority of captured feral horses will be transported to abattoirs for slaughter for pet food, and those in the community who are passionate advocates of mustering rather than shooting should at least think about the animal welfare implications of that approach.¹⁸²

Exclusion

5.100 Fencing has been the most common method to exclude pests from an area since early European settlement. There are many types of fence used to exclude pests, including: conventional stock fencing; electric fencing; and purpose built fences to protect native animals in private zoos. Olsen notes that probably the best-known fence in the world is the Dingo Fence that stretches from Queensland through New South Wales and across South Australia to the Great Australian Bight – 5614 km in total length.¹⁸³

5.101 NSW Agriculture notes that dog proof fencing is expensive but effective if well maintained.¹⁸⁴ The Committee heard evidence supporting the boundary fencing of national park estate, in an attempt to stop feral animal attack on agricultural areas. For instance, Mrs Susan Litchfield of the Monaro Landholders Wild Dog Committee stated:

I recently spoke to a respected adviser to the National Parks and Wildlife Service who believes that the only solution is to dog-fence the boundaries of all declared national estates. I agree with this proposal because good fencing is the key to good-neighbour policy. I ask that the citizens of New South Wales pay a tax levy to boundary fence all national parks. As national estate neighbours, we insist on the right to trade, that is, to run livestock as a living, without interference from wild dogs.¹⁸⁵

5.102 Dr Fleming of the National Parks and Wildlife Service noted in regard to wild dog control:

The important thing is that you have to combine those techniques. None works in isolation. Fencing is part of it in special areas. It has been suggested that maybe

¹⁸¹ “Challenge to tame Snowy brumbies” in *The Sydney Morning Herald*, 25 June 2002.

¹⁸² English, A.W. *A Report on the Management of Feral Horses in National Parks in New South Wales*, ND, at 5.

¹⁸³ Olsen, P. *Australia’s Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 62.

¹⁸⁴ Submission No 115, Dr Regina Fogarty, NSW Agriculture, at 27.

¹⁸⁵ Evidence of Mrs Susan Litchfield, Secretary, Monaro Landholders Wild Dog Committee, 7 February 2002, at 29.

one solution is fencing of the whole of the reserve estate. I think that costs will beat that—not just the costs of erecting those fences but the very large costs of maintaining them so that they actually continue to provide effective barriers. Apart from that, the geography will be a problem. In some areas, it will simply be impossible to fence. But fencing is certainly one part in some areas in a range of strategies.¹⁸⁶

Biological control and anti-fertility agents

5.103 Olsen defines biological control as: “the use of one organism, such as an agent of disease, to control another”, whilst anti-fertility agents aim to limit the reproductive success of pests and hence reduce their numbers. It is noted that the release of disease and fertility control are often suggested to be the ultimate answers to pest problems – considered low cost, long term and in some cases a humane alternative to conventional pest control. However, Olsen notes that these hopes are seldom realised, and that in reality the release of diseases to control pests is rarely the full solution.¹⁸⁷

5.104 The release of the myxoma virus in 1950, which causes myxomatosis in rabbits, produced a spectacular reduction in rabbit numbers in the early 1950s. NSW Agriculture submitted:

... On average, the number of rabbits in higher rainfall areas may be 5% of pre-myxomatosis levels while in arid areas the figure may be around 25%...

The rabbit and the myxoma virus now seem to have reached a stable ecological equilibrium, but myxoma virus remains a very effective biological control agent which, despite this equilibrium, helps minimise the number of rabbits otherwise recruited to the breeding population. Recent work ... indicates that removing the influence of myxoma virus can result in a ten-fold increase in rabbit numbers over a three-year period..

Like many serious animal diseases, myxomatosis can affect the welfare of individual rabbits and this is always an important issue. Equally important are the catastrophic mortalities (due to starvation and thirst), afflicting uncontrolled rabbit populations during drought.¹⁸⁸

5.105 The release of rabbit calicivirus disease (RCD) from its trial site on Wardang Island in South Australia in 1995 has also initially reduced rabbit numbers by about 90% in many parts of inland Australia. Rabbit populations in inland areas fluctuate but generally remain at 10% to 15% of pre-RCD density. In the more temperate parts of Australia RCD induced declines in rabbit populations have been variable with some remaining relatively unaffected. RCD is not considered to represent a significant welfare issue for rabbits as the virus is particularly virulent and causes rapid death.¹⁸⁹

¹⁸⁶ Evidence of Dr Anthony Fleming, Director, Southern Region, National Parks and Wildlife Service, 7 February 2002 at 42.

¹⁸⁷ Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 65.

¹⁸⁸ Submission No 115, Dr Regina Fogarty, NSW Agriculture, at 17.

¹⁸⁹ *ibid.*

5.106 The Cooperative Research Centre for the Biological Control of Pest Animals is investigating a range of novel biotechnological solutions to feral animal control. Dr Peacock, Chief Executive Officer of the Centre told the Committee:

...we search for means of blocking reproduction or stopping the reproductive cycle of feral animals. The research centres on proteins that coat the egg released from the ovary of the female called zona pellucida proteins and these are integral to the binding of the sperm with the egg to cause reproduction. What we do is immunise animals, that is with a vaccination against their own proteins, and cause reproduction to be blocked. It has a potential for use on all mammals. It is a humane method of control; it is also highly novel. It is also a long-term research goal, it is not around the corner.

We concentrate on three species: The mouse, the rabbit and the fox. A good mouse plague costs this country about \$150 million in lost production and we get a good mouse plague about once every four years in Australia. They are mainly confined to eastern Australia, you do not see a mouse plague in the west too often. That work is largely funded by the Grains Research and Development Corporation and we would hope that that is our lead product and that we would be in field trials in 12 to 18 months' time, all going well.

The rabbit is more difficult. We have a major research milestone at the end of this calendar year we have set ourselves to see whether we go forward with research into the rabbit. However, we can cause infertility in 80 per cent of rabbits that we inject with these proteins. When that protein is carried by a virus, the myxoma virus that causes myxomatosis, we only get about 25 per cent infertility, so our research goal is to try and control populations. If we get anything from 60 to 80 per cent on reproductive loss we will control populations of animals, so if we could get up to the level that we get with an injectable, we potentially could control rabbit populations. The rabbit is a poorly studied species in terms of its reproduction, oddly enough, so that is what causes us some problems in the research phase.

The other main species we concentrate on is the fox and we have made some significant breakthroughs with the fox. We have major issues in terms of cross-over with dingoes and domestic dogs, of course, with any control method that we come up with and so we only concentrate on a bait delivered infertility method there and we are probably four years away from field trial in novel methods of fox control.¹⁹⁰

5.107 The Committee notes the importance of the work of the Cooperative Research Centre and supports their endeavours to produce a vaccine to render certain feral animals infertile. Nonetheless, it is recognised that application of these techniques are many years away, and that significant feral animal control work must be applied using currently available techniques.

¹⁹⁰ Evidence of Dr Anthony Peacock, Chief Executive Officer, Cooperative Research Centre for the Biological Control of Pest Animals, 26 March 2002 at 26.

Use of alpacas, llamas and guard dogs to protect flocks of sheep

5.108 A novel and potentially promising method of minimising wild dog predation of farming stock is the use of alpacas and llamas. Ms Glynda Bluhm, an alpaca and llama producer, explained to the Committee the role that these animals may play in the protection of sheep and other stock from feral animal predation.

...there is a difference between alpacas and llamas although it seems that most people think that they are the same thing. An alpaca stands about five feet and a llama stands about six feet. An alpaca weighs approximately 60 kilograms or 70 kilograms whereas a llama weighs approximately 150 kilograms to 200 kilograms...

One of the things that became very apparent early in the piece was that the alpacas and llamas are extremely keen to chase foxes, dogs and, I have no doubt, dingoes, if they are around. They have been known to kill at least foxes. They are happy to protect their own species but the good news is that they are happy to protect sheep, dare I say goats and deer. I was thinking of domestic ones, not feral ones. I have heard of them attacking cats and other animals as well. I imagine that would not be feral cats because they probably would not be fast enough for a feral cat, I would not think.

...To my knowledge there has not been a study done in Australia but there is any amount of anecdotal evidence about alpacas and llamas chasing dogs and foxes.

...I have my doubts that they would stand up to a pack of dogs. I have my doubts that anything could stand up to a pack of dogs, except a gun. I do not think that much else would.¹⁹¹

5.109 Ms Bluhm explained how alpacas and llamas deter predators:

Their attitude towards predators is something that is quite interesting. They tend to eyeball predators—for instance, a dog or a fox—and if that does not work, they tend to scream at them. They call it the alarm call. They will give chase and they will stamp on them and they will swing their necks at them, so there is a variety of things that they do. Not all of them do every one of those things, of course. A study was done in America and that was for their main predator which is coyotes. Llamas were the topic of the study, not alpacas, and that was very effective. It stated that predation was reduced from 11 per cent to 1 per cent.¹⁹²

5.110 Ms Patricia McRae, a grazier at Wollomombi, noted about the use of alpacas or llamas as 'guard dogs'

Somebody had suggested that perhaps we needed some alpacas, which are thought to keep dogs away from sheep. A neighbour got two and put them out with a mob of sheep. He said that they were pretty to look at and great fun but that they were fairly ineffective. You would probably need a mob of alpacas as big as the mob of sheep for them to be effective. We also looked at the Maremma dogs....they

¹⁹¹ Evidence of Ms Glynda Bluhm, alpaca and llama producer, Sutton, 7 February 2002 at 58.

¹⁹² *ibid.*

would be affected by any 1080 baiting program we might have on the property.”¹⁹³

5.111 In its submission NSW Agriculture noted that a novel and promising method of minimising wild dog damage is the use of sheep-guarding dogs. However, NSW Agriculture further noted that this practice introduces a range of additional management considerations (such as their susceptibility to baiting programs) and will not be a panacea.¹⁹⁴

5.112 The Committee was advised that while there is some anecdotal evidence of land-owners having success using alpacas, llamas and maremma dogs, and that this could possibly provide a non-lethal answer to reducing feral animal damage to livestock. However, it was also further advised that little or no research by way of trials had been conducted in Australia. The Committee is conscious that it itself has noted that overall funding of feral animal control programs is currently below requirements and that what funds that are available must be used judiciously.

Recommendation 15

The Committee recommends that NSW Agriculture consider conducting field trials to research the effectiveness of alpacas and llamas and guard-dogs as guardians of farming stock.

¹⁹³ Evidence of Ms Patricia McRae, grazier, Wollomombi, 3 April 2002 at 19.

¹⁹⁴ Submission No 115, Dr Regina Fogarty, NSW Agriculture, at 26.

Chapter 6 **The development of strategic, integrated, regional feral animal control programs**

Feral animals tend to be very mobile species and do not respect property boundaries. Effective feral animal control therefore requires cooperative programs between landholders on a regional basis. Without cooperative regional programs, isolated feral animal control programs are likely to waste both time and resources as feral animals will simply re-invade cleared areas. This chapter looks at:

- The development of strategic programs rather than reactive feral animal control.
- The integration of programs across communities and land tenures.
- The most appropriate institutional mechanism to coordinate feral animal control State-wide.

Development of strategic feral animal control programs

6.1 It was argued in many submissions and evidence to the Committee that feral animal control tends to be reactive ‘crisis management’ rather than according to any strategic plan. For instance, the Murray Rural Lands Protection Board, in preparing and adopting a strategic plan in early 2002, noted the current situation:

Current control [of vertebrate pests] programs are generally limited to uncoordinated single property crisis management. These programs tend to be effective in reducing pest numbers for a short term but numbers escalate quickly and within two seasons return to pre-campaign levels.¹⁹⁵

6.2 A Tumbarumba Shire Council representative described historical feral animal control programs:

The control measures, historically, have been reactive. Again, this is why we support the work of the feral animal working group to get a co-ordinated approach to control.¹⁹⁶

6.3 Mr Geoffrey File of NSW Agriculture noted the following:

...the main motivation for controlling pest animals is to prevent the damage they cause. This results in a reactive climate in which the level of pest control waxes and wanes in line with perceived damage. A more strategic approach is required to deliver better pest animal control and in turn prevent the long-term agricultural and environmental impacts of pest animals.¹⁹⁷

¹⁹⁵ Murray Rural Lands Protection Board, *Pest Animal and Insect Function Management Plan*, 2002.

¹⁹⁶ Evidence of Mr Brent Livermore, Manager, Environmental Services, Tumbarumba Shire Council, 7 February 2002.

¹⁹⁷ Evidence of Mr Geoffrey File, Executive Director, Regulatory Services, NSW Agriculture, 25 March 2002.

6.4 Olsen refers to this reactive management as crisis management, and writes:

All too often farmers and reserve managers undertake pest control only when the pest animals or their damage become too obvious to ignore; this is crisis management. There is no clear objective for the control other than to kill pests and control efforts are largely wasted because the damage has already been done. Crisis management is not a desirable management strategy.¹⁹⁸

6.5 Mr Dean Wheeler, a Noxious Animal Control Ranger of the Hunter Rural Lands Protection Board, noted some of the major causes of feral animal control failure:

- Control measures that are undertaken are nearly always reactive when the pest in concern is creating a considerable financial or environmental impact.
- Control measures are rarely followed up with any clean up of residual feral populations remaining after the initial, larger control program has been completed.¹⁹⁹

6.6 It is clear to the Committee that while reactive management may help reduce an immediate threat, such as dogs attacking sheep during the lambing season, it is not a long-term solution. While many submissions to the Inquiry noted the importance of strategic feral animal management, it was not clearly articulated what this involves. Olsen describes the strategic approach to feral animal management as follows:

- Define the problem in terms of alleviating the damage caused by the pest (key questions include: who has the problem; where is the problem; how severe is the problem; will the problem change with time, ie decrease or increase?).
- Determine the objectives of the pest management plan – these should be clear and aimed at reducing pest animal damage to an acceptable level, as well as measurable and time-limited.
- Identify and evaluate the management options and develop the management plan – the following factors need to be considered: the level of current and future resources available for pest control; the reduction required in the pest population to achieve the desired reduction in damage; and the availability and practicality of control techniques.
- Implement the management plan – in many cases a collaborative group approach is more effective than individual action.
- Monitor progress and evaluate the results against the stated objectives – operational and performance monitoring and evaluation are essential, and

¹⁹⁸ Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 100.

¹⁹⁹ Submission No 70, Mr Dean Wheeler, Noxious Animal Control Ranger, Hunter Rural Lands Protection Board.

provides information that can be used to improve the effectiveness of the control strategy.²⁰⁰

- 6.7** It is recognised that moving from a reactive to a strategic feral animal control plan is going to take both time and resources. The Committee is encouraged that the need for a strategic approach to feral animal management has been recognised as a necessity by land management agencies. The Committee also notes that some strategic planning has begun to take place. For instance, Mr Steve Orr, Chief Executive Officer of the State Council of Rural Lands Protection Board told the Committee:

One of the first tasks of the committee and boards under the new Act was to implement and formalise the adoption of yearly pest animal and insect management plans and that was for each board district. Pest animal management planning is not a new concept in the board system by any means, but it was more a formal recognition of the minimum planning structure required for all boards and with input from all boards. Planning in the board system was recognised and aimed at being able to identify and clarify what was to be accomplished in pest management in a particular timeframe and outlining how it was to be achieved. It is also to work towards a more proactive pest management. It is there to increase board and staff accountability to each other and to the ratepayers ...; to improve staff resource efficiencies; to demonstrate the boards' understanding of other legislation that impacts on pest animal management and, over time, to facilitate the progression to pest animal planning on a regional basis.²⁰¹

- 6.8** Similarly, the fox threat abatement plan is another good example of the development of a strategic feral animal control program. Mr Brian Gilligan, Director-General of the National Parks and Wildlife Service noted:

I think it is true to say that the fox threat abatement plan is an excellent example of the sort of collaborative, strategic approach to feral animal control that we aspire to.²⁰²

- 6.9** Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture indicated to the Committee how the adoption of strategic control programs at a regional level is essential to improve feral animal control. He stated:

The first is that any significant improvement over our current level of pest animal control will require adoption of strategic control at a regional level. If I can use feral pigs as an example,... the regulatory approach creates a reactive pest control climate. This results in decreased control during tough seasons when numbers are low and land-holders' time and resources are concentrated elsewhere—things like drought feeding, agistment, and so on—yet this is precisely the time when it is often easiest to control pigs and when the extra control would significantly lengthen the period needed for pigs to build up and return to high populations once good seasons return.

²⁰⁰ Olsen, P. *Australia's Pest Animals. New Solutions to Old Problems*. Bureau of Resource Sciences and Kangaroo Press, 1998, at 79.

²⁰¹ Evidence of Mr Steve Orr, Chief Executive Officer, State Council, Rural Lands Protection Board, at 2.

²⁰² Evidence of Mr Brian Gilligan, Director-General, National Parks and Wildlife Service, 3 April 2002, at 40.

An ability to implement strategic and regionally focused control at these times would see a significant improvement in feral pig control. The situation differs for each pest species involved and also between areas where pest species occur, but the same considerations apply. So a strategic approach is not new, and there are plenty of examples of strategic approaches being applied, but it needs to be better developed. It would involve planning and implementing management programs at a land system level across land tenures. It would need government agencies and rural lands protection boards and landholders to work together. It needs good co-ordination and constant valuation. It would need adequate resources and funding, and for the planning and implementation to be more directly linked to funding. At the moment that is not the case. There also needs to be flexibility to take into account seasonal and climatic opportunities. I have used the example of pigs but similar issues apply to other species. This strategic approach is routinely used to address a broad range of problems at regional and catchment levels—these programs are not new—but it is especially important that this approach is applied to mobile species such as pigs, foxes, wild dogs and feral deer.²⁰³

- 6.10** The Committee commends the development of those strategic feral animal control programs already in place, and notes the importance of having strategic programs for all feral animal species.

Recommendation 16

The Committee recommends that, until such time that a statutory Pest Animal Council is established, NSW Agriculture develop, in cooperation with National Parks and Wildlife Service, State Forests, Department of Land and Water Conservation, and Rural Land Protection Boards, integrated and strategic feral animal control plans, (similar to the fox threat abatement plan) for each of the major feral animal species, including rabbits, dogs, pigs and deer.

