6

Methods for controlling pest animals

Overview

- 6.1 As discussed in Chapter 5, early detection and eradication of a pest species is far simpler and more cost effective than managing a pest animal species that has become established widely.
- 6.2 As many pest animal species are already established in regions of Australia, there is a need for effective, long-term strategies for pest animal control. Eradication of exotic pests is the ideal, however the committee received evidence that this will not be a feasible alternative for many species.¹ As stated in one submission:

There will always be re-introductions, edge effects and imperfect control operations. The best we can hope for is for low concentrations of pest animals to be sustained over large areas of management. Certainly if the damage is reduced then it may not be important that every last animal is eliminated, even if this is a commendable goal in principle. Significant economic and environmental outcomes will be achieved by substantial reductions of pest animals in local areas. This should be the real focus.²

¹ *Submissions 15*, p. 2, 72, p. 2, 78, p. 4, 84, p. 38, Dr Tony Peacock, PAC CRC, Transcript of evidence, 11 May 2005, p. 14.

² Animal Control Technologies, *Submission 84*, p. 38.

- 6.3 While acknowledging that eradication will be difficult and sometimes impossible, to the extent that eradication is a viable alternative, the committee believes that should be pursued. Local eradication of feral donkeys, for example, is occurring progressively in the Kimberley and the Pilbara region in Western Australia through the Judas donkey program coordinated by the Western Australian Government.³
- 6.4 Eradication is, of course, not appropriate as a strategy for native animals that are considered to be pest species. Population management and damage minimisation can be the only feasible strategies for native species.
- 6.5 The committee is aware that the responsibility for pest animal control on private land has progressively been transferred from state governments to private landowners. The committee is therefore concerned to ensure that a wide range of cost-effective methods is available to all land managers and that barriers to effective pest animal control are minimised as far as possible. The committee notes that no single control technique is likely to be effective in isolation, and land managers therefore need access to a range of methods.⁴
- 6.6 The committee is also concerned about inadequacies in funding for management of pest animal issues by state and territory governments. These concerns relate both to the quantum of funding and its distribution. The committee also considers that a substantial investment by the Australian Government into programs to eliminate wild dogs, feral pigs, rabbits and foxes is urgently required.
- 6.7 The committee believes that the proposed National Pest Animals and Weeds Committee will play an important role in coordinating change across states and territories where that is necessary to achieve more efficient and economical pest animal control.

³ Mr Richard Watkins, DAWA, *Transcript of evidence*, 22 July 2005, p. 15.

⁴ FGA, *Submission 29*, Animal Control Technologies, *Submission 84*, p. 29.

Animal welfare issues

- 6.8 The committee is cognisant of concerns held by sections of the community about the welfare implications of pest animal control. These concerns were expressed in a number of submissions.⁵ While emphasising the need for a range of cost-effective control methods to be available to landholders and governments, the committee acknowledges that as far as is practically possible, humane vertebrate pest control is an ideal that should be pursued.
- 6.9 A definition of 'humane vertebrate pest control' is provided in the Discussion Paper arising from proceedings of a workshop conducted jointly by RSPCA Australia, the Animal Welfare Centre and the Vertebrate Pests Committee in 2003:

Humane vertebrate pest control (HVPC) is the development and selection of feasible control programs and techniques that avoid or minimise pain, suffering and distress to target and non-target animals.⁶

6.10 The committee also agrees with the workshop's approach to balancing humaneness against efficacy. The Discussion Paper notes:

It was generally agreed that the selection of the most appropriate vertebrate pest control technique required consideration of both humaneness and efficacy: decision-making concerning the continued use or specific need for using particular techniques could not be based upon humaneness alone. In the absence of a humane alternative, especially in the face of a valid need to address high priority needs, a technique that is considered to have poor humaneness may be justifiable if it has high efficacy. Conversely, some techniques that are considered humane may have low efficacy and cannot therefore be justified in any circumstances where desired objectives cannot be met.⁷

⁵ *Submissions 6*, Attachment, p. 3, 32, 47, 68, p. 2, 69, 70, p. 10, 71, 72, p. 1, 76, p. 16, 84, pp. 21-22, 88, 90.