Need for integrated regional feral animal control programs

Benefits of co-operation

- 6.11** The Committee witnessed and received evidence about numerous regional cooperative feral animal control programs. Many submissions argued that the development of regional programs is the only effective way to control feral animals. This section:
- Highlights the arguments for the regional approach.
 - Documents some successful regional programs.

²⁰³ Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 3.

- Notes some difficulties of organising regional programs.

6.12 The submission of the Department of Land and Water Conservation noted:

It is important that the implementation of programs for research and control are based on cooperative and integrated approaches between government, industry and the wider community, in particular given the geographic and landscape links between estates managed by separate State management agencies.

Greater frequency of targeted partnerships between federal and State governments, partnerships between State-wide agencies, and implementation of regional programs also provide considerable cost-efficiencies and improvements in control outcomes.²⁰⁴

6.13 Similarly, Mr Gilligan, Director-General of the National Parks and Wildlife Service, told the Committee:

...the solutions to feral animal control in New South Wales lie at a regional level and the real challenge is to get the effective collaboration and co-ordination of resourcing at the regional level. I think the mechanisms are in place for that to happen. I think we continue to work to improve them, to refine them, and to enhance our involvement and collaboration there, but I think that is where the solutions are going to be found.²⁰⁵

6.14 The National Parks and Wildlife Service submission noted the importance of cooperative feral animal control programs, and reported preliminary results of an internal audit of feral animal control programs:

Preliminary indications of that audit are that at least 70% of NPWS programs for 2001-2002 are, or will be, undertaken in cooperation with other parties. A significant number of pest programs do not impact on other parties because they are undertaken in remote areas of parks that can be many kilometres from neighbours.²⁰⁶

6.15 Ms Leonie Walsh, Operations Coordinator, National Parks and Wildlife Service, told the Committee:

We have a very strong focus on co-operative and integrated programs because they are seen to be the most effective and we employ some specialist and very experienced pest management staff whose job it is to work with the other agencies and our neighbours to develop the most effective programs.²⁰⁷

6.16 Sir Owen Croft, Director of the Armidale Rural Lands Protection Board, noted the importance of regional cooperation, and the role of Landcare groups. He told the Committee:

²⁰⁴ Submission No 116, Mr Joe Cummins, Senior Reserves Management Officer, Department of Land and Water Conservation, at 13.

²⁰⁵ Evidence of Mr Brian Gilligan, Director-General, National Parks and Wildlife Service, 25 March 2002 at 37.

²⁰⁶ Submission No 53, Dr Andrew Leys, National Parks and Wildlife Service, at 14.

²⁰⁷ Evidence of Ms Leonie Walsh, Operations Coordinator, National Parks and Wildlife Service, 3 April 2002 at 44.

Armidale's Rural Lands Protection Board has a very good record, particularly of working with National Parks. We spend a lot of time with National Parks and Forestry coming up with programs. This applies particularly to dogs and foxes. We have a program working with them. The biggest thing is preparation and education. Groups such as Landcare have a tremendous part to play. It is probably the best avenue we have because you have a group of like-minded people in a particular area. They know their land very well. They know the problems. From a rural lands protection board perspective, one ranger can deal with 20 or 40 people at the one time and set up programs.

That is the role that Landcare excels in. It could be nourished a lot more for that reason. ... Most of the Landcare people are very concerned about the environment and native species. ... Collaboration and co-ordination is imperative. You cannot do it as an individual. A lot of these pests cover vast territories. It is always an ongoing problem, but if you can do it on 100,000 or 200,000 acres or whatever, you can be effective. But if you do it as an individual it is a waste of time.²⁰⁸

6.17 Another example of the need for cooperative feral animal control programs is the Port Stephens Feral Animal Management Committee. The Committee was established around a specific need – in this case the management of koalas. Ms Walsh of the National Parks and Wildlife Service told the Committee:

A very important initiative that we are involved with in that area is the Port Stephens Feral Animal Management Committee. This co-ordinates co-operative programs by a range of agencies in and around the urban and semi-rural bushland areas. Agencies involved include the National Parks and Wildlife Service, State Forests, Port Stephens Council, the Native Animal Trust Fund, the RAAF, Hunter Water, sandmining companies and the University of Newcastle. The primary aim of those programs is to protect koala populations in and around those urban areas. That arose from some research that found one of the major causes of mortality in those population was dog attacks.²⁰⁹

6.18 The Committee heard a considerable amount of evidence about the development of cooperative wild dog management plans. Mr Peter Southwell, Deputy Chair, Yass Rural Lands Protection Board told the Committee:

The Brindabella and Wee Jasper Valleys Wild Dog and Fox Working Group was established as a result of the National Parks and Wildlife Service south-west slopes regional advisory committee's meeting which was held in Wee Jasper on 9 November 2000. The meeting with local landholders identified the need for a representative group of land managers across all tenures to effectively cost and implement wild dog control works in the valleys. The landholders identified a high level of support for a working group that not only would meet to formulate a plan but also would then directly oversee the implementation of the plan in the field. We were the ones who would oversee it right from the word go. The working group first met at Wee Jasper on Monday, 18 December 2000. The knowledge base was provided by the formation of a working group and allowed the following

²⁰⁸ Evidence of Sir Owen Croft, Grazier and Director, Armidale Rural Lands Protection Board, 3 April 2002 at 4.

²⁰⁹ Evidence of Ms Leonie Walsh, Operations Coordinator, National Parks and Wildlife Service, 3 April 2002 at 42.

issues to be accurately plotted on operational maps: historical locations of wild dog attacks, access routes and trails utilised by wild dogs, a review of the current operational area and historical control practices in those areas, proposed target areas for future control, and existing and potential wild dog habitats.²¹⁰

6.19 Mr Southwell explained to the Committee the benefits of the co-operative wild dog program, and the requirements to ensure its success:

I believe that one of the best programs that we have is improved relations on the ground between National Parks, State Forests, land managers and the RLPB... At this point in time, relations are excellent and co-operation is really good. I think this program will proceed very well. I refer now to the essential things that are required for the success of the Brindabella and Wee Jasper program. These include: realistic expectations of the working group or landholders. In other words, we cannot be unrealistic about what we think we can achieve. We must provide support for all land managers involved in the program. We also require continued funding and support from public land managers in that area.

Another essential issue includes adherence to guidelines. This includes bait burying at the right depths and all those sorts of things. Another issue is the minimisation of potential non-target species. We must keep that important point in mind. We also require resources to maintain and monitor transects. It is important that we know what is going to happen, what could happen and how we can change things to make them better. We also require balanced, positive and accurate media exposure. The media must be given the right picture. We do not need the wrong story going out; we need the right story of what is happening and what we are doing about it. Co-operative plans are the way to go in the future for pest animal control.

We require sound planning, sound funding and co-operation from all parties, including politicians and Treasury. It is important that Treasury becomes an understanding partner in this. Without funding the program will not work. I believe we can achieve a satisfactory result in the medium to long term.²¹¹

6.20 The Committee commends the development of these collaborative wild dog plans, and notes their successful implementation. A review of the Brindabella & Wee Jasper Valleys Co-operative Wild Dog/Fox Program for the 2001/2002 year is attached at Appendix 5.

Recommendation 17

The Committee notes the success of the 'Brindabella & Wee Jasper Valleys Co-operative Wild Dog/Fox Program' which has resulted in a 68% reduction in sheep losses in one year, and recommends that the Government consider extending these programs to other areas of the State..

²¹⁰ Evidence of Mr Peter Southwell, Deputy Chair, Yass Rural Lands Protection Board, 7 February 2002 at 35.

²¹¹ *ibid*, 37.

Problems of non-participation by landholders

6.21 The importance of coordinated feral animal control programs on a regional scale cannot be overstated. Feral animal control programs performed in isolation of other landholders are doomed to failure. Mr Andrew Phillips, Ranger, Northern Slopes Rural Lands Protection Board, noted the difficulty in organising large scale group feral animal control programs, and the resultant problems when some landholders refuse to join those programs:

The last aerial pig shoot the board held in the area was negated.... getting everyone involved is a problem. ...The main reason they did not become involved was expense. We have the authority and the power to compel all landholders to control feral animals, but they can use a loophole to say no to our attempts, and it is a vital one.

We need to be able to encourage those landholders to participate in-group control. The encouragement that is needed is finances. We need to be able to reduce the cost of aerial control, especially in pigs in this area, which is what we are talking about, to make it a viable proposition that landholders become involved. That shoot, in particular, was a successful one because we shot 1,300 or 1,250 pigs. But if we flew that same area the next day or the next week we would have shot another thousand. The fact that those people were not involved leaves a nucleus of breeding pigs, and really negates all of our attempts. Landholders around there who became involved were quite upset that the other landholders did not become involved, and they put pressure on us to make them become involved.

In our attempts to make them become involved we came across hostility. Besides the economic factor there are other factors as to why they do not become involved. It is not an easy process. To make it easier, we need everyone to be involved. But there are different reasons, and all different pest animals. There are different reasons. Rabbit groups are formed in a certain area and you will not get everyone involved in that area as well. The same with fox groups. With foxes you have 50 per cent sheep people and 50 per cent cattle people. Cattle people are not interested in baiting for foxes because foxes do not affect their livelihood. It is not an easy process to have everyone involved, but we need everyone involved.²¹²

6.22 Mr Phillips later noted in evidence:

Government policies are adequate to the extent that they do support us, I think. The policies that are in place are designed to help us and they understand that. What we would like to see ...is that if I organise an aerial pig shooting covering 40,000 hectares and I had a nucleus in the middle where ... [the non-participants] is that says no, I would like the power and the knowledge to be able to fly over that country, shoot and know that at the end of that shoot the expense would not fall into my pockets and that the land-holders who are underneath and who said no, for various reasons, would have no recriminations on my employer. I would like to cover that area to make it a viable shoot and I would like to be able to do it in a reasonable manner without any recriminations back on my employer, but in doing so make the rest of the shoot viable.²¹³

²¹² Evidence of Mr Andrew Phillips, Ranger, Northern Slopes Rural Lands Protection Board, 3 April 2002 at 4.

²¹³ *ibid*, 6.

6.23 Similarly, Ms Walsh of the National Parks and Wildlife Service told the Committee:

Feral goats are also an issue in the Northern Directorate and we tend to use aerial shooting fairly widely, particularly in rough terrain. This is a humane and cost-effective method when you are dealing with large remote areas or with low numbers of feral goats. ... Our pest management staff face a major problem in maintaining their control over feral populations because many of our reserves are surrounded by properties with significant feral goat populations but with very few active control programs. As a result those properties tend to become a source of ongoing infestation back into the reserves, which undermines the efforts of our pest management staff.²¹⁴

6.24 Mr Fergus Thomson, Director of the South Coast Rural Lands Protection Board, noted that his Board has feral animal control contracts with other government agencies and how this assists in regional planning. He told the Committee:

The South Coast board has been fortunate in that we have contract arrangements, as I said, with National Parks and State Forests. We also have arrangements with the Shoalhaven City Council, Eurobodalla Shire Council, Bega Valley Shire Council and the Department of Land and Water Conservation. The result of these unique arrangements is that we have developed extremely good working relationships with these bodies....

Under these arrangements the burden of the costs of our predator management and our feral animal control—which was a cost which was born totally by our ratepayers—is now one which is shared between our board and the other agencies. So we believe that is a win-win situation, not only for our ratepayers but also for the other agencies. Another benefit has been the acceptance by small landholders that not only are we involved in wild dog management; we are also very involved in environmental management. We are involved in the protection of little terns. We are seen as being a plus in the eradication of foxes and cats. So, as a manager of a large land area—our board has normally been seen to be the body responsible for or representing large land owners—we now have an affinity with those who have smaller blocks.²¹⁵

6.25 The involvement of landholders with small lots/rural subdivisions in feral animal control is important. However, evidence was given to the Committee about how difficult it was to involve them compared to those with larger landholdings. For instance, Mr Michael Thorman, Noxious Animal Control Ranger of Kempsey Rural Lands Protection Board told the Committee:

[in the area of]...Port Macquarie and Coffs Harbour. It is pretty well documented that there is a large influx of people coming into those areas. The highways from Sydney are a lot better than they used to be 10 years ago and people are moving here and buying land for rural lifestyles or holiday-type places. Quite a bit of land is held in speculation for future development. There are a number of people on those lands who are not traditionally farmers. They come from city lifestyles and have their own policies and ideals. They want to set their own lifestyles. Often

²¹⁴ Evidence of Ms Leonie Walsh, Operations Coordinator, National Parks and Wildlife Service, 3 April 2002 at 43.

²¹⁵ Evidence of Mr Fergus Thomson, Director, South Coast Rural Lands Protection Board, 7 February 2002, at 2.

their incomes are earned away from the farm, derived from an outside source. These people are extremely hard to bring into baiting programs. They see baiting programs in a very poor light.

The good side of 1080 baiting has never been advertised to people. They only see the bad side of it and the benefits are often never shown to them. These people will often have dogs of their own that they let roam freely. When they are approached on the matter they say that they have come up to enjoy the rural lifestyle. They believe that they have the right to let their dogs roam on their 30 or 40 acres but the dog impacts on wildlife and impacts on other people's income in the form of kills. These people just will not be involved with control programs. You cannot enforce the *Rural Lands Protection Act* on them simply because you are talking about a dog or a fox that is continually on the move. With rabbits you can see that the burrows are there so there must be rabbits. If it is a dog they say, "It is not my dog, it's your dog or the National Parks' dog." It is hard to implement programs on small acreage places when they are seen in such a bad light and there is no monetary loss to these people.²¹⁶

Potential solutions

6.26 Mr Terence Korn of the National Parks and Wildlife Service also told the Committee about some of the positives and challenges for organising regional cooperative feral control programs:

There are lots of good things happening in the co-operative sense, and that has happened over the past 10 or 15 years. Before I worked for National Parks I worked for NSW Agriculture, and I was the state-wide specialist in this area. I have seen the evolution of effective regional control programs for a variety of pest species developed over time, and also the establishment of the Pest Animal Council where there is now some state-wide effective co-ordination between the agencies and other major players. There are a substantial number of very effective, regional co-operative programs. ...

You need some people with some leadership and drive at a regional level to make those work effectively. If those people leave, the programs often collapse and you need someone else to pick that up and run with it. They are a challenge, but would like to finish on a positive note. I would like to say that the rural land protection boards, in particular, and the other agencies are significant, really good examples of effective pest control programs operating state-wide. I would not lose heart at all about feral animal control in the long term. It can still occur, but because of the changing political socio-economic scene over time it will always remain a challenge. It is a manageable one, provided that people at the regional level remain committed.²¹⁷

²¹⁶ Evidence of Mr Michael Thorman, Noxious Animal Control Ranger, Kempsey Rural Lands Protection Board, 3 April 2002 at 35.

²¹⁷ Evidence of Mr Terrence Korn, Director, Western Directorate, National Parks and Wildlife Service, 25 March 2002, at 45.

6.27 The need for this greater regional co-operation is demonstrated by the following comments of Mr Eric Davis, NSW Agriculture, in relation to pigs and dogs:

Both are highly mobile species for which effective control requires a strategic co-ordinated approach across all land tenures at a landscape level...

There is currently no process for either species that links planning to coordination and implementation of management programs with funding at a regional level and across land systems.²¹⁸

6.28 Mr Roger Anderson, Chairman of the Tumbarumba Shire Feral Animal Working Group recommended for the following solution for coordinating regional programs:

That Ministerial support be given for the formation of regional/district working groups, consisting of State Agencies and Private Land Owners for the purpose of developing integrated control programs and determining funding requirements and opportunities in those regions/districts.²¹⁹

6.29 The NSW Farmers' Association also recognised the need for another layer of planning for regional feral animal control. Ms Jacqueline Knowles of the Association told the Committee:

It is the opinion of our organisation that pest animal control has to be done on a regional basis. Rural lands protection boards essentially are made up of land-holders and land-holders often feel that they can have an important role to play in the direction that boards take. The rural lands protection board system is an integral party in integrated pest animal control at a regional level. In addition, there needs to be another layer of planning above the rural lands protection board level. In the southeast of NSW we have seen a conglomeration of rural lands protection boards get together and draw up a preliminary plan about control on a broad regional scale, as opposed to just a broad scale.²²⁰

6.30 The Committee believes the Pest Animal Council is the most appropriate vehicle for enhancing regional co-operation, but only if it can be strengthened with both legislative and financial backing. The creation of a fund to be administered by such a body was discussed in Chapter Four, the next section of this report considers the full role of an enhanced Pest Animal Council.

²¹⁸ Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 4.

²¹⁹ Submission No 32, Mr Roger Anderson, Chairman, Tumbarumba Shire Feral Animal Working Group.

²²⁰ Evidence of Ms Jacqueline Knowles, Senior Analyst, Conservation and Resource Management, NSW Farmers' Association, 25 March 2002, at 22.

Proposal for a statutory Pest Animal Council

6.31 There was general agreement during the inquiry for the need for the improved coordination of feral animal control State-wide. Mr Ron Smith of Tumut submitted to the Committee:

There are too many independent authorities (NPWS, State Forests, Land and Water Conservation, Rural Lands Protection Boards etc) all with their own agendas, going this way and that. In the long term barely maintaining the status quo.

The total problem is so great that it is time for total feral animal control to be brought under one body or separate bodies with the power to override some of the restraints over the existing organisations.²²¹

6.32 The South Coast Rural Lands Protection Board recommended that State-wide feral animal control be coordinated through the Board system. Mr Beamish, General Manager of the Board, told the Committee:

... As a rural lands protection board, we have the authority to use 1080 and we are also the authority for the control of pest animals. We should have overriding authority state-wide, and the structure should be within the rural lands protection board.²²²

6.33 As noted in Chapter Two, the Pest Animal Council, a non-statutory committee, is charged with the responsibility of coordinating feral animal control. Dr Leys of the National Parks and Wildlife Service noted:

The Pest Animal Council is made up of representatives from a number of organisations, and it can play a crucial role in co-ordinating the actions across the State. But it is the responsibility of the individual agencies to develop the strategic approaches within their lands, doing it in a collaborative way. If we come back to who is going to organise feral animal control in New South Wales, obviously NSW Agriculture is the lead agency and plays a crucial role, and so does the Pest Animal Council because it brings all those groups together. It brings all the public land managers together, it brings the animal welfare people together, it brings the rural lands protection boards and NSW Farmers together. They then all go back to their own organisations to do their work, but it does play a crucial role in co-ordinating them.²²³

²²¹ Submission No 26, Mr Ron Smith, Tumut, at 2.

²²² Evidence of Mr Beamish, General Manager, South Coast Rural Lands Protection Board, 7 February 2002, at 7.

²²³ Evidence of Dr Andrew Leys, Pest Management Coordinator, National Parks and Wildlife Service, 25 March 2002 at 37.

6.34 Ms Knowles of the NSW Farmers' Association noted some of the limitations of the current structure of the Pest Animal Council:

...It is the overarching State body for policy, yet it has no capacity to identify areas for priority funding or for there to be some whole-of-government approach to pest animal control. At the moment agencies do not necessarily work in silos when they are planning, but their administrative capacity to deliver on-plan is that they have to work very much within the silos of their agencies. The Pest Animal Council has broad representation of government, rural land protection board and land-holder interests. We see it as playing an integral role in integrated pest management.²²⁴

6.35 It was evident to the Committee that on a State-wide basis there is no 'master plan' to coordinate all the different organisations involved in feral animal control. In evidence before the Committee, Ms Helen Cathles, State Councillor of the Rural Lands Protection Board, indicated the potential benefit that could be drawn from such coordination:

The Hon. JOHN JOBLING: What in fact you have said to me is that the evidence and knowledge is out there?

Ms CATHLES: Yes.

The Hon. JOHN JOBLING: Everyone has it in their own little bailiwick, but there is no master plan.

Ms CATHLES: That is right.

Mr ORR: It is not integrated.

Ms CATHLES: And what you could do if that was integrated is huge.

The Hon. JOHN JOBLING: Has anyone moved down those lines?

Ms CATHLES: The resources have not been available. Everybody has been busy taking care of what they have to take care of. That is an extra resource thing that needs to be funded.²²⁵

6.36 The Committee notes the level of coordination of feral animal programs currently in place. Mr Davis of NSW Agriculture added:

There is perhaps more co-ordination than would be apparent just looking at it on that basis. But I would agree that that co-ordination could and should improve. That would get over some of the differences in policies and approaches and other things that also currently exist.²²⁶

²²⁴ Evidence of Ms Jacqueline Knowles, Senior Analyst, Conservation and Resource Management, NSW Farmers' Association, 25 March 2002, at 22.

²²⁵ Evidence of Ms Helen Cathles, State Councillor, Rural Lands Protection Board, 26 March 2002 at 13.

²²⁶ Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 7.

6.37 One consideration to improve feral animal control coordination is to make the Pest Animal Council a statutory body, and making it responsible for integrated pest management across the State. Asked if this would be a worthwhile proposition, Mr Joseph Cummins of the Department of Land and Water Conservation replied:

Yes, I represent the department on the Pest Animal Council..., and I am also on the Noxious Weeds Advisory Committee, which is a statutory body, and it seems to me that it would give that committee perhaps a more formal role or status, I suppose. They have written a pest animal control policy for the Pest Animal Council, it might as well be a sort of statutory policy, and there was a discussion about possible funding for the Pest Animal Council to coordinate some activities, and I certainly think that would work, so yes, I think that if it was an option that the Committee is considering it would be good.²²⁷

6.38 Asked if making the Pest Animal Council a statutory body would enhance the integration of pest management programs, Mr Cummins replied:

That would definitely be one of the principal achievements. I do believe that there is a lot of informal integration going on already....

...If I look at the sort of things that the Pest Animal Council has spoken about, we do meet when there are issues and there is a full book of issues when we do meet, but if they had a more formal co-ordination role, there would be more business I am sure. There would be more programs.²²⁸

6.39 Mr Davis noted the following in regard to making the Pest Animal Council a statutory body:

I think it would offer significant improvements over what we currently have and it would certainly provide a mechanism to link funding to planning, implementation and monitoring of pest animal control programs. It would certainly do that— independently of land system and land tenure, which would certainly be an improvement on what we have now.²²⁹

6.40 However, funding of such a ‘new’ body would be required. Mr Geoffrey File of NSW Agriculture told the Committee:

“At the moment there is no way that NSW Agriculture could fund that. It would have to be new money.”²³⁰

6.41 The evidence for approaching feral animal control from the regional perspective is overwhelming. The crucial issue is how to organise this. The Committee believes that the development of the wild dog control plans provide a model or blueprint for regional cooperation, and their success in the field validates the call for the development of more

²²⁷ Evidence of Mr Joseph Cummins, Senior Reserves Management Officer, Department of Land and Water Conservation, 26 March 2002, at 49.

²²⁸ *ibid.*

²²⁹ Evidence of Eric Davis, Program Leader, Vertebrate Pest Management, New South Wales Agriculture on 25 March 2002 at 18.

²³⁰ Mr Geoffrey File, Executive Director, Regulatory Services, NSW Agriculture, 25 March 2002 at 18.

regional planning. However, the Committee is concerned that much of this regional planning to date has been 'ad hoc' and the result of both landholder anger about a particular feral animal (for example dogs) and the desire of public agencies to find regional solutions. The Committee would like to see a much more structured process for this regional cooperation.

- 6.42** The Committee congratulates the members of the Pest Animal Council on the level of integration of feral animal control achieved to date. However at present the Council largely relies upon goodwill between agencies, meets infrequently and has no effective funding base. The Committee believes that now is an appropriate time to reassess the structure of the Council and to transform it into a statutory authority, meeting regularly, to, among other things, coordinate, fund, and promote feral animal control programs across the State.
- 6.43** The Committee believes this recommendation is fundamental to many of the other issues discussed in this report.

Recommendation 18

- (a) The Committee recommends that the Government introduce a Bill to make the Pest Animal Council a statutory body, responsible for coordinating feral animal control programs across the State.
 - (b) The Committee recommends that the Government establish a fund for feral animal control. This fund would be administered by the Pest Animal Council who would assist in the funding of appropriate feral animal control programs as identified in the regional planning process.
 - (c) The Committee recommends that one of the first functions of the statutory Pest Animal Council should be to develop the framework for effective regional feral animal control programs.
 - (d) The Committee recommends that the Government provide adequate financial and administrative resources to the statutory Pest Animal Council in order for it to fulfil its functions.
 - (e) The Committee recommends that one of the functions of the statutory Pest Animal Council should be to liaise with and coordinate feral animal control issues with adjoining States.
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Chapter 7 Future reforms: legislation, research and education

During the Inquiry there were several facets of feral animal control that were the subject of both criticisms and suggestions for improvements. These include:

- The declaration of feral animals as pests.
- Conflicting legislation.
- The need for research into feral animals.
- The need for public education programs about the damage caused by feral animals.

The Committee believes that the statutory Pest Animal Council, recommended in the previous chapter, is the main mechanism for pursuing these reforms.

Legislation and regulation

The declaration of feral animals as pests

7.1 As noted in chapter Two, the Minister for Agriculture may declare an animal a pest under the *Rural Lands Protection Act 1998*, and the pest may be subject to a pest control order. This requires landholders in the areas nominated in the order to fully and continuously suppress and destroy the pest. To date, three vertebrate animals are subject to a pest control order – wild dogs, feral pigs, and rabbits. In effect, all other feral animals are controlled on a voluntary basis.

7.2 Concerns have arisen about the few animals that have been declared as pests under the *Rural Lands Protection Act*. For instance, it seems remarkable to the Committee that the Government has gone to the lengths to prepare a State-wide Fox Threat Abatement Plan, yet foxes are not a prescribed pest under the *Rural Lands Protection Act*.

7.3 In relation to foxes the Rural Lands Protection Board noted in their submission:

Because present control activity is only voluntary the efficacy of such activities [fox control] is generally inadequate in the context of the overall fox population.

Foxes were declared noxious animals under the *Pastures Protection Act 1934* until about 1955. It has not been possible to ascertain why foxes were deleted from the list of noxious animals, but it may have been because foxes did not impact on all agricultural enterprises and so was not fair on those unaffected to be required to “fully and continuously suppress and destroy” foxes. (However, all landholders are

required to control wild dogs, but only stockowners would be affected by that pest from an agricultural point of view).²³¹

7.4 The Committee heard considerable evidence of the problem of deer. Mr Eric Davis of NSW Agriculture noted:

There is a possibility under the *Rural Lands Protection Act* to have deer listed as a pest species. The department produced a draft pest control for deer, but it has not yet gone to public consultation, so there are still a couple of steps to go there. There is an issue also with the *Impounding Act*. I will put the positive side first. The *Impounding Act* is designed to take account of the rights of people who own stock. If I own some livestock and they get out, I should not suffer the consequences that they are shot or destroyed just because a flood washed the fence out or something. The *Impounding Act* takes care of that.

The problem is that it also catches deer, but deer are not domestic stock. Basically they are farmed wild animals. They are not really domesticated stock. Once deer get out and about they cannot be mustered like domestic stock. You need specific expertise and special systems. It is quite expensive to muster deer. Getting an escaped deer back is not an option, yet the *Impounding Act* still applies. We are hoping that the rural lands protection order, a pest control order for deer when it comes through, if that comes through, will take care of that. If not, we will have to ask for the *Impounding Act* to be amended with respect to deer.²³²

Recommendation 19

The Committee recommends that the Minister for Agriculture give urgent consideration to declaring foxes, feral deer, feral goats and feral cats as pests, either State-wide or by specific regions, under the *Rural Lands Protection Act 1998*, following the required notice and consultation process.

7.5 Several submissions to the Inquiry also noted that legislation or regulation needed to be changed to ensure adequate fencing for farmed goats and deer. For instance, in regard to goats Sir Owen Croft submitted:

A very useful animal when controlled but until minimum fencing requirements are required by local Government and RLPB they will only become a greater pest.²³³

²³¹ Submission No 105, Mr Steve Orr, Chief Executive Officer, State Council of Rural Lands Protection Boards, at 15.

²³² Evidence of Mr Eric Davis, Program Leader, Vertebrate Pest Management, NSW Agriculture, 25 March 2002 at 10.

²³³ Submission No 114, Sir Owen Croft, Grazier and Director, Armidale Rural Lands Protection Board.

7.6 A Ranger for the Bombala Rural Lands Protection Board, Mr Graham Hillyer, also raised this issue:

Another problem that I think is emerging in a number of other areas—it is an issue of concern—is the deer problem. We feel that there should be tighter restrictions on deer farmers in respect of fencing. Perhaps there should be more legislation to ensure that they are held liable when deer escape or are let go. This is an emerging problem. I am sure you appreciate that that is happening quite a bit in the eastern areas of NSW.²³⁴

Recommendation 20

The Committee recommends that the Government investigate minimum fencing requirements for the control of farmed goats and farmed deer, to prevent their escape from farming enterprises.

Conflicting legislation

7.7 Two main areas of conflicting legislation were brought to the attention of the Committee. The first was the confusion between the *Native Vegetation Conservation Act* and the *Rural Lands Protection Act*. This was highlighted by Mr Stephen Orr, Chief Executive Officer, Rural Lands Protection Board:

...there is a degree of uncertainty as to the standing of our legislation and pest control orders. It is not exactly clear to us as to how our legislation relates to things such as the *Native Vegetation Conservation Act*. Indeed there have been some recent examples whereby regional planning processes in relation to the vegetation legislation have caused some confusion as to the relationship between the rural lands protection legislation and the native vegetation legislation when it comes to pest animal control. We believe that that confusion certainly needs to be cleared up and cleared up fairly quickly.²³⁵

... For example, the case whereby there is rabbit harbour under timber and someone is obliged under the *Rural Lands Protection Act* to control those rabbits under that timber, yet under the *Native Vegetation Act* there are controls placed on that individual in terms of what they can and cannot do in relation to that native vegetation. So there is potential for conflict between the two acts.²³⁶

²³⁴ Evidence of Mr Graham Hillyer, Ranger for the Bombala Rural Lands Protection Board on 7 February 2002 at 9.

²³⁵ Evidence of Mr Steve Orr, Chief Executive Officer, State Council, Rural Lands Protection Board, at 2.

²³⁶ *ibid*, 8.

Recommendation 21

The Committee recommends that NSW Agriculture, the Department of Land and Water Conservation, and the Rural Lands Protection Boards develop protocols to overcome any identified conflicts in legislation in regard to feral animal control.

7.8 The other area of conflict is where the *Rural Lands Protection Act 1998* and the *Wild Dog Destruction Act 1921* conflict with respect to the issue of the conservation of the dingo. The *Rural Lands Protection Act* requires pest species to be controlled on public land. Wild dogs, which include dingoes, are a declared pest species. However, an animal species cannot be declared a pest under the *Rural Lands Protection Act* if it is classed as threatened or protected fauna under the *Threatened Species Act 1995*. An application has been made to the Scientific Committee (the independent body responsible for determinations under the *Threatened Species Act*) to list dingoes as a threatened species. The authors of a paper presented to the 12th Australian Vertebrate Pest Conference argued that “such a listing would seriously limit control of all dogs and foxes and create direct conflict between conservation and agricultural production objectives”. A decision on the application to list dingoes has been deferred pending further information on the genetic purity and distribution of dingoes.²³⁷

7.9 A proposed solution to this problem was explained by the above-mentioned authors from NSW Agriculture and the National Parks and Wildlife Service:

Dingo conservation is most feasible in large reserves where further hybridisation with domestic dogs can be minimised. There is also less likelihood of dogs moving out of the core of large areas to attack livestock....The NPWS and State Forests NSW collectively manage about 8 million hectares of public land, parts of which are potentially suitable for this purpose.

The consultation undertaken by NPWS identified large areas of high quality dingo habitat on contiguous NPWS and State Forest NSW land, along with smaller areas of Sydney Catchment Authority and unoccupied crown land managed by the Department of Land and Water Conservation. These areas formed the basis of a whole of government submission proposing that wild dog control obligations within these ‘wild dog management areas’ would be met through agreed local management plans.

The *RLP Act 1998* requires public land managers to eradicate ... pest animals to the extent necessary to minimise the risk of damage to all land. The elements of this obligation contain legal uncertainty but the Act also allows this obligation to be fully discharged if the public land manager implements control measures that have been agreed by the RLPB for that district.

This effectively allows the option of ‘no dog control’ to become an acceptable method of meeting this obligation within the core of these “wild dog management areas”. It also allows all local stakeholders to have input into the wild dog control programs implemented outside the core of these areas.²³⁸

²³⁷ Davis, E. and Leys, A. “*Reconciling Wild Dog Control and Dingo Conservation Under New South Wales Legislation*”, Paper presented at the 12th Australian Vertebrate Pest Conference, Melbourne 21-25 May 2001.

²³⁸ *ibid.*

7.10 Mr Geoff Wise, Western Lands Commissioner, also explained the similar conflict with the operation of the *Wild Dog Destruction Act 1912*, which operates in the Western Division of the State. In this case, the *Wild Dog Destruction Act* requires landholders to destroy dogs on their land, yet does not include public land agencies. He told the Committee:

“If I can speak on behalf of the Wild Dog Destruction Board, that board has seen very definite conflict of intent for the purposes of the *Wild Dog Destruction Act* and the *Threatened Species Conservation Act 1995*. I should add the *Wild Dog Destruction Act* was enacted in 1921, so it was written a long time ago. That conflict of intent that I referred to relates to the status of wild dogs, which may be part or full blood dingo or even have no dingo at all, the status of any wild dogs living in the wild in the western division. I quoted earlier where the *Wild Dog Destruction Act* imposes an obligation on the owner or occupier of all land in the western division to destroy those wild dogs. The Dog Board's view is that a national perspective should be taken and that New South Wales does not necessarily need to have their own small population of wild dogs, which scientific evidence suggests are more likely than not cross bred, more likely than not inbred, when we know that there is a much bigger genetic pool of wild dogs immediately through the fence which we are maintaining through Government and community support.²³⁹”

7.11 Mr Wise, explained the Wild Dog Destruction Board's view on whether any dingoes should be allowed to remain in the Western Division at all. He told the Committee:

...the Dog Board has very much taken the view that we should look at a species such as the dingo from a national perspective and question whether we need to have our own in our own backyard, and the dog board's view very simply is that there is little justification to have any population of wild dogs in western NSW. From the science, there is a genuine view that the dogs that are there are inbred and impure, from a dingo species point of view. Therefore, the dog board's point of view is maintaining the status quo, knowing that the nearly 600 kilometres of fence that the NSW Wild Dog Destruction Board maintains is part of a continuum that starts in Queensland and finishes at the Great Australian Bight, in the order of 5,000 kilometres length, that it is only appropriate to continue exactly as we have for the last 80 years, and, as I say, I am speaking from the dog board's point of view, and, therefore, say there is the line in the sand, it is quite acceptable to have Australian wild dogs, irrespective of their breed, on the other side of that line in the sand and maintain freedom of wild dogs this side.

...I have to say that one of the problems that I face is the 1500 or so ratepayers who we send an annual account to, they write some pretty violent statements across their payments, some of which really are not fit for anyone to read, fundamentally saying, "Why should I pay these rates when the Government is allowing dogs to be on this side of the fence", especially when the clause specifically within the *Wild Dog Destruction Act* says it is an obligation for every owner or occupier of land to destroy all wild dogs.²⁴⁰

7.12 The Committee supports current arrangements to manage wild dogs, noting the objectives of both dingo conservation in core areas of publicly managed land, and the prevention of farm stock losses from feral dog predation.

²³⁹ Evidence of Mr Geoff Wise, Far West Regional Director, Western Lands Commissioner, Department of Land and Water Conservation, at 47.

²⁴⁰ *ibid*, 50.

Feral animal research

7.13 As was discussed in earlier chapters, it was apparent to the Committee that while generations of people have been attempting to control feral animals, little is known about some of their basic biological characteristics that may assist in control programs. In regard to these areas and other feral animal research required, Mr Paul Meek of State Forests noted:

I think we also need to ... look at experimental studies to evaluate the effectiveness of aerial baiting achieving its goal. A big gap in our knowledge is that we really do not know very much about feral dog biology and ecology and how that differs from dingoes, and therefore the functional roles of feral dogs as opposed to dingoes and reproductive success and how that has implications for management.