⁶ *Exhibit 11, A National approach towards humane vertebrate pest control,* Discussion paper arising from the proceedings of an RSPCA Australia/AWC/VPC joint workshop, Melbourne, 4-5 August 2003, p. 4.

⁷ Exhibit 11, A National approach towards humane vertebrate pest control, Discussion paper arising from the proceedings of an RSPCA Australia/AWC/VPC joint workshop, Melbourne, 4-5 August 2003, p. 12.

- 6.11 The committee notes that, in addition to the welfare of pest animals, the welfare of livestock preyed upon by pest animals should be taken into consideration. The committee received some disturbing evidence about the effects of attacks by wild dogs and foxes on livestock, particularly lambs.⁸ The need to take account of animal welfare impacts of attacks on livestock has been recognised by animal welfare organisations.⁹
- 6.12 The committee recommended in Chapter 4 that the development of national pest animal welfare standards be included as part of the terms of reference for the proposed National Pest Animals and Weeds Committee.
- 6.13 While acknowledging the need to take animal welfare into consideration, the committee strongly rejects the following suggestion made by Animals Australia in its submission:

Species which cannot survive in the altered environment should be permitted to achieve the peace of extinction. Species which are here to stay because we have made this place such an ideal habitat for them must be permitted to settle into their new niches and stabilise their populations with a minimum of human interference.¹⁰

6.14 The committee emphasises the importance of pest animal control in helping to protect Australia's native flora and fauna. The committee objects to the idea that pest animals should be allowed to 'stabilise their populations'. Although pest animal control should be carried out as humanely as possible, the ultimate goal must be removal of feral species.

Environmental laws

6.15 The ability of some landholders to control pest animals by means of shooting and hunting is limited due to environmental regulations. For example, fruit farmers around the Oakdale region in New South Wales are subject to strict limitations on the numbers of grey-headed flying foxes they can shoot, because the grey-headed flying fox is listed as a 'vulnerable species' under the *Environment Protection and Biodiversity Conservation Act* 1999 (Cth) and under the *Threatened Species Conservation Act* 1995 (NSW).¹¹

⁸ Bruce and Barbara Reid, *Submission 42*, Mr Edgar Richardson, PGA, *Transcript of evidence*, 20 July 2005, p. 2, Mr Michael Hartmann, CCA, *Transcript of evidence*, 15 June 2005, p. 1.

⁹ Mr Mark Pearson, Animals Australia, Transcript of evidence, 16 March 2005, p. 10.

¹⁰ *Submission* 32, p. 5.

¹¹ Mr Ed Biel, Submission 21, p. 4.

- 6.16 Similarly, landholders in Western Australia are limited in the actions they can take to control wedge-tail eagles that prey on lambs. Because eagles are a protected species, the permission of an officer from CALM is required before shooting can occur. In remote areas, such as Leonora, officers are not readily available to visit properties, meaning that landowners are largely powerless to legally protect their livestock.¹² Eagles are also a problem in New South Wales.¹³
- 6.17 Where a species, while 'vulnerable' in terms of population at a national level, is abundant in a particular locale, the committee believes it would be useful if measures could be taken to control the population locally, while preserving the 'vulnerable' status of the species nationally.

Recommendation 20

6.18 The committee recommends that the proposed National Pest Animals and Weeds Committee work with state and territory governments to ensure that effective measures are available to control species classified as 'vulnerable' or 'threatened' where they constitute pests.

Hunting

6.19 Despite the widespread use of baiting and fencing, shooting is still an important part of many programs for dealing with pest animals, particularly large animals such as dogs, pigs, donkeys, camels and goats, and native species such as possums and kangaroos. The committee received a substantial amount of evidence regarding the use of hunting and shooting, and impediments to their effective use as part of pest control strategies.

Hunting and sporting organisations

6.20 FGA and the SSAA provided evidence to the committee in relation to the contributions their organisations have made to pest animal control. These comprise not only reduction of pest animal numbers through shooting and hunting, but also work in monitoring population numbers of pest species.

¹² Roundtable discussion with Leonora pastoralists, 12 April 2005.

¹³ Mr Ernie Constance, *Transcript of evidence*, 9 September 2005, p. 47.