We are keen to see an expansion of the program that National Parks are currently working towards of doing dingo DNA research to map the distribution of dingoes to identify what is actually there and what habitats are required for management, and balance that against the demands of livestock protection.²⁴¹

7.14 The Committee received evidence that there were conflicting priorities for agencies in the feral animal research conducted according to the core concerns of those agencies Dr Peacock of the Pest Animal Control Cooperative Research Centre noted that Australia-wide feral animal research is uncoordinated:

I believe feral animal impacts are vastly under-estimated as a national environmental and agricultural issue. ... feral animal research is particularly uncoordinated in Australia. You tend to have State departments of agriculture or conservation equivalents where it has gone down in importance or the general issue of funding research is not uncommon, so you find that there are one or two people beavering away on research, in quite isolated units, very often also given the task of feral animal control, so they tend to be part-time researchers, generally poorly resourced and poorly coordinated.²⁴²

7.15 An agency such as NSW Agriculture funds substantial research but its emphasis is protection of livestock, while an agency such as the National Parks and Wildlife Service will conduct its research to emphasize the key concerns of its agency. There is a need for the conducting and funding of research with the overall problems of feral animal control being considered. The Committee believes research should be an important statutory function of the new Pest Animal Council recommended in the previous chapter.

²⁴¹ Evidence of Mr Paul Meek, Regional Ecologist, State Forests of NSW, 26 March 2002, at 43.

²⁴² Evidence of Dr Anthony Peacock, Chief Executive Officer, Cooperative Research Centre for the Biological Control of Pest Animals, 26 March 2002 at 27.

Recommendation 22

The Committee recommends that one of the functions of the proposed statutory Pest Animal Council should be to monitor current agency research and fund and/or conduct feral animal research programs in areas of need.

Recommendation 23

The Committee recommends that NSW Agriculture make representations to their federal and State government counterparts about forming a national working body to determine priority actions for feral animal research projects.

Public education

7.16 As noted earlier in this report, it is the wider community that strongly influences whether or not an animal is classed as feral. Feral animal control programs will ultimately not work if they do not have the support of the community. Former federal Environment Minister the Hon Barry Cohen noted the importance of educating the public about the problems of feral animal damage, and submitted to the Committee:

First and foremost it must be the goal of governments to continue the process of changing peoples' attitudes towards feral animals. The public must be made aware of the damage that feral animals are doing and what action can be taken to reduce their numbers.²⁴³

7.17 An officer with the Department of Land and Water Conservation highlighted the value of co-operative public education programs in other parts of its operations:

Public education was a very important part of those tern and oyster catcher programs where the general public got on side, the four wheel drivers and people with their dogs on the beach, and the other very successful part of that was the involvement of the community, and thanks to the national parks, we have to give them full marks for organising a sort of roster of community volunteers to go and monitor the tern...²⁴⁴

7.18 The National Parks and Wildlife Service conducts a number of education and community awareness programs related to feral animal control in partnership with NSW Agriculture, the Rural Lands Protection Boards and community groups. These include:

²⁴³ Submission No 65, The Hon. Barry Cohen, Calga Springs Sanctuary, at 3.

²⁴⁴ Evidence of Mr Joseph Cummins, Senior Reserves Management Officer, Department of Land and Water Conservation, on 25 March 2002 at 55.

- Its website (www.npws.nsw.gov.au) with online access to feral animal documents and educational materials.
- The cane toad education and awareness program, involving public displays, media campaigns and a toad awareness kit.
- The Feral Peril component of the National Parks Discovery Program.
- Pest animal workshops as part of the Farming for the Future (Commonwealth initiative) program aimed at improving property management by farmers.
- A Conservation Partners Program to encourage community involvement in conservation, including pest animal considerations.²⁴⁵

7.19 Despite these and other programs, NPWS believes increased public education programs remains a high priority need in feral animal control. It cites examples such as the Weddin Mountains National Park program “Outfox the fox”, and the fox control program from Nowendoc to Guyra run in partnership with the Armidale RLPB, the Southern England Landcare Committee and NSW Agriculture, as examples of community based programs which should be encouraged.²⁴⁶

7.20 A Ranger for the Hunter Rural Lands Protection Board, Mr Dean Wheeler argued in his submission that:

The problem is not that viable and effective control options are not currently available because they are. The problem is that the far majority of landholders are not dedicated to seriously controlling feral animals and utilising those existing control options that are already there!

Education, awareness and continued action from all land owners and managers are the vital keys to achieving results and an ongoing success! .. I strongly believe that community education and awareness are the only options that will make a real difference. Unfortunately, it is also the least attended to area of feral animal control at the moment.²⁴⁷

7.21 Clearly community education programs are being run by NSW Agriculture, NPWS, the Rural Lands Protection Boards and others. As with research, the Committee is concerned that no agency at present has responsibility for co-ordinating an overall approach to community education on feral animals and their control, and identifying gaps in current awareness. Again, this should be an important function of a statutory Pest Animal Council.

²⁴⁵ Submission No 53, Dr Andrew Leys, NSW National Parks and Wildlife Service at 63-64.

²⁴⁶ *ibid*, 63.

²⁴⁷ Submission No 70, Mr Dean Wheeler, Noxious Animal Control Ranger, Hunter Rural Lands Protection Board at 2.

Recommendation 24

The Committee recommends that one of the functions of the proposed statutory Pest Animal Council should be coordinating community information programs about the problems of feral animals, reasons for their classification as feral and why they must be controlled.

The Committee recommends that one of the functions of the proposed statutory Pest Animal Council should be to maintain a website that provides information on, and links to, all feral animal educational and program activity across the State.

Appendix 1

Submissions

Submissions

| No | Author |
|-----------|--|
| 1 | Anonymous |
| 2 | Anonymous |
| 3 | C Buggenum |
| 4 | Mr William Squair |
| 5 | Mr Tim Cadman (Native Forest Network) |
| 6 | Mr Rob Andrews |
| 7 | Mr Don Noakes (Yarrowitch/Tia Wild Dog Association) |
| 8 | Mr Martyn Tizzard |
| 9 | Mr Pat Daniel (Southern Region Pig Catchers Association Inc) |
| 10 | Mr Rick Harris (Port Stephens Council) |
| 11 | Mr John Quilter |
| 12 | Mr Barry Devitt |
| 13 | Mr Keith Dunlop (Northern Slopes Rural Lands Protection Board) |
| 14 | Mr Clive Cottrell (Corrowong Wallendibby Landcare Group) |
| 15 | Mr Robert Belcher (Snowy River Interstate Landcare Committee) |
| 16 | Mr Lance Beamish (South Coast Rural Lands Protection Board) |
| 17 | Mr Alex Colley OAM (The Colong Foundation for Wilderness Ltd) |
| 18 | Dr Stephen McLeod (Earth Sanctuaraires Ltd) |
| 19 | Mr Jeff McQuiggin (Mudgee – Merriwa Rural Lands Protection Board) |
| 20 | Mr Roy Stacy (Riverina Region Advisory Committee) |
| 21 | Mr and Mrs K & H Waters |
| 22 | Mr Richard Ali (Urban Feral Animal Action Group) |
| 23 | Mr and Mrs Paul and Helen Parramore |
| 24 | Mr Charles Mumford |
| 25 | Mr Craig Allen |
| 26 | Mr Ron Smith |
| 27 | Mr Rod Young |
| 28 | Ms Eslyn Johns (Narrabri Rural Lands Protection Board) |
| 29 | Mr Brian Dudley (Northern Territory Shooters Council Incorporated) |
| 30 | Ms Noeline Franklin (The Mountains wild Dog Association of Southern NSW) |
| 31 | Mr Stephen Johnston |
| 32 | Mr Colin Skennar |
| 33 | Ms Jan Deighton (Excelsior Park Bushland Society) |

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|-----------|---|
| 34 | Ms Margery Smith |
| 35 | Confidential |
| 36 | Mr Scott Soper |
| 37 | Mr Roger Anderson (Tumbarumba Shire Feral Animal Working Group) |
| 38 | Mr John White (Tumbarumba Shire Council) |
| 39 | Mr Andrew Glover (Moss Vale Rural Lands Protection Board) |
| 40 | Mr Tim Russell |
| 41 | Mr Peter Webb MP (Legislative Assembly, NSW Parliament) |
| 42 | Ms Anne Rolfe |
| 43 | Mr Ken Turner (The Pastoralists' Association of West Darling) |
| 44 | Mr Ian Fitchfield (Dry Plains Wild Dog Association) |
| 45 | Mr and Mrs Bill and Ellen Green |
| 46 | Ms Sue Litchfield (Monaro Landholders Wild Dog Committee) |
| 47 | Ms Kay Durham |
| 48 | Mr Paul Leskiw |
| 49 | Ms Ruth Franklin |
| 50 | Ms Anne Waugh |
| 51 | Mr Jim Muirhead |
| 52 | Mr J Egan (Kempsey Rural Lands Protection Board) |
| 53 | Dr Andrew Leys (NSW National Parks and Wildlife Service) |
| 54 | Mr Paul Leskiw (Newcastle District Hunting Club) |
| 55 | Mr and Mrs Brian and Jan Mitchell |
| 56 | Mr Rix Wright |
| 57 | Mr and Mrs Greg and Mary Russell |
| 58 | Mr and Mrs F and J Maraldo |
| 59 | J R Lindwall |
| 60 | J G McLaren (The NSW Stud Merino Breeders' Association Limited) |
| 61 | Mr Pteer Reed |
| 62 | Mr Ken England |
| 63 | Ms K Durham (Narrabri Bushwalking Club Inc) |
| 64 | Mr John Howden |
| 65 | The Hon Barry Cohen (Calga Springs Sanctuary) |
| 66 | Mrs Ina Casburn (Goodmans Ford Landcare Group) |
| 67 | Mr Stewart Kerr (Tweed Lismore Rural Lands Protection Board) |
| 68 | J R Green and Margaret Clunies Ross |
| 69 | Ms Amanda Stevenson (Bombala Rural Lands Protection Board) |
| 70 | Mr Dean Wheeler (Hunter Rural Lands Protection Board) |

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| 71 | Mr Bruce Muddle |
| 72 | Ms Jane Judd (Northern Plains Regional Advisory Committee) |
| 73 | Mr Brian Tomalin (Barnard River Wild Dog Control Association Inc) |
| 74 | Mr Stephen Hurt |
| 75 | Mr Keith Manning and family |
| 76 | Ms Jennifer Cole, Mr Dean Wheeler and Mr Simon Scoular |
| 77 | Mr Bill Moller (Murrumbidgee Field Naturalists Inc) |
| 78 | Mr Tom Peadon |
| 79 | Ms Narelle Swanson |
| 80 | Ms Joan Ennis (Tathra Landcare Waterwise & "Saving our Shoreline") |
| 81 | Mr Steve Adams (Windi Past Co) |
| 82 | Mr Gary Orr and Ms Louise Conibear (Rural Conservation Service) |
| 83 | Mr and Mrs Maret and Mart Vesk |
| 84 | Mr Lloyd Coleman |
| 85 | Mrs Margaret Reid |
| 86 | Mr David Ridley (State Forests of New South Wales) |
| 87 | Mr Roderick Holcombe |
| 88 | Mr Lewis Hathway |
| 89 | Bede Carmody |
| 90 | Mr Denis Starrs |
| 91 | S Golby |
| 92 | Confidential |
| 93 | Ms Cheryl Bate |
| 94 | Ms Susan Mitchell (NSW Farmers Association Cooma District Council) |
| 95 | R W Lewis |
| 96 | Mr Michael Litchfield |
| 97 | Mr Michael Green |
| 98 | Mr Matthew Crozier (NSW Farmers Association) |
| 99 | J E Alcock (Monaro Merino Association Inc) |
| 100 | Ms Jo Bell (Animal Liberation NSW) |
| 101 | Mrs Ann Kubacki (Snowy River Shire Ratepayers Association) |
| 102 | Mrs June Weston |
| 103 | Mrs June Weston (NSW Farmers Association) |
| 104 | Confidential |
| 105 | Mr Steve Orr (State Council of Rural Lands Protection Boards) |
| 106 | Mr Richard Martin (NSW Farmers Association Queanbeyan/Canberra Branch) |
| 107 | Mr Charles Litchfield (Snowy River Shire Council) |

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| 108 | Mr Gordon Crowe (Rocky Plain Wild Dog Association) |
| 109 | R E Maguire (Jilliby Merino Stud) |
| 110 | Mr John Mumford (Australian Deer Association NSW Branch) |
| 111 | Mr John Mumford (Game Management Council of NSW) |
| 112 | Dr Tony Peacock (Cooperative Research Centre for the Biological Control of Pest Animals) |
| 113 | Ms Lisa Wellman (Newrybar Swamp Feral Pig Management Committee) |
| 114 | Sir Owen Croft (Armidale Rural Lands Protection Board) |
| 115 | The Hon Richard Amery (Minister for Agriculture; Minister for Land & Water Conservation) |
| 116 | Mr Joe Cummins (Department of Land and Water Conservation) |
| 117 | Confidential |
| 118 | Ms Ilona Renwick |
| 119 | Ms Katherine Rogers (The NSW Animal Societies Federation) |
| 120 | Mr Terry Moody (NPWS Northern Rivers Region Advisory Committee) |
| 121 | Mrs Robin Dickson (Oatley Flora and Fauna Conservation Society Inc) |
| 122 | Mr Andrew Cox (Environment Liaison Office) |
| 123 | Dr Chris Belcher (Ecosystems Environmental Consultants) |
| 124 | Mr Gary Miller |
| 125 | Mr Andrew Wallis |
| 126 | Mr Heath Folpp |
| 127 | Mr Daniel Humphries |
| 128 | Mr Jamie Bousfield |
| 129 | Mr Michael McLean |
| 130 | Mr Elliot Henry |
| 131 | Ms Glenys Oogjes (Animals Australia) |
| 132 | Mr Matthew Priestly (MGP Feral Animal Control Services) |
| 133 | Mr Eric Johnton (NSWF – Bega Branch) |
| 134 | R Gee |
| 135 | Ms Jenny Bailey |
| 136 | Mr Arthur Macalpine |

Appendix 2

Witnesses

Witnesses

Thursday 7 February 2002 (Cooma Returned Services Club)

| | |
|-------------------------|--|
| Linda Sutherland | Director <i>South Coast Rural Lands Protection Board</i> |
| Raymond Lennon | Managing Ranger <i>South Coast Rural Lands Protection Board</i> |
| Fergus Thomson | Director <i>South Coast Rural Lands Protection Board</i> |
| Lance Beamish | General Manager <i>South Coast Rural Lands Protection Board</i> |
| Michael Green | Grazier |
| Graham Hillyer | Ranger <i>Bombala Rural Lands Protection Board</i> |
| John Bauer | Grazier |
| Roger Anderson | Chairman <i>Tumbarumba Shire Feral Animal Working Group</i> |
| Brent Livermore | Manager <i>Environmental Services, Tumbarumba Shire Council</i> |
| Janice Walker | Grazier |
| Kathleen Weston | Grazier |
| Richard Martin | Grazier |
| Susan Mitchell | Company Director |
| Susan Litchfield | Secretary <i>Monaro Landholders Wild Dog Committee</i> |
| John Alcock | President <i>Monaro Merino Association</i> |

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| Robert Maguire | Member <i>Rocky Plain Wild Dog Association</i> |
| Peter Southwell | Deputy Chair <i>Yass Rural Lands Protection Board</i> |
| Bill Morris | Dog Trapper <i>Yass Rural Lands Protection Board</i> |
| Anthony Fleming | Director <i>Southern National Parks and Wildlife Service</i> |
| David Darlington | Regional Manager <i>National Parks and Wildlife Service</i> |
| Stephen Horsley | Regional Manager <i>National Parks and Wildlife Service</i> |
| Dierk von Behrens | Stakeholder |
| Ian Haynes | Stakeholder |
| Glynda Bluhm | Member <i>Alpaca Association Australian and Llama Association Australia</i> |
| Gary Orr | Manager and Partner <i>Rural Conservation Service</i> |
| Deborah Russell | Primary Producer |
| Timothy Russell | Primary Producer |
| Noeline Franklin | Stakeholder |
| Monday 25 March 2002 (Parliament House) | |
| Geoffrey File | Executive Director <i>Regulatory Services, NSW Agriculture</i> |
| Eric Davis | Program Leader <i>Vertebrate Pest Management, NSW Agriculture</i> |

| | |
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| Jacqueline Knowles | Senior Analyst <i>Conservation and Resource Management, NSW Farmers Association</i> |
| Brian Gilligan | Director-General <i>National Parks and Wildlife Service</i> |
| Andrew Leys | Pest Management Co-ordinator <i>National Parks and Wildlife Service</i> |
| Robert Conroy | Director <i>Central Directorate, National Parks and Wildlife Service</i> |
| Terrence Korn | Director <i>Western Directorate, National Parks and Wildlife Service</i> |
| Keith Muir | Conservationist and Director <i>Colong Foundation for Wilderness</i> |
| Andrew Cox | Executive Officer <i>National Parks Association of NSW</i> |
| Anne Reeves | Consultant <i>National Parks Association of NSW</i> |
| Monday 26 March 2002 (Parliament House, Sydney) | |
| Stephen Orr | Chief Executive Officer <i>State Council, Rural lands Protection Boards</i> |
| Keith Allison | Elected State Councillor <i>Rural Lands Protection Boards</i> |
| Christopher Lane | Pest Animal and Insect Manager <i>State Council, Rural Lands Protection Boards</i> |
| Helen Cathles | Grazier and Elected State Councillor <i>State Council, Rural Lands Protection Boards</i> |
| Joanne Bell | Vice President <i>Animal Liberation NSW</i> |