- 6.21 As an example of this contribution, SSAA gave evidence that its Hunting and Conservation Branch has a national program that monitors vertebrate pest animal populations. The Hunting and Conservation Branch coordinates with national parks and private landholders to assess levels of pest infestation and reduce pest animal numbers.¹⁴ Similarly, FGA has been collecting data on pest animal hunting activity from its members for more than a decade.¹⁵
- 6.22 Hunting organisations have also made important contributions to pest animal control efforts in particular regions. For example, Victorian hunters from FGA participated in a fox bounty trial that destroyed more than 198,000 foxes in just over twelve months.¹⁶ Members of the SSAA have culled more than 25,000 wild goats in the Flinders Ranges since 1992.¹⁷
- 6.23 One of the advantages of utilising sporting and hunting organisations is that their members are usually accredited and have undergone some kind of training. Members of the SSAA, for example, undergo an accreditation course before going out to private lands, which includes training in ethical hunting, firearm handling, bushcraft and first aid.¹⁸ Hunting organisations generally operate under codes of practice, which ensure that best practice with regard to animal welfare is followed.¹⁹
- 6.24 Some landholders and organisations were supportive of the use of hunters to help control pest animal numbers.²⁰ It was suggested that responsible shooting organisations could be supported to conduct control operations, possibly through subsidisation of ammunition.²¹
- 6.25 SSAA gave evidence that legislative restraints and problems with insurance prevent landholders in some jurisdictions offering recreational hunting on their properties.²² The current insurance situation is that, although members of a sporting shooters group are covered by the insurance policy for their organisation, this does not guarantee that the insurer will not pursue landholders for reimbursement regarding accidents occurring on their property. Many farmers' insurance policies would not extend to a claim for negligence in respect of a hunting

- 15 FGA, Submission 29.
- 16 Submission 29.
- 17 Submission 20, p. 3.
- 18 Letter from Dr Jeanine Baker, SSAA, to the Committee, 16 July 2005.
- 19 Mr Rodney Drew, FGA, Transcript of evidence, 25 May 2005, p. 4.
- 20 Submissions 1, 4, 44, p. 5, 84, p. 29.
- 21 Animal Control Technologies, Submission 84, p. 29.
- 22 Submission 20, p. 4, Dr Jeanine Baker, SSAA, Transcript of evidence, 25 May 2005, p. 10.

¹⁴ Submission 20, p. 1.

accident, as hunting is not regarded as a farming activity. This has lead to reluctance on the part of some landholders to allow hunting to take place on their properties.

6.26 SSAA has advised the committee that it has discussed with its insurance broker the possibility of providing coverage for property owners in return for an increased premium.²³ This is a potential solution to the problem of insurance cover however the committee notes that in the absence of cooperation by insurance companies, state and territory governments may need to negotiate alternative arrangements to ensure that landholders are able to access the services of hunting and shooting groups for pest animal control.

Recommendation 21

6.27 The committee recommends that the Australian Government, through the Coalition of Australian Governments, encourage states and territories to amend legislation and to find solutions for insurance problems experienced by hunting and shooting organisations where legislation and insurance problems preclude the organisations from assisting landholders with pest control activities.

Individual hunters and shooters

- 6.28 The committee notes that individual hunters and shooters who are not part of organised sporting shooters' groups can also assist landowners in controlling pest animal problems on their land. The committee believes, however, that there must be guidelines in place as to acceptable hunting practices.
- 6.29 As discussed in Chapter 5, there was some evidence provided to the committee in relation to alleged irresponsible behaviour by hunters, such as releasing feral pigs and other animals into areas not already populated by those species, in order to build up new populations for hunting.²⁴

²³ Letter from Dr Jeanine Baker, SSAA, to the Committee, 16 July 2005.

²⁴ Submissions 38, p. 2, 39, 70, p. 12, 72, p. 2, 76, p. 13, 77, p. 2, Mr John Alcock, Monaro Merino Association, *Transcript of evidence*, 9 September 2005, pp. 14-15, Mr Mark Pearson, Animals Australia, *Transcript of evidence*, 16 March 2005, p. 9.

- 6.30 The committee also took note of evidence provided by the Tumbarumba Feral Animal Working Group (TFAWG) to the New South Wales Standing Committee No. 5 Inquiry into Feral Animals about the practice of pig dogging, which involves the use of hunting dogs to attack feral pigs. This practice is not only inhumane, but dogs used for this purpose may also escape and join populations of wild dogs.²⁵
- 6.31 Humane Society International expressed concern in its submission about the potential animal welfare impacts of hunting by inexperienced shooters.²⁶
- 6.32 Although the committee supports the use of individual hunters to assist landowners in controlling pest animals on their land, hunting must be appropriately regulated to ensure that it is conducted safely, humanely and responsibly. An effective way of regulating individual hunting, as well as managing hunting by organised groups, is through the implementation of Property-based Game Management Plans. These are discussed in Chapter 8.
- 6.33 The committee also received evidence about the involvement of private shooters in pest animal control through bounties. Bounty schemes involve a price per head being fixed for a particular species of pest animal, which is paid upon delivery of a carcass, or part of a carcass.
- 6.34 Some submissions were supportive of a bounty program.²⁷ Ms Denise Brien, of Oberon in New South Wales, suggested that a bounty be introduced to help control foxes, which prey on lambs in her region.²⁸ A bounty for foxes, cats and rabbits was also recommended by Transport Concepts (Qld) Pty Ltd.²⁹ Bill and Gloria Gossage, farmers to the southwest of Gulgong in New South Wales, recommended introducing a bounty on pigs.³⁰ Kathy and Malcolm Boladeras, of Wonganoo Station, called for a bounty to cut back dog numbers in the north-east Goldfields region of Western Australia.³¹

- 27 Submissions 58, p. 3, 83, 87, pp. 2-3.
- 28 Submission 14.
- 29 Submission 13.
- 30 *Submission 58*, p. 3.
- 31 *Submission 87,* pp. 2-3.

²⁵ Exhibit 2, TFAWG, Submission to the New South Wales General Purpose Standing Committee No 5 Inquiry into Feral Animals, August 2001, pp. 6-7.

²⁶ Submission 88, p. 1.

6.35 A joint submission from FGA and the SSAA, gave the following evidence in support of bounties:

Bounties are a controversial method of animal control, but clearly have a role if instigated with the support of the community and recognition of their limitations if undertaken on a small scale. Whilst debate will continue on the effectiveness or otherwise of "Bounties", Australian landholders should have access to a variety of eradication and control tools to combat pest animals, and shooting is one of these. Whilst we recognise that this method is not appropriate for every situation, shooting programs can be highly effective, species specific, cost efficient with an immediate measurable reduction in pest animal damage, particularly when combined with other techniques as part of a coordinated pest animal control plan.³²

- 6.36 A number of submissions pointed to the need for bounties to be operated on a national scale, or at least with consistency across regions, for them to be effective as a means of reducing pest animal population levels.³³
- 6.37 The committee notes with interest the comments made by Mr Trevor de Landgrafft, President of WAFF, in relation to the utilisation of bounties:

What it really is a reaction to is the lack of training and preparation by the agencies in having doggers available to undertake the task. They are hoping that perhaps, if they put a bounty out, it might attract some enterprising people to go out there and make a living. It is quite clear that that is not going to happen and it does not appear to ever be going to work. Nothing is going to replace continual training in and funding of these dogging experts to go out and do that.³⁴

6.38 Research provided by the BRS, and other evidence provided to the committee, indicates that bounties are generally ineffective as a means of control.³⁵ This may be due to a number of factors, including fraudulent practices, failure in terms of providing long-term relief, high costs of administering schemes and selective removal of surplus animals. Animals shot as part of a bounty scheme are often targeted in areas of high density

³² Submission 90.

³³ *Submissions 46, 83, 90, 95,* Mr Ian Lobban, VFF Barnawartha Branch, *Transcript of evidence*, 18 June 2004, p. 27.

³⁴ Transcript of evidence, 20 July 2005, p. 31.