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|--|--|
| Katherine Rogers | Education Officer and Vice President <i>The NSW Animal Societies Federation</i> |
| Anthony Peacock | Chief Executive Officer <i>Cooperative Research Centre for Biological Control of Pest Animals</i> |
| Michael Bullen | Director <i>Environmental Management and Forest Practices Directorate, State Forests of NSW</i> |
| James Shields | Wildlife Manager and Principal Ecologist <i>State Forests of NSW</i> |
| Paul Meek | Regional Ecologist <i>State Forests of NSW</i> |
| Donald Martin | Regional Director <i>Department of Land and Water Conservation, Central West</i> |
| Geoffrey Wise | Regional Director <i>Department of Land and Water Conservation</i> |
| Joseph Cummins | Senior Reserves Management Officer <i>Department of Land and Water Conservation, Orange</i> |
| Stephen Hurt | Committee Representative <i>Australian Deer Association NSW</i> |
| John Mumford | State Executive Member and Chairman <i>Game Management Council of NSW</i> |
| Wednesday 3 April 2002 (Armidale Ex-Service Club) | |
| Owen Croft | Grazier and Director <i>Armidale Rural Lands Protection Board</i> |
| Nigel Schaeffer | Grazier and Chairman <i>Armidale Rural Lands Protection Board</i> |
| Andrew Phillips | Ranger <i>Northern Slopes Rural Lands Protection Board</i> |

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| Gerald O'Connor | Senior Ranger <i>Northern Slopes Rural Lands Protection Board</i> |
| Donald Noakes | President <i>Yarrowitch-Tia Wild Dog Control Association</i> |
| Allan Wiggan | President <i>Barnard River Wild Dog Control Association</i> |
| Brian Tomalin | Vice-president <i>Barnard River Wild Dog Control Association</i> |
| Bruce Moore | Secretary <i>Barnard River Wild Dog Control Association</i> |
| Patricia McRae | Grazier |
| Donald Cameron | Vice-chair <i>Armidale Branch, NSW Farmers Association</i> |
| Stephanie Lymburner | Bush Regenerator <i>Northern Rivers Region Advisory Committee</i> |
| Lisa Wellman | Chairperson and Pest Management Officer <i>Newrybar Swamp Feral Pig Management Committee</i> |
| Michael Thorman | Noxious Animal Control Ranger <i>Kempsey Rural Lands Protection Board</i> |
| John Willey | Chairman <i>Kempsey Rural Lands Protection Board</i> |
| Brian Gilligan | Director-General <i>National Parks and Wildlife Service</i> |
| John O'Gorman | Director <i>Northern National Parks and Wildlife Service</i> |
| Andrew Leys | Pest Management Co-ordinator <i>National Parks and Wildlife Service</i> |

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| Leonie Walsh | Operations Co-ordinator <i>National Parks and Wildlife Service, Grafton</i> |
| Gary Swanson | Team Manager <i>The Australian Brumby Heritage Society</i> |
| Christine Haire | Co-ordinator <i>The Australian Brumby Heritage Society</i> |
| Alan Jackson | Member <i>National Parks Association</i> |

Appendix 3

Site Visits

Site visits

| | |
|--|--|
| Friday 8 February 2002 | Nowra and Lake Wollumboola |
| Presentations and discussions with: | |
| <ul style="list-style-type: none"> • Diane Garrod - <i>Manager, NPWS South Coast Region</i> • Paul Mahon - <i>Project Officer Fox TAP, NPWS</i> • Sue Feary - <i>Manager, NPWS Nowra Area</i> • Gabrielle Wiltshire - <i>Department of Land and Water Conservation</i> • Andrew Glover - <i>Rural Lands Protection Board</i> • Brendon Neilly - <i>Birds Australia</i> • Melinda Norton - <i>Project Officer, Brush-Tailed Rock Wallabies, NPWS</i> | |
| Thursday 4 April 2002 | Aerial inspection of Oxley River National Park and Northern Barnard River area |
| In attendance: | |
| <ul style="list-style-type: none"> • Ken Pines – <i>Pest Management Officer, NPWS Armidale</i> • Steve Elkin – <i>Senior Ranger, NPWS Armidale</i> • Brian Tomalin – <i>Vice President, Barnard River Wild Dog Association</i> • Tony Barnes – <i>Agricultural Protection Officer</i> • Bruce Moore – <i>Secretary, Barnard River Wild Dog Association</i> | |
| Discussions with representatives from: | |
| <ul style="list-style-type: none"> • Rural Lands Protection Boards • National Parks and Wildlife Service • NSW Agriculture • Wild dog control associations • State Forests of NSW • University of New England • NPWS Northern Tablelands Advisory Committee • NSW Farmers' Association | |
| Presentation by Southern New England Landcare Committee | |
| Inspection of New England Wild Dog Fence and view of gorge area from John Weston's property at Enmore | |
| Demonstration of feral animal control techniques and equipment | |

Appendix 4

Category D Firearms Licenses - Adjudication Policy for Primary Producers

Category D Firearms Licences - Adjudication Policy for Primary Producers



ABN 43 408 613 180

Category D Firearm Licences – Adjudication Policy for Primary Producers

Policy No. 2002/5

Effective 16 July 2002

Principles and Mission

"To improve and promote public safety by ensuring that only persons authorised under the Firearms Act 1996 are able to possess and use Category D firearms for the genuine reason of primary producer".

Section 15 of the Firearms Act 1996 states

15 Category D licences restrictions on issue (cf APMC 3 (c))

The Commissioner must not issue a category D licence to any person unless:

- (a) the genuine reason established by the person for being issued with the licence is that of **vertebrate pest animal control**, and
- (b) in addition to establishing any such genuine reason, the person produces evidence to the Commissioner's satisfaction that there is a special need for the person to possess or use a firearm to which a licence category D applies, and
- (c) in the case of a person referred to in paragraph (c) of the genuine reason of **vertebrate pest animal control**, the person produces evidence to the Commissioner's satisfaction that any such special need cannot be met by any other means (including by the authority conferred by a category A, category B or category C licence, or by engaging the services of a professional contract shooter).

Section 12 of the Firearms Act 1996 (Genuine reasons for having a licence) states:

Reason: vertebrate pest animal control

The applicant must be:

- (a) a professional contract shooter engaged or employed in controlling vertebrate pest animals on rural land, or
- (b) a person employed by or in, or authorised by, a government agency prescribed by the regulations that has functions relating to the control or suppression of vertebrate pest animals, or
- (c) a person whose occupation is the business of a primary producer, or who is the owner, lessee or manager of land used for primary production, and who is participating in an **authorised campaign conducted by or on behalf of a government agency** or public authority to eradicate large feral animals or animals that are affected by brucellosis or tuberculosis.

Application of Section 12, genuine reason 'Vertebrate Pest Animal Control'.

The responsibility for the conduct of an 'authorised campaign conducted by or on behalf of a government agency' rests with the NSW Department of Agriculture through the State Council of the Rural Lands Protection Boards (RLPB). The RLPB has developed guidelines pursuant to Section 25 of the Rural Lands Protection Act 1998.

Essentially, primary producers applying for a Category D firearm licence must:

1. Apply to their local Rural Lands Protection Board office on the application form appended at Attachment 1.
2. The Board may inspect the property of the applicant to assess the applicant's need for the category D firearm
3. The applicant must be assessed at the next available Board meeting, the assessment procedure is appended at Attachment 2.
4. The Board may call upon the applicant to be interviewed concerning the need.
5. The Board must record all decisions relevant to the recommendation. Criteria for the Board assessing Category D firearms licence applications is appended at Attachment 3.
6. The Board must record its final decision on the Certificate Form (if recommended, Attachment 4) or Decision Form (Attachment 5) if not recommended.
7. The Chairman must sign the Assessment Sheet and either the Certificate Form or the Decision Form, Attachment 4 and 5.
8. The Board must forward a copy of the Application, the Assessment Sheet and either the Certificate or the Decision form to the Applicant, State Council and the NSW Firearms Registry.
9. The Board may charge the applicant a fee for assessing the application.

Policy

Applications for the issue of a Category D firearm licence must contain a copy of the Application to the RLPB, the Assessment Sheet and a copy of the Certificate recommending the issue of the licence.

Applications for the issue of a Category D firearms licence that do not comply with the above requirements are incomplete and should be returned to applicants with a request to provide the RLPB documentation.

Attachment 1



**APPLICATION FOR CATEGORY D LICENCE
CERTIFICATE**

Pursuant to Section 15 of the Firearms Act, 1996

GUNS GULLY RURAL LANDS PROTECTION BOARD

PO BOX 10
GUNS GULLY NSW 1056

Phone : 02 1234 5678
Fax : 02 1234 5679

I _____, of
(name of applicant)

(address)

Phone No : _____ Fax : _____

Hereby apply for a Certificate from the Board that:

1. I have a SPECIAL NEED to possess a Category D Firearm, and
2. That special need cannot be met by a Category A, B, or C Firearm.

In support of my application the following reasons are submitted.

Set out the reasons - Include references to :-

The feral/pest animal species for which this category of firearm is required;

Participation in previous campaigns;

The location and terrain of the property;

The history of feral/pest animal impact on the property;

The terrain of the surrounding properties.

Other reasons.

(add extra pages if necessary)

The information provided by me in this application is true and accurate in every respect.

Signature

Date

Received
For and on behalf of the
Guns Gully Rural Lands Protection Board

Date



ASSESSMENT SHEET Attachment 2

Pursuant to Section 15 of the Firearms Act, 1996

GUNS GULLY RURAL LANDS PROTECTION BOARD

PO BOX 10
GUNS GULLY NSW 1056

Phone : 02 1234 5678
Fax : 02 1234 5679

Assessment criteria for _____ of,
(name of applicant)

(address)

The Guidelines must be followed in conjunction with this assessment

| | Yes (tick box) | No (cross box) |
|--|--------------------------|--------------------------|
| 1. Does the Board's Management Plan for the control of pest animals include the management of the nominated feral/pest species | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is shooting an appropriate way to control this species of feral/pest animal given the applicant's circumstances. | <input type="checkbox"/> | <input type="checkbox"/> |

Special Need

On assessing the criteria below, the issues of operator health and safety and the efficient and humane destruction of the feral/pest animal species must be taken into consideration.

| | Yes (tick box) | No (cross box) |
|--|--------------------------|--------------------------|
| 1. Is the applicant a person whom the Board requires to take part in any shooting program conducted, organised or coordinated by the Board? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Does the extent of the type and density of vegetation and the ruggedness or lay of the terrain/topography restrict the applicant's mobility, visibility or access to control the feral/pest animal species? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is the population density and reproductive capacity of the feral/pest species a factor? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Is the number of any offspring of the feral/pest species likely to be at foot a factor? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is the history of the feral/pest species in the district, and on the applicant's land, a factor? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Is the history of the impact of feral/pest species in the district, and on the applicant's land, a factor? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Can the special need be met by a Category A, B or C firearm? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Was an inspection of the property pertaining to the application carried out? If so, date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

Chairman

Date

For and on behalf of the
Guns Gully Rural Lands Protection Board

CRITERIA

FOR ASSESSING CATEGORY D FIREARM LICENCE APPLICATIONS.

In making a recommendation regarding an applicant's firearm requirement, Boards *must* first be satisfied that the applicant has a *genuine reason* for a firearm to control the species of feral/pest animal concerned. Boards *must* then be satisfied that the circumstances in which the applicant needs to control these animals are such that there is a *special need* for a Category D Firearm to ensure *either*, the safety of the applicant, *or* the efficient and humane destruction of the animals including any need to destroy all members of a group of these animals; *and*, that this special need cannot be met by another Category of firearm.

A *genuine reason* would exist if *all* the following criteria are met:

- 1 The Board's Function Management Plan for the control of feral/pest animals includes the management of this species of animal; *and*
- 2 Shooting is an appropriate way to control this species of feral/pest animal given the applicant's circumstances.

A *special need* would exist with respect to ensuring the safety of the applicant or the efficient and humane destruction of the animal where *one or more* of the following criteria are met:

- 1 If the applicant is a person whom the Board requires to take part in any shooting program conducted, organised or coordinated by the Board; *or*
- 2(a) Where the applicant's circumstances require the feral/pest animals to be shot at close range and/or with little time to react to the proximity of the animals, and the size and behaviour of the animals are such that the applicant's safety is likely to depend on the ability to fire many shots of sufficient calibre in a very short period of time; *or*
- 2(b) Where the physical features of the applicant's land are such that the applicant is likely to have only limited opportunity to target and shoot all feral/pest animals in a group of animals, and destruction of all animals in the group is necessary to prevent undue suffering by un-weaned animals or for the efficient destruction of animals that may otherwise become wary and more difficult to shoot in future, and that destruction of all animals is likely to require the ability to fire many shots of sufficient calibre in a very short period of time.

In considering criteria 2(a) and 2(b), Boards will have regard to the following factors in relation to the applicant's land and the species of animal to be controlled:

- i) The extent to which the type and density of vegetation restricts the applicant's access, mobility or visibility,
- ii) The extent to which the ruggedness of the terrain/topography restricts the applicant's access, mobility or visibility,
- iii) The population density of the animal,
- iv) The number of any offspring of the animal that are likely to be at foot,
- v) The history of the animals in the district and on the applicant's land.

In considering whether an applicant's *special need* can be met by a Category of firearm other than Category D, Boards *must* be satisfied that the *special need* could not be reasonably met by another Category of firearm in those situations that may be reasonably foreseen considering the circumstances of the applicant, the experience of the Board and any expert advice that may be obtained by the Board in this regard.

The Board may make any arrangements it sees fit to seek expert advice and assistance in determining the outcome of any assessment if required.



Attachment 4

CERTIFICATE

Pursuant to Section 15 of the Firearms Act, 1996

GUNS GULLY RURAL LANDS PROTECTION BOARD

PO BOX 10
GUNS GULLY NSW 1056

Phone : 02 1234 5678
Fax : 02 1234 5679

1. _____ of,
(name of applicant)

(address)

has made an application for a certificate pursuant to Section 15 of the Firearms Act, 1996, that he / she has a SPECIAL NEED to possess or use a firearm to which a CATEGORY D LICENCE applies.

2. The Board is conducting an AUTHORISED CAMPAIGN in the District for the ERADICATION of FERAL/PEST ANIMALS pursuant to Section 180 of the Rural Lands Protection Act, 1998, during the following period : _____ to _____.
3. The provisions of that Campaign are contained in the Board's Pest Animal and Insect Function Management Plan (PAI Plan) prepared in accordance with Section 44 of the Rural Lands Protection Act, 1998.
4. The Board RECOMMENDS that the applicant be granted a Category D Licence for the reasons outlined in the attached Assessment Sheet.
5. The Board certifies that the special need cannot be met by Category A, B or C firearm.

Chairman
For and on behalf of the
Guns Gully Rural Lands Protection Board

Date



Attachment 5

DECISION

Pursuant to Section 15 of the Firearms Act, 1996

GUNS GULLY RURAL LANDS PROTECTION BOARD

PO BOX 10
GUNS GULLY NSW 1056

Phone : 02 1234 5678
Fax : 02 1234 5679

6. _____ of,
(name of applicant)

(address)

has made an application for a certificate pursuant to Section 15 of the Firearms Act, 1996, that he / she has a **SPECIAL NEED** to possess or use a firearm to which a **CATEGORY D LICENCE** applies.

- 7. The Board is conducting an **AUTHORISED CAMPAIGN** in the District for the **ERADICATION** of **FERAL/PEST ANIMALS** pursuant to Section 180 of the Rural Lands Protection Act, 1998, during the following period : _____ to _____.
- 8. The provisions of that Campaign are contained in the Board's Pest Animal and Insect Function Management Plan (PAI Plan) prepared in accordance with Section 44 of the Rural Lands Protection Act, 1998.
- 9. The Board **DOES NOT RECOMMEND** that the applicant be granted a Category D Licence for the reasons outlined in the attached Assessment Sheet.

Chairman
For and on behalf of the
Guns Gully Rural Lands Protection Board

Date

Appendix 5

Brindabella & Wee Jasper Valley co-operative wild dog/fox program

Brindabella & Wee Jasper Valley co-operative wild dog program

Update No. 4
2001/2002 Financial year

Brindabella & Wee Jasper Valley co-operative wild dog/fox program





Trial year review identifies success of cooperative program

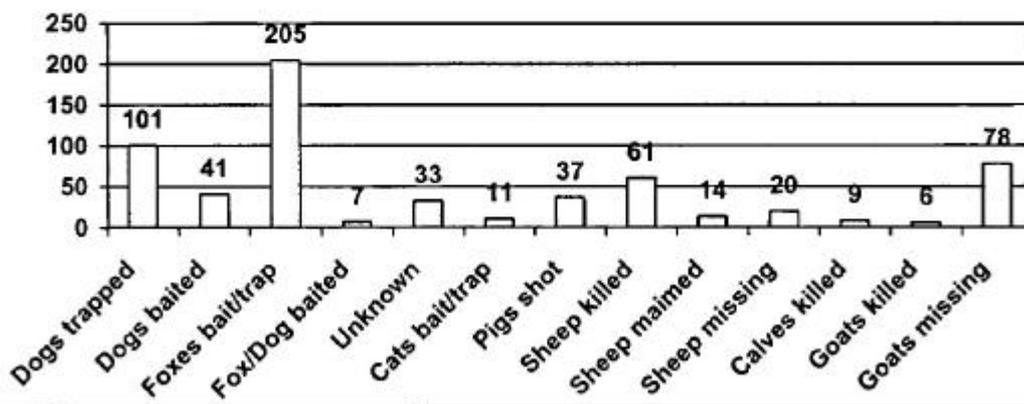
A review of the 2001/2002 cooperative wild dog plan for the Brindabella and Wee Jasper Valleys has been carried out by the Wild Dog/Fox Working Group. The trial year clearly identified the value of cooperative efforts by reducing sheep losses by 68% compared to the previous years losses.

Monitoring with CSIRO has also identified a much lower abundance of wild dogs in bushland areas surrounding the valleys when compared to areas where little or no wild dog control is undertaken. Monitoring will be continued for the next 3 years to identify levels of wild dog/fox abundance and any response from native wildlife in the area.

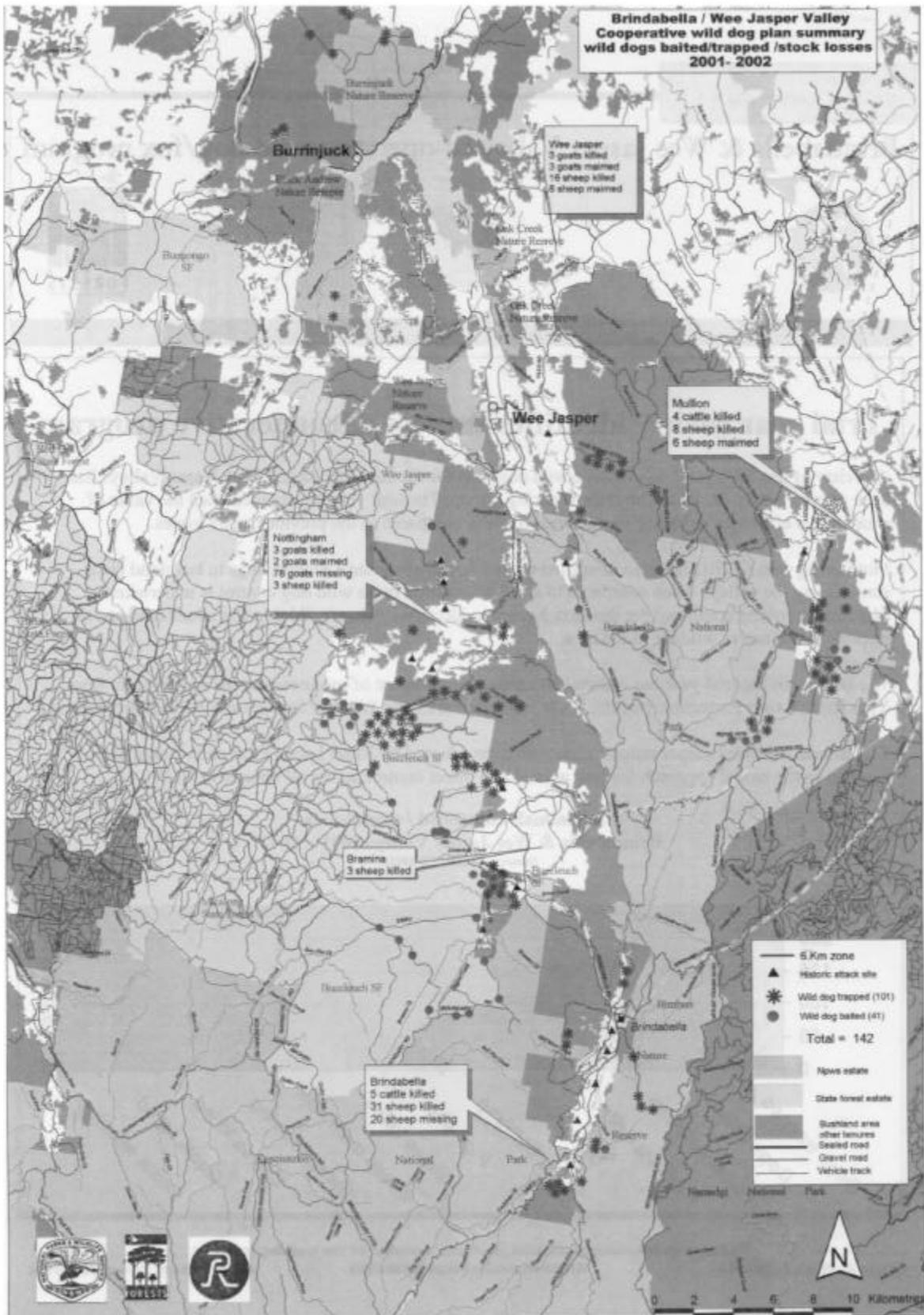
The success of the trial year has ensured an agreed commitment of resources for the next 3 years from Yass Rural Lands Protection Boards, NSW National Parks and Wildlife Service and NSW State Forests.

The Brindabella/Wee Jasper program has now been adopted by Rural Lands Protection Board State Council as the model approach for pest animal and insect control across all tenures in NSW.

Pest animals controlled / stock losses
Brindabella & Wee Jasper Valleys 2001 – 2002
(Source: Yass RLPB 2002)



For more information contact your local member of the working group or
 Yass RLPB ph 62261155 NPWS Queanbeyan ph 62980356 State Forests Tumut 69473911



Acknowledgments



- ✓ To the landholders of the Brindabella and Wee Jasper valleys for their commitment and support
- ✓ To the members of the Brindabella and Wee Jasper Valley Wild Dog/Fox Working Group whose efforts ensured the objectives of this plan made it from the Wee Jasper Hall to the bushland interface where the work was needed.
- ✓ To Bob Wilson who turned our ideas into maps.

Has the trial program been a success????



Have we reduced stock losses?

- For the 2001/2002 financial year sheep kills were reduced by 68% when compared to 2000/01 and 60% when compared to the average yearly stock loss for the valleys from 1995.

Have we reduced wild dog numbers?

- A total of 142 wild dogs have been baited (41) or trapped (101) for the 2001/2002 financial year.
- CSIRO sand pad monitoring program has identified that the Brindabella/Wee Jasper area has a much lower abundance of wild dogs when compared with an area where little wild dog control is undertaken.

Have we reduced fox numbers?

- A total of 205 foxes have been baited (145) or trapped (60) for the 2001/2002 financial year.
- CSIRO sand pad monitoring has identified that the Brindabella/Wee Jasper area has a medium to high abundance of foxes when compared with an area where little wild dog or fox control is undertaken.

Has the program been of benefit to local wildlife?

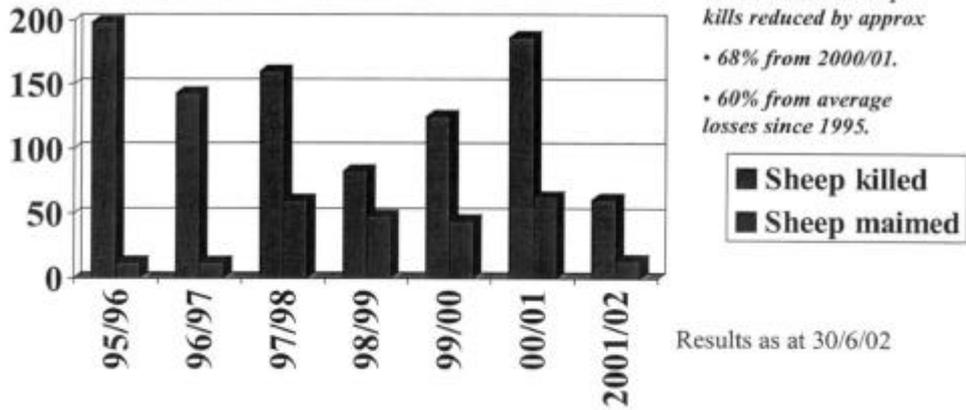
- CSIRO sand pad monitoring will identify long term recovery of native species over the next 3 years.

Will the trial become a long term program?

- A funding agreement between Yass Rural Lands Protection Board, NSW National Parks and Wildlife Service and NSW State Forests has been signed along with a 3 year plan to ensure the current program continues to 2005.

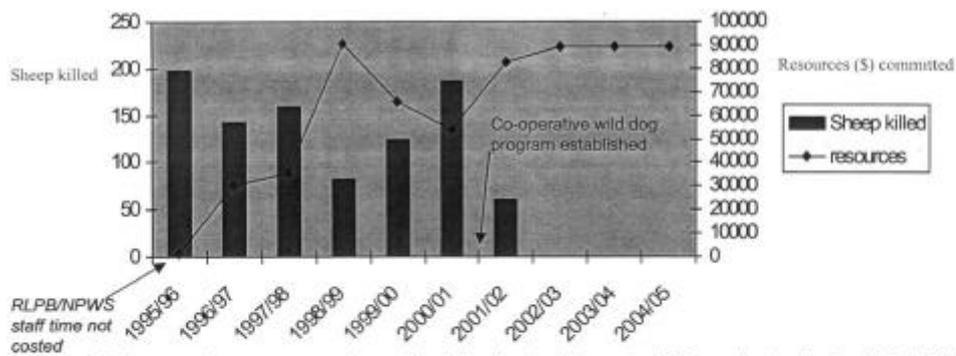
Working group review the program after trial period

Sheep killed /maimed 1995/96 - 2001/02 Yass RLPB
(including cooperative program)



Stock losses/financial resources committed 1995 – 2005

(Yass RLPB 2001)



The increase in resources and associated drop in stock losses in 1999 are due to the South East NSW and ACT Wild Dog Project.

Impact upon native animals. (What are wild dogs/foxes eating in the bushland?)

Results of scat collections for Brindabella and northern Kosciuszko National Parks (Triggs and Story 1998 - 2001) and Tinderry Nature Reserve (Triggs and Story 1997 - 2001)

| Species | Brindabella & northern Kosciuszko National Park | | Tinderry Nature Reserve | |
|-------------------------|---|---------|-------------------------|----------|
| | Wild dog | Fox | Wild dog | Fox |
| Swamp wallaby | 32 (92%) | 5 (18%) | 48 (92%) | 39 (12%) |
| Kangaroo | | | 10 (8%) | 7 (2%) |
| Red neck wallaby | | | 1 | |
| Bush tail possum | 9 (25%) | 4 (14%) | 10 (18%) | 30 (12%) |
| Ring tail possum | 1 | 2 (7%) | 0 | 23 (8%) |
| Eastern pygmy possum | | | | 1 |
| * Yellow bellied glider | 1 | | | |
| Goswami glider | 1 | | | |
| Sugar glider | 1 | | 4 (2%) | 0 (0%) |
| Antechinus | 2 | 2 (7%) | 2 | 11 (4%) |
| Bush rat | 2 | 5 | 1 | 0 (0%) |
| * Broad tooth rat | | 1 | | |
| Echidna | 32 (92%) | | 18 (10%) | 3 |
| Ungulate | 2 | | 0 (0%) | 18 (7%) |
| Vegetation | 7 (20%) | 1 | 5 (9%) | 5 |
| Wombat | | | 4 (8%) | 15 (5%) |
| Reptile | 2 | 1 | 2 | 4 |
| Bird | 5 (15%) | 0 (0%) | 10 (18%) | 12 (4%) |
| Egg | 1 | | | |
| * Rabbit | 4 (12%) | 3 (11%) | 6 (11%) | 35 (14%) |
| *Hare | | | 4 (8%) | 3 |
| *Cat | 1 | 2 (7%) | | 2 |
| *Black rat | 1 | | | |
| *Sheep | 3 (9%) | | 5 (9%) | 10 (4%) |
| *Coe | 1 | | 5 (9%) | 3 |
| *Pig | 1 | | 17 (31%) | 13 (5%) |
| *Goat | | | 5 (9%) | |
| *Fox | | | 1 | |
| Total sample size | 111 | 28 | 173 | 352 |

Species most common within dog/fox scats:

- Swamp wallaby
- Echidna
- Possum (brushtail/ringtail)
- Rabbit

While individuals of these native and introduced species are being taken by wild dogs/foxes, the impact upon local populations is unknown.

There are also more complex issues related to the interactions between the introduced predators and dingo and quoll populations.

>Species listed under Threatened Species Conservation Act 1995
* Introduced species

Monitoring



- Establish a system of monitoring sites to allow effective evaluation of the program. (CSIRO contract with NPWS)

Sand plots will be utilised to allow comparison between areas covered by co-operative wild dog/fox control program and areas where control is not being undertaken.

- 4 x 25 kilometre transects with sand pads placed every 1 km
(Within the 25 km transects 2 x 5 km transects with sand pads every 200m to identify presence/absence/response of smaller animals)
- 2 transects within wild dog/fox control area
- 2 transects outside wild dog/fox control area (nil treatment)
- transects checked daily for 3 days during each monitoring period
- prints of target and non target species on sand pads are recorded
- Transects to be checked minimum of twice per year (Autumn and Spring)

- Stock losses will continue to be monitored through the existing reporting system. (stock missing?)

- Target and non target species activity at bait stations are recorded.

Benefits of the co-operative program

- ✓ More efficient and effective utilisation of resources
- ✓ Trapper has regular programmed employment
- ✓ Trainees/land managers have an opportunity to skill share
- ✓ Landholders know when trapper is due to return to their area
- ✓ Landholders acknowledge the importance of wild dog activity reports.
- ✓ Patrol day per week allows trapper to patrol/respond to activity reports
- ✓ Best practice use of 1080 implemented across all tenures
- ✓ Accurate costings allow the identification of the "real" cost of wild dog/fox control.
- ✓ Opportunity to submit program with costings as a co-ordinated program ready for implementation. (wild dog pest orders) (parliamentary feral animal enquiry).
- ✓ All land managers aware of co-operative program to address wild dog/fox issue.
- ✓ Improved relations "on ground".



Essentials for success

- * Realistic expectations of working group and landholders
- * Support from all land managers involved in the program
- * Continued funding/labour support from public land managers
- * Adherence to guidelines e.g: burying baits 15 cm
- * Minimisation of potential non target species impacts e.g: domestic dogs, quolls
- * Resources to maintain monitoring transects
- * Balanced/accurate media exposure



Appendix 6

Minutes of the Proceedings

Minutes of the proceedings

Minutes No. 53
Wednesday 30 May 2001
Greenway Room, Level 7, Parliament House at 2.00 pm

1. **Members Present**

Mr R Jones (in the Chair)
Ms Burnswoods
Mr Jobling
Mr Johnson
Mr M Jones
Ms Saffin (Dyer)

2. **Apologies**

Mr Colless

3. **Confirmation of minutes**

Resolved, on the motion of Mr Jobling, that the minutes of meetings 50, 51 and 52 be confirmed.

4. **Proposed terms of reference concerning feral animals**

The Committee deliberated.

Mr Jobling moved that the Committee adopt the following terms of reference:

That General Purpose Standing Committee No 5 inquire into and report upon:

- 1) the damage caused by feral animals including wild dogs and cats to native flora and fauna;
- 2) the current and future threat of feral animals to native flora and fauna in NSW with specific reference to NSW National Parks;
- 3) the adequacy of current practices and resources for feral animal control carried out by the authorities;
- 4) improvements for current practices, and alternative solutions for feral animal control; and
- 5) any other relevant matters.

The Committee deliberated.

Resolved, on the motion of Ms Burnswoods: That the question be amended by the deletion of paragraphs 1 – 3 and their replacement with the following:

- 1) the damage caused by feral animals to the environment across all land tenures;
- 2) the current and future threat of feral animals to native flora and fauna across all land tenures, including national parks, private land holdings, other publicly owned land etc;
- 3) the adequacy of current practices and resources for feral animal control;

Resolved, on the motion of Mr M Jones: That the Committee adopt the amended terms of reference as follows:

That General Purpose Standing Committee No 5 inquire into and report upon:

- 1) the damage caused by feral animals to the environment across all land tenures;
- 2) the current and future threat of feral animals to native flora and fauna across all land tenures, including national parks, private land holdings, other publicly owned land etc;
- 3) the adequacy of current practices and resources for feral animal control;
- 4) improvements for current practices, and alternative solutions for feral animal control; and
- 5) any other relevant matters.

5. Proposed revised timetable for current inquiries

The Committee deliberated.

Resolved, on the motion of Ms Burnswoods: That the reporting date for the inquiry into the M5 East ventilation stack be extended to 5 September 2001, although the Committee would endeavour to report upon this inquiry by late June /early July if possible.

Resolved, on the motion of Ms Burnswoods: That one day of hearings in relation to the inquiry into Sydney Water's Biosolids Strategy be held before 26 July, and that the reporting date for this inquiry be extended to 16 October 2001.

Resolved, on the motion of Mr M Jones: That advertisements calling for submissions in relation to the inquiry into feral animals be placed in metropolitan and rural newspapers during June, with a closing date for submissions of 31 August 2001.

Resolved, on the motion of Mr M Jones: That the reporting date for the inquiry into feral animals be 26 February 2002.

6. Adjournment

The Committee adjourned at 2.30 pm sine die.

David Blunt
Committee Director

Minutes No. 68

Thursday, 7 February 2002

At Cooma Returned Services Club, Cooma at 9:15am

1. Members present

Mr R Jones (Chair)

Ms Burnswoods

Mr Colless

Ms Fazio

Mr Gay (Mr Jobling)

Mr M Jones

2. Inquiry into Feral Animals

Hearing

The public were admitted.

LINDA CAROLYN ERM SUTHERLAND, Director, South Coast Rural Lands Protection Board, **RAYMOND LENNON**, Managing Ranger, South Coast Rural Lands Protection Board, **FERGUS DOUGLAS THOMSON**, Director, South Coast Rural Lands Protection Board, and **LANCE ERNEST BEAMISH**, General Manager, South Coast Rural Lands Protection Board were sworn and examined.

Mr Lennon tendered "Table A, 2001/2002 Proposed Far South Coast Region Vertebrate Pest Control Program – RLPB Contract

Evidence concluded and the witnesses withdrew.

MICHAEL JAMES GREEN, Grazier, and **GRAHAM JOHN HILLYER**, Ranger, Bombala Rural Lands Protection Board, sworn and examined.

Mr Green tendered figures on Wild Dog Baiting Programs, Holbrook & Hume RLPB.

Evidence concluded and the witnesses withdrew.

JOHN BRADFORD BAUER, Grazier, **ROGER DONALD ANDERSON**, Chairman, Tumbarumba Shire Feral Animal Working Group, **BRENT STEPHEN LIVERMORE**, Manager, Environmental Services, Tumbarumba Shire Council, and **JANICE MARY WALKER**, Grazier, sworn and examined.

Mr Bauer tendered a paper titled: "A brief look at the Economic Effects of Changing from a Sheep Enterprise to a Cattle Enterprise on Camoo and other local holdings of the Daniel Family".

Evidence concluded and the witnesses withdrew.

KATHLEEN JUNE WESTON, Grazier, **RICHARD BOWRING MARTIN**, Grazier, and **SUSAN KATHRINE MITCHELL**, Company Director, sworn and examined.

Mr Martin tendered figures on Wild Dogs trapped/shot and Sheep killed/bitten.

Evidence concluded and the witnesses withdrew.

SUSAN LITCHFIELD, Secretary, Monaro Landholders Wild Dog Committee, **JOHN EDWARD ALCOCK**, President, Monaro Merino Association, and **ROBERT EDWARD MAGUIRE**, Member, Rocky Plain Wild Dog Association, sworn and examined.