³⁵ Submissions 17, 84, p. 28, BRS, Submission 76, Attachment E, P Olsen, Australia's pest animals: new solutions to old problems, Commonwealth of Australia, Canberra, 1998, pp. 26-27, Dr Tony Peacock, PAC CRC, Transcript of evidence, 11 May 2005, p. 5.

where they are easily caught, which means that the problem animals in an area are not removed. $^{\rm 36}$

6.39 Despite the submissions in support of bounties referred to above, the committee is of the view that bounty schemes generally need to be implemented at a national level, or at least across state borders, in order to be effective. The committee considers that the resources necessary to fund an inter-state bounty would be more usefully spent on the employment of more on-ground controllers such as dog trappers. The committee notes, however, that bounty schemes may be appropriate in particular circumstances, and may therefore play a role in local and regional pest animal management strategies, for example in the control of foxes and feral cats.

Baiting and poisoning

- 6.40 The committee received evidence that baiting is an effective method of pest animal control, particularly over large areas, where hunting and trapping may be difficult and impractical. It is also a necessary part of pest animal control in areas where residential build-up precludes shooting and hunting.³⁷ Baiting can generally play an important part as an element of an overall pest animal control strategy.³⁸
- 6.41 The Western Australian Government provided evidence that its Western Shield 1080 baiting program has been successful in turning around the trend towards extinction of a number of native animals that are preyed upon by foxes. The program involves routine baiting of approximately 3.5 million hectares four times a year and sometimes more often in smaller areas and on the margins of agricultural land.³⁹

³⁶ BRS, Submission 76, Attachment I, G Saunders, B Coman, J Kinnear and M Braysher, Managing Vertebrate Pests: Foxes, Australian Government Publishing Service, Canberra, 1995, pp. 56-57.

³⁷ Submissions 23, 31, p. 11, 84, p. 34.

³⁸ Mr Colin Clift, *Submission 12*, District Council of Grant, *Submission 17*, Mr Keiran McNamara, CALM, *Transcript of evidence*, 11 April 2005, p. 25.

³⁹ Mr Keiran McNamara, CALM, *Transcript of evidence*, 11 April 2005, p. 25.

- 6.42 In New South Wales, similarly, 'Outfox the Fox' is a large, coordinated fox baiting program that commenced in September 1999. It now has more than 1,400 participating landholders, several New South Wales National Parks and Wildlife regions, state forests, crown land and reserve trust areas involved. Baiting is conducted twice a year, with around 50,000 baits placed each time.⁴⁰
- 6.43 Most submissions in relation to baiting and poisoning included evidence in relation to the use of 1080 poison and aerial baiting.

Benefits of 1080 poison

- 6.44 A range of evidence was received in support of the continued availability of 1080 poison, with many landholders and organisations noting that 1080 is an important part of strategies to control pest animals such as wild dogs and foxes, and in Tasmania, possums and wallabies.⁴¹
- 6.45 The State Council for the RLPB of New South Wales had the following to say about 1080:

Of major relevance in pest animal management is the use of 1080 poison to control various pest species. The crucial importance of this chemical in pest species control cannot be overemphasised. In many ways it is the primary tool in controlling such pests. Without the continued availability of 1080 poison for this purpose, the deleterious effects of the pest species would no doubt increase to disastrous levels. State Council and Boards are aware of the opposition to the use of 1080 which comes from various individuals and organisations. However, the benefits of use of the chemical for pest control far outweigh any problems associated with its use.⁴²

6.46 Executive Director of CALM, Mr Keiran McNamara, indicated that he considers 1080 to be "... an absolutely essential part of our armoury ..." and that he favours the continued use of 1080 in Western Australia.⁴³

⁴⁰ State Council for RLPB New South Wales, *Submission 81*, p. 8.

⁴¹ Submissions 12, 18, 36, Attachment, 54, p. 3, 56, 81, p. 11, 82, Dr Tony Peacock, PAC CRC, Transcript of evidence, 11 May 2005, p. 10, Mr Chris Tallentire, CCWA, Transcript of evidence, 11 April 2005, p. 1, Mr Ian Lobban, VFF Barnawartha Branch, Transcript of evidence, 18 June 2004, p. 26, Mrs Alison Burston, Transcript of evidence, 18 June 2004, p. 59.

⁴² *Submission* 81, p. 11.

⁴³ *Transcript of evidence*, 11 April 2005, p. 34.