Evidence concluded and the witnesses withdrew.

PETER JOHN SOUTHWELL, Deputy Chair, Yass Rural Lands Protection Board, and **BILL MORRIS**, Dog Trapper, Yass Rural Lands Protection Board, affirmed and examined.

Mr Southwell tendered "Draft 3 Year Co-operative Wild Dog/Fox Plan Brindabella & Wee Jasper Valleys".

Evidence concluded and the witnesses withdrew.

ANTHONY IAN FLEMING, Director, Southern, National Parks and Wildlife Service, **DAVID GEORGE DARLINGTON**, Regional Manager, National Parks and Wildlife Service, and **STEPHEN HORSLEY**, Regional Manager, South West Slopes, National Parks and Wildlife Service, affirmed and examined:

Evidence concluded and the witnesses withdrew.

DIERK von BEHRENS, Public Servant, and **IAN HAYNES**, Retiree, affirmed and examined.

Evidence concluded and the witnesses withdrew.

GLYNDA BLUHM, Member, Alpaca Association Australia and Llama Association Australia, and **GARY PETER ORR**, Manager and Partner, Rural Conservation Service, sworn and examined.

Evidence concluded and the witnesses withdrew.

DEBORAH ANNE RUSSELL, Primary Producer, **TIMOTHY GREGORY RUSSELL**, Primary Producer, and **NOELINE ALICE FRANKLIN**, Housewife, sworn and examined.

Evidence concluded and the witnesses withdrew.

Publication of proceedings and tendered documents

The Committee deliberated

Resolved, on the motion of Ms Burnswoods: That the Committee authorises the publications of today's proceedings and accepts the documents presented to it as tabled papers.

3. Adjournment

The meeting adjourned at 4:50 pm, until 9.00 am Friday 8 February 2002.

Russell Keith
Snr Project Officer

Minutes No. 69

Friday, 8 February 2002

Nowra and Lake Wollumboola at 9:00 am

1. Members present

Mr R Jones (Chair)

Ms Burnswoods

Mr Colless

Ms Fazio

Mr M Jones

2. Inquiry into Feral Animals

Site visit

Presentations and discussions, Riverhaven Motel

- Diane Garrood, Manager, NPWS South Coast Region

NSW Fox Threat Abatement Plan (TAP)

- Paul Mahon, NPWS Project Officer, Fox TAP

Lake Wollumboola little tern project

- Sue Feary, Manager, NPWS Nowra Area

Also in attendance: Gabrielle Wiltshire, Department of Land and Water Conservation, Andrew Glover, Rural Lands Protection Board, Brendon Neilly, Birds Australia

Site inspection, Lake Wollumboola

- Presentation, Brendon Neilly, Birds Australia

Presentation and discussion, NPWS Office, Nowra

- Brush-tailed rock wallaby fox control program in Kangaroo Valley
- Melinda Norton, NPWS Project Officer, Brush-Tailed Rock Wallabies

3. Adjournment

The meeting adjourned at 1:00 pm, *sine die*.

Russell Keith

Snr Project Officer

Minutes No. 70

Monday 12 March 2002

At Parliament House (Room 1136) at 9.45am

1. Members present

Mr R Jones (Chair)

Ms Burnswoods

Ms Fazio

Mr Jobling (Mr Pearce after 10.00 am)

Mr Colless (Mr Ryan after 10.00 am)

Mr M Jones

2. Apologies

Ms Saffin

3. Confirmation of minutes

Resolved, on the motion of Ms Burnswoods, that: the minutes of meeting numbers 66, 67, 68, and 69 be confirmed.

4. Inquiry into Feral Animals

The committee discussed its future plans for the inquiry.

Resolved, on the motion of Mr Colless: That in order to better inform all those who are participating in the inquiry process, the committee make use of the powers granted under paragraph 8(e) of the resolutions establishing the Standing Committees, and section 4(2) of the *Parliamentary Papers (Supplementary Provisions) Act 1975*, to publish submissions received for the inquiry, excluding those for which confidentiality had been requested.

Mr Colless and Mr Jobling left the room to be replaced by Mr Pearce and Mr Ryan.

5. *****6.** *****7.** *****8. Adjournment**

The meeting adjourned at 10.45 am until 25 March 2002, Parliament House.

Russell Keith

Snr Project Officer

Minutes No. 71

Monday 25 March 2002

At Parliament House (Room 814-815) at 9.30 am

1. Members present

Mr R Jones (Chair)

Mr Hatzistergos (for Ms Fazio)

Mr Jobling

Mr Colless

Mr M Jones

2. Apologies

Ms Burnswoods

3. Inquiry into Feral Animals

Hearing

The public were admitted.

GEOFFREY CHARLES FILE, Executive Director, Regulatory Services, New South Wales Agriculture, and **ERIC OWEN DAVIS**, Program Leader, Vertebrate Pest Management, New South Wales Agriculture, sworn and examined.

Evidence concluded and the witnesses withdrew.

JACQUELINE LOUISE KNOWLES, Senior Analyst, Conservation and Resource Management, New South Wales Farmers Association, sworn and examined.

Evidence concluded and the witness withdrew.

BRIAN JOHN GILLIGAN, Director-General, National Parks and Wildlife Service, and **ANDREW ROSS LEYS**, Pest Management Co-ordinator, National Parks and Wildlife Service, affirmed and examined and **ROBERT JAMES CONROY**, Director, Central Directorate, and **TERRENCE JOHN KORN**, Director, Western Directorate, sworn and examined.

Evidence concluded and the witnesses withdrew.

KEITH WILLIAM MUIR, Conservationist and Director, Colong Foundation for Wilderness, and **ANDREW COX**, Executive Officer, National Parks Association of New South Wales, and **ANNE ELIZABETH REEVES**, Consultant, National Parks Association of New South Wales, affirmed and examined.

Evidence concluded and the witnesses withdrew.

Publication of proceedings

Resolved, on the motion of Mr Colless, that the Committee authorises the publications of today's proceedings.

4. Adjournment

The meeting adjourned at 4:45 pm, until 9.30 am, Tuesday, 26 March 2002.

Russell Keith

Snr Project Officer

Minutes No. 72

Monday 26 March 2002

At Parliament House (Room 814-815) at 9.30 am

1. Members present

Mr R Jones (Chair)

Mr Jobling

Mr Colless

Mr M Jones

2. Apologies

Ms Burnswoods

3. Inquiry into Feral Animals***Hearing***

The public were admitted.

STEPHEN JONATHAN ORR, Chief Executive Officer, State Council, Rural Lands Protection Boards, **KEITH WILLIAM ALLISON**, Elected State Councillor, Rural Lands Protection Boards, **CHRISTOPHER JOHN LANE**, Pest Animal and Insect Manager, State Council, Rural Lands Protection Boards, and **HELEN MARGUERITE READING CATHLES**, Grazier and Elected State Councillor, State Council, Rural Lands Protection Boards, sworn and examined.

Mr Lane tendered "Preparation of a Pest Animal & Insect Function Management Plan for 2002"; and "Draft Animal Workplan for Pest Management". Resolved on the motion of Mr Colless that the documents be accepted as tabled papers.

Ms Cathles tendered "South Eastern NSW & ACT Wild Dog Management Project: Progress Report to Bureau of Rural Sciences"; and "Wild Dog Management Project: Trainee Report". Resolved on the motion of Mr Jobling that the documents be accepted as tabled papers.

Evidence concluded and the witnesses withdrew.

JOANNE MARY BELL, Vice President of Animal Liberation (NSW), and **KATHERINE MARGARET ROGERS**, Education Officer, Vice President, The NSW Animal Societies Federation, affirmed and examined.

Evidence concluded and the witnesses withdrew.

ANTHONY JOHN PEACOCK, Chief Executive Officer, Cooperative Research Centre for the Biological Control of Pest Animals, affirmed and examined.

Evidence concluded and the witnesses withdrew.

Deliberative meeting

The Committee went into closed session.

Agreed, on the motion of Mr Colless: That this Committee directs the Chair to request the Minister for the Environment and the Minister for Agriculture to take immediate and urgent action to address the current wild dog crisis in the Cooma, Yass and Bombala Rural Lands Protection Board areas.

Hearing 'continue'

The public were admitted.

MICHAEL JOHN BULLEN, Director, Environmental Management and Forest Practices Directorate, State Forests of New South Wales, **JAMES MICHAEL SHIELDS**, Wildlife Manager and Principal Ecologist, State Forests of New South Wales, and **PAUL DOUGLAS MEEK**, Regional Ecologist, State Forests of New South Wales, affirmed and examined.

Dr Shield tendered proceedings of the "State Forests of NSW, Predator Management Workshop, September 1999, Taree". Resolved on the motion of Mr Colless that the document be accepted as tabled papers.

Mr Meek tendered a paper titled: "Positive Dingo Management: how not to throw the baby out with the bath water". Resolved on the motion of Mr M Jones that the document be accepted as a tabled paper.

Evidence concluded and the witnesses withdrew.

DONALD GREGORY MARTIN, Regional Director, Central West, Department of Land and Water Conservation, **GEOFFREY ALAN WISE**, Regional Director, Department of Land and Water Conservation, and **EDWARD JOSEPH CUMMINS**, Senior Reserves Management Officer, Department of Land and Water Conservation, Orange, sworn and examined.

Evidence concluded and the witnesses withdrew.

STEPHEN ROSS HURT, Committee Representative, Australian Deer Association New South Wales, and **JOHN JULES MUMFORD**, State Executive Member, Chairman, Game Management Council of New South Wales, affirmed and examined.

Evidence concluded and the witnesses withdrew.

4. Adjournment

The meeting adjourned at 5:00 pm, until 9.10 am, Wednesday, 3 April 2002.

Russell Keith
Snr Project Officer

Minutes No. 73

Wednesday 3 April 2002

At Armidale Ex-Service Club, Dumaresq Street, 9.10 am

1. Members present

Mr R Jones (Chair)

Mr Colless

Ms Fazio

Mr Jobling

Mr M Jones

Ms Saffin

2. Apologies

Ms Burnswoods

3. Inquiry into Feral Animals

Hearing

The public were admitted.

OWEN GLENDOWER CROFT, Grazier and Director, Armidale Rural Lands Protection Board, **NIGEL ROBERT SCHAEFFER**, Grazier, Chairman, Armidale Rural Lands Protection Board, **ANDREW DESMOND PHILLIPS**, Ranger, Northern Slopes Rural Lands Protection Board, and **GERALD SEAN O'CONNOR**, Senior Ranger, Northern Slopes Rural Lands Protection Board, sworn and examined.

Evidence concluded and the witnesses withdrew.

DONALD COLEMAN NOAKES, President, Yarrowitch-Tia Wild Dog Control Association, affirmed and examined, **ALLAN BRUCE WIGGAN**, President, Barnard River Wild Dog Control Association, and **BRIAN TOMALIN**, Vice-president, Barnard River Wild Dog Control Association, and **BRUCE MOORE**, Secretary, Barnard River Wild Dog Control Association, sworn and examined.

Mr Noakes tendered a paper **TITLE?**. Resolved on the motion of Mr Jobling that the paper be accepted as a tabled paper.

Evidence concluded and the witnesses withdrew.

PATRICIA ELIZABETH McRAE, Grazier, and **DONALD HUGH CAMERON**, Vice-chair Armidale branch, New South Wales Farmers Association, sworn and examined.

Evidence concluded and the witnesses withdrew.

STEPHANIE MAXINE LYMBURNER, Bush Regenerator, Northern Rivers Region Advisory Committee, via Ballina, sworn and examined.

Evidence concluded and the witness withdrew.

LISA JEAN WELLMAN, Chairperson, Newrybar Swamp Feral Pig Management Committee, and Pest Management Officer, and **MICHAEL FREDERICK THORMAN**, Noxious Animal Control Ranger, Kempsey Rural Lands Protection Board, sworn and examined, **JOHN DAVID WILLEY**, Chairman, Kempsey Rural Lands Protection Board, affirmed and examined.

Evidence concluded and the witnesses withdrew.

BRIAN GILLIGAN, Executive Director, National Parks and Wildlife Service, on former oath, **JOHN O'GORMAN**, Director Northern, National Parks and Wildlife Service, sworn and examined, **ANDREW LEYS**, Pest Management Co-ordinator, National Parks and Wildlife Service, on former oath, and **LEONIE ALISON WALSH**, Operations Co-ordinator, National Parks and Wildlife Service, Grafton, sworn examined.

Evidence concluded and the witnesses withdrew.

GARY JAMES SWANSON, Team Manager, The Australian Brumby Heritage Society, sworn and examined, **CHRISTINE ANN HAIRE**, Co-ordinator, The Australian Brumby Heritage Society, affirmed and examined.

Evidence concluded and the witnesses withdrew.

ALAN RUSSELL BIRNIE JACKSON, Retired Veterinarian and member of the National Parks Association, Armidale, sworn and examined.

Evidence concluded and the witness withdrew.

Publication of proceedings

Resolved, on the motion of Mr Jobling, that the Committee authorises the publications of the proceedings today and on 26 March 2002.

4. Adjournment

The meeting adjourned at 5:20 pm, until 8.00 am, Thursday, 4 April 2002.

Russell Keith
Snr Project Officer

Minutes No. 74

Thursday 4 April 2002

Armidale, 8.00 am

1. Members present

Mr R Jones (Chair)

Mr Colless

Ms Fazio

Mr Jobling

Mr M Jones

Ms Saffin

2. Apologies

Ms Burnswoods

3. Inquiry into Feral Animals

Site visits

The Committee conducted an aerial inspection of the Oxley River National Park and northern Barnard River area, accompanied by Ken Pines (Pest Management Officer, NPWS Armidale), Steve Elkin (Senior Ranger, NPWS Armidale), Brian Tomalin (Vice President, Barnard River Wild Dog Association), Tony Barnes, Agricultural Protection Officer and Bruce Moore (Secretary, Barnard River Wild Dog Association).

Morning Tea at Armidale Rural Lands Protection Board Office with representative from Rural Lands Protection Boards, National Parks and Wildlife Service, NSW Agriculture, wild dog control associations, State Forests of NSW, University of New England, NPWS Northern Tablelands Advisory Committee and the NSW Farmers' Association.

- Presentation by members of Southern New England Landcare Committee on large-scale cooperative fox control program covering more than 500 farms in an area stretching from Nowendoc (south-east of Tamworth) to Guyra.

Drive to John Weston's property at Enmore.

Inspection of New England Wild Dog Fence and view of gorge area. Demonstration of feral animal control techniques and equipment e.g. bait station, pig traps, radio-tracking equipment for goats.

Discussion and lunch with local landholders and others who attending earlier in the day.

Return to Armidale.

4. Adjournment

The meeting adjourned at 3.45 pm, *sine die*.

Russell Keith

Snr Project Officer

Minutes No. 75

Wednesday 19 June 2002

Parkes Room, Parliament House at 1:00 pm

1. Members present

Mr R Jones (Chair)

Mr Colless

Ms Burnswoods

Ms Fazio

Mr Jobling

Mr M Jones

Mr West (Saffin)

2. Apologies

Ms Saffin

3. Substitution

The Chair informed the meeting that the Government Whip had advised that Mr West would substitute for Ms Saffin.

4. Inquiry into Feral Animals

The Committee deliberated.

Mr Colless moved the motion that the Committee undertake a final hearing in Western NSW.

The Committee deliberated.

Question put.

Ayes: Mr Colless
 Mr Jobling
 Mr M Jones

Noes: Mr R Jones
 Ms Fazio
 Ms Burnswoods
 Mr West.

Question resolved in the negative.

5. Adjournment

The meeting adjourned at 1.15 pm, until Thursday 20 June 2002 at 8:00 pm (Budget Estimates).

Warren Cahill

Clerk to Committee.

Minutes No 82

Wednesday 25 September 2002

Room 1108, Parliament House at 1.00 pm.

1. Members Present

The Hon Richard Jones MLC (*Chair*)
 Ms Jan Burnswoods MLC (*Deputy Chair*)
 The Hon Rick Colless MLC
 The Hon Amanda Fazio MLC
 The Hon John Jobling MLC
 The Hon Malcolm Jones MLC
 The Hon Peter Primrose MLC (*Saffin*)

2. Apologies

The Hon Janelle Saffin MLC

3. Substitution

The Chair was advised by the Government Whip that he would be substituting for Ms Saffin.

4. Previous minutes

Resolved, on the motion of Ms Fazio, that minutes numbers 70, 71, 72, 73, 74, and 75 be confirmed.

5. Feral Animals Inquiry***Draft Report***

The Chair tabled his draft report which, having been circulated, was taken as being read.

Chapter One read.

Chapter Two read.

The Committee deliberated.

Resolved, on the motion of Mr Malcolm Jones, that the heading "Definition of 'Feral'" which appears immediately above paragraph 2.1 be deleted and replaced with the heading:

Various definitions of "feral".

Mr Malcolm Jones moved that paragraph 2.3 be deleted.

Question put.

Ayes: Mr Colless
 Mr Jobling
 Mr Malcolm Jones

Noes: Ms Burnswoods
 Ms Fazio
 Mr Primrose
 Mr Richard Jones.

Question resolved in the negative.

Resolved, on the motion of Mr Malcolm Jones, that a reference to the 2002-2003 initial budget allocation for the National Parks & Wildlife Service be inserted by the secretariat at the end of paragraph 2.28.

Resolved, on the motion of Ms Fazio, that Chapters 1 and 2, as amended, be adopted.

Chapter Three read.

Mr Colless moved that the following recommendation be inserted immediately before paragraph 3.39:

That the NSW Government provide funding to the NSW Rural Lands Protection Boards to develop and implement a common information management system to be used by all Rural Lands Protection Boards. The system would allow Boards to record information on pest animal management within their district and allow for the amalgamation of this data to present a State-wide perspective.

Resolved, on the motion of Ms Fazio, that consideration of the recommendation moved by Mr Colless be held over until the next meeting of the Committee.

Resolved, on the motion of Ms Fazio, that Chapter 3, with the exception of the item held over until the next meeting, be adopted.

Chapter Four read.