6.47 The Tasmanian Farmers and Graziers Association (TFGA) expressed the advantages of 1080 over other poisons as follows:

Among available poisons 1080 is preferable to other options because:

- it is a naturally occurring substance
- it is easily administered
- it does not accumulate in body tissues
- it is biodegradable in soil and water
- it is far less indiscriminate in its effects than options such as strychnine and arsenic.⁴⁴

Animal welfare considerations and non-target impacts

- 6.48 In contrast to the positive evidence provided about 1080, a number of submissions expressed concern about the continued availability of 1080, because of perceived animal welfare issues associated with its use.⁴⁵
- 6.49 Animals Australia gave the following evidence:

Animals poisoned by 1080 scream, vomit, defecate and suffer violent seizures. They remain conscious even after the toxin, which disrupts their energy metabolism, denies them the ability to move or escape from predators. The poison has been tested thoroughly, but not for humaneness. Apart from the obvious severe physical pain, the animal experiences stress, fear and mental suffering up until it loses consciousness. So it is impossible to claim that 1080 is a humane poison.⁴⁶

- 6.50 Contrasting evidence was presented to the effect that, despite the appearance that animals poisoned by 1080 have seizures and appear to be distressed, there is actually little or no pain and suffering involved.⁴⁷
- 6.51 Mr Clive Marks, of Nocturnal Wildlife Research, who has researched the impact of 1080 on animals, gave evidence that most people who believe that 1080 does not cause pain and suffering focus on the final, convulsive stage of 1080 poisoning in animals, which probably does not cause any pain or distress. Mr Marks indicated that it is the penultimate stage, in which the poisoned animal may exhibit manic running, retching and

⁴⁴ *Submission* 56.

⁴⁵ Submissions 69, 88, p. 1, 89, Dr Kevin Doyle, AVA, Transcript of evidence, 15 June 2005, p. 5.

⁴⁶ Ms Kristi-Anna Brydon, Animals Australia, Transcript of evidence, 16 March 2005, p. 3.

⁴⁷ Dr Tony Peacock, PAC CRC, *Transcript of evidence*, 11 May 2005, pp. 10-11, Mr Rupert Gregg, TFGA, *Transcript of evidence*, 29 March 2005, p. 14.

distressed vocalisation, which probably does cause pain and suffering for the poisoned animal.⁴⁸

- 6.52 In other evidence, the view was expressed that 1080 baits are ingested by a range of native species including possums, potoroos, wombats and eastern quolls, and should be banned for that reason.⁴⁹ Other non-target species, such as wedge-tail eagles, may be indirectly poisoned by feeding on the carcasses of animals poisoned by 1080.⁵⁰ Another submission indicated that the impact of 1080 baiting on native species is largely unknown.⁵¹
- 6.53 The Tasmanian Conservation Trust, in documents provided to the committee, expressed opposition to the use of 1080 poison to control native browsing and grazing animals in Australia. They supported the federal government's 2004 election commitment to phase out the use of 1080 poison against native wildlife by December 2005.⁵²
- 6.54 Other submissions expressed the opposing view that 1080 causes no harm to non-target native species, or that any direct effects are outweighed by the effects of predation and competition on native species by ferals.⁵³ Mr Antony Plowman, the member for Benambra in the Victorian Parliament, gave evidence in relation to an aerial baiting experiment conducted in New South Wales in which seventy tagged quolls were found to be still alive after baiting had occurred.⁵⁴ Mr Rupert Gregg, President of the TFGA, told the committee that effects on non-target species are minimal due to the control measures that are taken, such as cleaning up carcasses and clearing uneaten baits.⁵⁵

- 51 Bombala RLPB, Submission 80, p. 4.
- 52 Submission 89, Attachments.
- 53 Submissions 31, p. 9, 56, Mr Michael Litchfield, Transcript of evidence, 9 September 2005, p. 29, Mr Rupert Gregg, TFGA, Transcript of evidence, 29 March 2005, p. 11, B Moore, 'Address', in Exhibit 3, Proceedings of the National Wild Dog Summit, Wodonga, 22 February 2002, p. 2, DAWA, CALM, Department of Health Western Australia, 1080: Summary Information, June 2002, p. 10.
- 54 Transcript of evidence, 18 June 2004, p. 35.
- 55 Transcript of evidence, 29 March 2005, p. 11.

⁴⁸ Transcript of evidence, 15 June 2005, p. 21.