Resolved, on the motion of Ms Fazio, that paragraph 4.12 be amended by deletion of the first sentence "The Committee acknowledges the increase in funding over recent years by the National Parks and Wildlife Service for feral animal control, and supports this financial commitment", and its replacement with the sentence:

The Committee acknowledges the increase in funding over recent years, from \$15.80 to \$34.50 per hectare of national park, for the National Parks and Wildlife Service, and supports this financial commitment.

Resolved, on the motion of Ms Fazio, that paragraph 4.12 be amended by the insertion in the second sentence of the word "more" before the word "funding" and replacement of the word "inadequate" with the word "necessary".

Resolved, on the motion of Ms Fazio, that recommendation 2 of Chapter 4 be amended by inserting the following words at the beginning of the recommendation:

While the Committee notes the significant funding provided by the National Parks & Wildlife Service for feral animal management,

Resolved, on the motion of Ms Fazio, that recommendation 2 of Chapter 4 be amended by inserting the words "receive increased funding and" immediately before the word: "further".

Resolved, on the motion of Ms Burnswoods, that Chapter 4, as amended, be adopted.

Chapter Five read.

Ms Fazio moved that recommendation 1 of Chapter 5 be amended by deletion of the words "species is determined and applied" and their replacement with the words:

management objectives for the identified species, the specifics of the situation and to the animal concerned is determined and applied.

Question put.

Ayes: Ms Burnswoods
Ms Fazio
Mr Richard Jones

Noes: Mr Colless
Mr Malcolm Jones.

Question resolved in the affirmative.

6. Adjournment

The Committee adjourned at 2:05 pm until Thursday 26 September 2002 at 1:00 pm.

Steven Reynolds
Clerk to the Committee

Minutes No 83

Thursday 26 September 2002

Room 1108, Parliament House at 1:00 pm

1. Members Present

The Hon Richard Jones MLC (*Chair*)
Ms Jan Burnswoods MLC (*Deputy Chair*)
The Hon Rick Colless MLC
The Hon Amanda Fazio MLC
The Hon John Jobling MLC
The Hon Malcolm Jones MLC
The Hon Ian West MLC (*Saffin*)

[On a number of occasions during the meeting Mr Tsang substituted for Ms Saffin while Mr West left the meeting.]

2. Apologies

The Hon Janelle Saffin MLC.

3. Substitution

The Chair was advised by the Government Whip that Mr West and Mr Tsang would be alternately substituting for Ms Saffin.

4. Feral Animals Inquiry

Draft Report

The Committee considered the item that had been held-over from the 25 September meeting.

Resolved, on the motion of Ms Fazio, that the following paragraph be inserted after paragraph 3.38:

The Committee notes the recent announcement of \$3.5 million funding, over three years, for the Rural Lands Protection Boards to upgrade their information technology systems. This funding will allow the establishment of an integrated State-wide IT system for Rural Lands Protection Boards, enabling better information collection and data sharing on pest species and exotic diseases.

Mr Colless withdrew his motion to insert his proposed recommendation immediately after paragraph 3.38.

The Committee resumed consideration of Chapter Five of the Chair's draft report.

The Committee deliberated.

Mr Colless moved to delete recommendation 3 of Chapter 5.

Question put.

Ayes: Mr Jobling
Mr Malcolm Jones
Mr Colless

Noes: Ms Burnswoods
Ms Fazio
Mr Tsang
Mr Richard Jones

Question resolved in the negative.

Mr Colless moved that paragraph 5.46 be deleted and replaced with the following paragraph:

The Committee does not wish to rule out the continuing use of aerial baiting and supports the research of Dr Bob Harden on the rejection of loaded 1080 baits by quolls.

Question put.

Ayes: Mr Jobling
Mr Malcolm Jones
Mr Colless

Noes: Ms Burnswoods
Ms Fazio
Mr Tsang
Mr Richard Jones

Question resolved in the negative.

Mr Colless moved that recommendation 4 of Chapter 5 be deleted and replaced with the following recommendation:

The Committee recommends that the use of 1080 in aerial baiting programs continue in those areas currently using such programs.

The Committee recommends that aerial baiting recommence in areas suffering excessive losses of domestic livestock since aerial baiting was restricted.

Question put.

Ayes: Mr Jobling
Mr Malcolm Jones
Mr Colless

Noes: Ms Burnswoods
Ms Fazio
Mr Tsang
Mr Richard Jones

Question resolved in the negative.

Mr Malcolm Jones moved that recommendation 4 of Chapter 5 be deleted.

Question put.

Ayes: Mr Jobling
Mr Colless
Mr Malcolm Jones

Noes: Ms Burnswoods
Ms Fazio
Mr Tsang
Mr Richard Jones.

Question resolved in the negative.

Mr Colless moved that the word “conclusive” be deleted from the second paragraph of recommendation 4 of Chapter 5 and replaced with “indicative”.

Question put.

Ayes: Mr Jobling
Mr Malcolm Jones
Mr Colless

Noes: Ms Burnswoods
Ms Fazio
Mr Tsang
Mr Richard Jones

Question resolved in the negative.

Resolved, on the motion of Mr Jobling, that a further paragraph concerning the research work undertaken by Dr Bob Harden on the rejection of loaded 1080 baits by quolls be prepared by the secretariat and circulated to the Committee then considered at the next meeting of the Committee.

Resolved, on the motion of Mr Jobling, that paragraph 5.61 be amended by deleting the words “is also grateful” and replacing them with the word “notes”.

Mr Colless moved that the following recommendation be inserted after paragraph 5.61:

The Committee recommends that Category D Firearm licences be available for primary producers for year round use and use outside of specific campaigns.

Resolved, on the motion of Ms Fazio, that information on the availability of Category D firearms licences be obtained by the secretariat and circulated to the Committee and that consideration of paragraph 5.61 and the proposed recommendation be held over until the next meeting of the Committee.

Resolved, on the motion of Mr Colless, that recommendation 6 of Chapter 5 be amended by inserting the words “and the illegal movement of pigs” at the end of the recommendation.

Mr Malcolm Jones moved that recommendation 6 of Chapter 5 be deleted.

Question put.

Ayes: Mr Malcolm Jones

Noes: Ms Burnswoods
Mr Colless
Ms Fazio
Mr Jobling
Mr Tsang

Question resolved in the negative.

Mr Colless moved that recommendation 7 of Chapter 5 be amended by including the following new section:

The Committee recommends that licensed dog trappers be permitted into National Parks for the purpose of pursuing feral dogs attacking domestic livestock on adjoining agricultural land.

Question put.

Ayes: Mr Jobling
Mr Malcolm Jones
Mr Colless

Noes: Ms Burnswoods
Ms Fazio
Mr Tsang
Mr Richard Jones

Question resolved in the negative.

Resolved, on the motion of Mr Jobling, that a draft new section of recommendation 7 of Chapter 5 be circulated to the Committee and that consideration of recommendation 7 be held over until the next meeting of the Committee.

Resolved, on the motion of Ms Fazio, that chapter 5, as amended, be adopted, with the exception of those items for which the Committee agreed to hold over consideration until the next meeting of the Committee.

Chapter Six read.

Mr Malcolm Jones moved that recommendation 1 of Chapter 6 be amended by including the "Game Council" among the list of government agencies.

Question put.

Ayes: Mr Colless
Mr Jobling
Mr Malcolm Jones

Noes: Ms Burnswoods
Ms Fazio
Mr Tsang
Mr Richard Jones

Question resolved in the negative.

Ms Burnswoods tabled copies of the document: "Review of the Brindabella & Wee Jasper Valleys Co-operative Wild Dog/Fox Program for 2002/2002". Ms Burnswoods moved that the document be attached as an appendix to the committee's report and that an appropriate reference to the appendix be inserted at paragraph 6.20.

Ms Burnswoods also moved that the following recommendation be inserted immediately after paragraph 6.20:

The Committee notes the success of the "Brindabella & Wee Jasper Valleys Co-operative Wild Dog/Fox Program", which has resulted in a 68% reduction in sheep losses in one year, and recommends that the Government consider extending these programs to other areas of the State.

The Committee deliberated.

Resolved, on the motion of Ms Burnswoods, that the Committee hold over consideration of the inclusion of the appendix and the proposed recommendation and the amendment to paragraph 6.20 until the next meeting of the Committee.

Resolved, on the motion of Ms Fazio, that chapter 6, as amended, be adopted, with the exception of those items for which the Committee agreed to hold over consideration until the next meeting of the Committee.

Chapter Seven read.

Resolved, on the motion of Ms Burnswoods, that recommendation 1 of chapter 7 be amended by deleting the words: "foxes, deer, and goats as pests" and replacing them with the words: "foxes, feral deer, feral goats and feral cats as pests, either State-wide or by specific regions,".

Resolved, on the motion of Ms Fazio, that recommendation 2 of chapter 7 be amended by deleting the word "regulate" and replacing it with the word "investigate".

Resolved, on the motion of Ms Fazio, that chapter 7, as amended, be adopted.

The Chair noted that a further deliberative meeting of the Committee would need to be arranged after all proposed amendments and information had been circulated by the secretariat.

5. Adjournment

The Committee adjourned at 2.35 pm *sine die*.

Steven Reynolds

Clerk to the Committee

Minutes No. 84

Thursday 24 October 2002 at 1:05pm
Room 1108, Parliament House.

1. Members Present

The Hon Richard Jones MLC (*Chair*)
Ms Jan Burnswoods MLC (*Deputy Chair*)
The Hon Rick Colless MLC
The Hon Amanda Fazio MLC
The Hon John Jobling MLC
The Hon Malcolm Jones MLC
The Hon Peter Primrose MLC (*Saffin*)

2. Apologies

The Hon Janelle Saffin MLC

3. Substitutions

The Chair advised that Mr Primrose as Government Whip had advised him that for this and future GPSC 5 meetings he would substitute for Ms Saffin.

4. Confirmation of draft minutes

Resolved, on the motion of Ms Fazio, that minutes numbers 82 and 83 be confirmed.

5. Inquiry into Feral Animals***Chair's draft final report***

The committee considered the proposed amendments held over from the previous meeting, which had been circulated by the secretariat.

Resolved, on the motion of Ms Burnswoods, that after the first sentence the remainder of paragraph 5.16 be deleted and replaced with the words:

“As explained in the submission by NSW Agriculture” followed by the following quote:

Depending on the species, death from 1080 results from cardiac failure (humans and rabbits), convulsions or subsequent respiratory paralysis (dogs) and central nervous system dysfunction, or a combination. Many species show symptoms consistent with central nervous system dysfunction ranging from tremors and muscular spasms, through to running, ‘paddling’ and convulsions. The perception of whether an animal feels pain during this process is greatly influenced by the perception of the person observing these symptoms. Although 1080 poisoning causes central nervous system dysfunction, these effects are similar to those experienced by humans during epileptic fits. Animals eventually lose consciousness in an equivalent way to human epileptics undergoing *Grand Mal Seizures*. It has therefore been inferred that the symptoms of central nervous system stimulation caused by fluoracetate poisoning in *canids* (dogs and foxes) are not associated with significant pain. There is limited objective evidence with which to validate this assessment. However, one person who survived accidental 1080 poisoning subsequently reported feeling no pain, even during very severe convulsions. This account is consistent with the epilepsy analogy mentioned previously.

Resolved, on the motion of Ms Fazio, that the following new paragraph 5.30 be inserted:

The findings of the research conducted by Dr Bob Harden's group which indicates that quolls will reject loaded 1080 baits is further discussed at paragraph 5.42.

Resolved, on the motion of Ms Fazio, that paragraph 5.41 [now paragraph 5.42] be amended to read:

A report on the findings of research conducted under the auspices of Dr Bob Harden, and provided to Environment Australia and the NSW National Parks and Wildlife Service (referred to in paragraph 5.29) found no impact of fox baiting on tiger quoll populations in North-Eastern NSW. The report concluded:

Resolved, on the motion of Mr Jobling, that the application process for primary producer access to Category D licences be added as an appendix to the report.

Mr Colless moved a motion that a new recommendation inserted after paragraph 5.61:

The Committee recommends that Category D Firearms licences be available to primary producers for year round feral animal control outside of specific authorised feral animal eradication campaigns.

Question put.

Ayes: Mr Colless
Mr Jobling
Mr M Jones

Noes: Mr Primrose
Ms Burnswoods
Ms Fazio
Mr R Jones

Question resolved in the negative.

Mr M Jones moved a motion that the Recommendation 7 in Chapter Five be deleted and the following recommendation be inserted:

In acknowledgement of the enormous losses that can be caused by individual feral dogs, the Committee recommends that the National Parks and Wildlife Service give licensed dog trappers continued access into National Parks for the purpose of pursuing and destroying identified feral dogs responsible for attacks on domestic livestock from adjoining agricultural land.

Question put.

Ayes: Mr Colless
Mr Jobling
Mr M Jones

Noes: Mr Primrose
Ms Fazio
Ms Burnswoods
Mr R Jones

Question resolved in the negative.

Ms Fazio moved that the following new paragraph 5.94 be added after recommendation 7:

The Committee notes and endorses the recent practice of the National Parks and Wildlife Service of providing RLPB licensed dog trappers access into national parks for the purpose of pursuing and destroying identified feral dogs responsible for attacks on domestic livestock from adjoining agricultural land.

Resolved, on the motion of Ms Burnswoods, that the Brindabella and Wee Jasper Valleys Co-operative Wild Dog/Fox program Review document be added to the report as an appendix, and the following sentence added to the end of paragraph 6.20:

A review of the Brindabella and Wee Jasper Valleys Co-operative Wild Dog/Fox Program is attached as appendix X.

Resolved, on the motion of Ms Burnswoods, that the Committee include the following new recommendation immediately after paragraph 6.20:

The Committee notes the success of the “Brindabella & Wee Jasper Valleys Co-operative Wild Dog/Fox Program” which has resulted in a 68% reduction in sheep losses in one year, and recommends that the Government consider extending these programs to other areas of the State.

Adoption and Publication of Report

Resolved, on the motion of Ms Fazio, that the report, as amended, be adopted.

Mr Colless, Mr Jobling and Mr M Jones indicated they would be submitting a dissenting report to be appended to the main report. The Chair set a deadline of close of business on Friday 25 October for the dissenting report to be submitted to the secretariat.

Resolved, on the motion of Ms Burnswoods, that the Committee report be signed by the Chair and presented to the House in accordance with the resolution establishing the committee of 13 May 1999.

Resolved, on the motion of Ms Burnswoods, that pursuant to the provisions of section 4 of the *Parliamentary Papers (Supplementary Provisions) Act 1975* and under the authority of Standing Order 252, the Committee authorises the Clerk of the Committee to publish the report, all minutes, correspondence, submissions and tabled documents, except those for which confidentiality has been requested.

Motion for House to require response to the Committee’s final report

Resolved, on the motion of Mr Jobling, that the Chair move the following motion in the House prior to the tabling of the Committee’s final report:

1. (a) *The Clerk of the House is to refer the Final Report of General Purpose Standing Committee No 5’s inquiry into Feral Animals to the Leader of the Government in the House, who must within the current session of this Parliament, report to the House what action, if any, the Government proposes to take in relation to the recommendations of the Committee.*
- (b) *If, at the time at which the Government seeks to report to the House, the House is not sitting, a Minister may present the response to the Clerk of the House.*
- (2) *A response presented to the Clerk is:*
 - (a) *on presentation, and for all purposes, deemed to have been laid before the House*
 - (b) *to be printed by authority of the Clerk*
 - (c) *for all purposes deemed to be a document published by order or under the authority of the House, and*
 - (d) *to be recorded in the Minutes of the Proceedings of the House*

The President is to report to the House when any Government response has not been received within the deadline.

6. ***

7. ***

8. Adjournment

The meeting adjourned at 2:30 pm *sine die*.

Steven Reynolds
Clerk to the Committee

Appendix 7

Statement of Dissent

Statement of dissent

FERAL ANIMAL INQUIRY

DISSENTING REPORT

Chapter 2

1. Delete Paragraph 2.3, definitions provided by the National Parks Association.

Chapter 4

2. Paragraph 4.12 be amended to read:

The Committee appreciates the increase in funding over recent years by the National Parks and Wildlife Service for feral animal control, and supports this financial commitment. Nevertheless, the Committee cannot ignore comments by both national park estate neighbours and members of its own advisory committees that more funding is still necessary.

3. Recommendation 5 be amended to read:

The Committee recommends that the National Parks and Wildlife Service further increase its funding commitment to feral animal management so that it has the capacity to better target major problem areas where feral animals are affecting neighbouring communities.

Chapter 5

4. Delete Recommendation 10.

5. Paragraph 5.47 be amended to read:

The Committee does not wish to rule out the continuing use of aerial baiting and supports the research of Dr Bob Harden on the rejection of loaded 1080 baits by quolls.

6. Recommendation 11 be amended to read:

The Committee recommends:

1. *the use of 1080 in aerial baiting programs continue in those areas currently using such programs;*
2. *aerial baiting using 1080 be recommenced in all areas suffering excessive domestic livestock losses since the cessation of aerial baiting in those areas.*

7. Insert a new recommendation after Recommendation 12:

The Committee recommends that Category D Firearms licences be available to primary producers for year round feral animal control outside of specific authorised feral animal eradication campaigns.

8. Include a third paragraph in Recommendation 14:

In acknowledgement of the enormous losses that can be caused by individual feral dogs, the Committee recommends that the National Parks and Wildlife Service provides continued access to licensed dog trappers into National Parks for the purpose of pursuing and destroying identified feral dogs responsible for attacks on domestic livestock from adjoining agricultural land.

Chapter 6

9. Recommendation 16 be amended to read:

The Committee recommends that, until such time that a statutory Pest Animal Council is established, NSW Agriculture develop, in cooperation with National Parks and Wildlife Service, State Forests, Department of Land and Water Conservation, Rural Lands Protection Boards and the NSW Game Council, integrated and strategic feral animal control plans for each of the major feral animal species, including rabbits, dogs, pigs and deer.

Chapter 7

10. Delete Recommendation 20.

Signed



The Hon. Malcolm Jones MLC



The Hon. John Jobling MLC



The Hon. Rick Colless MLC

25th October 2002.