⁴⁹ *Submissions* 69, 88, p. 2, 89, Attachments, 91, p. 4.

⁵⁰ *Submissions 69, 96,* Ms Kristi-Anna Brydon, Animals Australia, *Transcript of evidence*, 16 March 2005, p. 3.

6.55 The committee notes that Western Australia is in a special position with regard to the impact of 1080 on native species. This is because a key component of 1080 occurs naturally in Western Australian flora, which means that native species particularly in the south-west of that state possess a natural resistance to the poison.⁵⁶ Mr Keiran McNamara explained this as follows:

The active ingredient in 1080 is sodium monofluoro-acetate, which exists in a family of plants known as the poison plants of the genus Gastrolobium, which is fairly widespread in the South-West. The early settlers did and farmers still do talk of poison country with gastrolobium on it. Because of that, there is a natural tolerance in the fauna of the South-West, at least from about Shark Bay to the Esperance area, to 1080. Without having the figures at my fingertips, that tolerance shows that baits can be used quite readily for foxes and not be of harm to native carnivores and so on.⁵⁷

- 6.56 The committee had regard to the preliminary findings of the Australian Pesticides and Veterinary Medicines Authority's (APVMA) review of the use of 1080 poison. The review found that, although 1080 can have an impact on individual non-target animals, it does not have an impact at the population level. The review also indicated that 1080 is readily degraded in surface soil, waters and living organisms, and therefore significant contamination of air, soil and water is not an issue. Animal welfare was not considered as part of the review.⁵⁸
- 6.57 The committee notes that the APVMA's preliminary findings include a number of recommendations for improvements in the labelling of 1080 products to reduce the potential for non-target effects and the general safety of 1080 use. The recommended changes to labels are as follows:
 - deletion of general terminology 'vermin' and replacement with specific target animals;
 - neighbour notification about imminent baiting;
 - minimum distance requirements for bait placement;
 - requirement of signage in baiting locations;
 - inclusion of 1080 dose rates;

⁵⁶ LE Twigg and DR King, 'The Impact of fluoracetate-bearing vegetation on native Australian fauna: a review', *Oikos*, vol. 61, 1991, pp. 412-430.

⁵⁷ Transcript of evidence, 11 April 2005, p. 33.

⁵⁸ Dr Joe Smith, APVMA, Transcript of evidence, 1 June 2005, p. 15.

- specifications as to bait materials and size;
- instructions on bait preparation; and
- information about storage and transportation of baits.⁵⁹
- 6.58 The committee takes the view that implementation of these changes to labelling of 1080 products will enhance the safety and effectiveness of the poison, which constitutes an important tool for landholders as part of their overall pest animal management strategies.
- 6.59 The review's preliminary findings indicate that risks of non-target species being affected by baiting can often be minimised by following careful procedures associated with the laying of different types of bait. As an example, where native birds may be likely to ingest rabbit baits, baiting should occur late in the day so that rabbits can take the baits overnight and minimise the number left for birds to take the next day.⁶⁰
- 6.60 While the RSPCA, Animal Welfare Centre and Vertebrate Pests Committee joint workshop discussion paper states that the relative humaneness of 1080 is not clear, it indicates that the implementation of standard operating procedures is essential in ensuring that 1080 is administered according to best practice standards.⁶¹ The committee agrees that the administration of 1080 according to recognised best practice should be a priority.
- 6.61 The committee also noted evidence that a private research company, Nocturnal Wildlife Research, has developed an agent that will greatly reduce the symptoms associated with distress in the use of 1080 poison.⁶² Research of this nature was supported by Animals Australia and RSPCA Australia in their evidence to the inquiry.⁶³ The committee considers that implementation of this research will go a long way towards removing some of the controversy surrounding the use of 1080 and that development of this important research should be supported.

63 *Transcript of evidence*, 16 March 2005, pp. 5, 7.

⁵⁹ APVMA, The Reconsideration of Registration of Products containing Sodium Fluoroacetate (1080) and their Associated Labels: Preliminary Review Findings, APVMA, Canberra, May 2005, viewed 11 October 2005, http://www.apvma.gov.au/chemrev/1080_prelim_review_findings.pdf>.

⁶⁰ APVMA, p. 36.

⁶¹ *Exhibit 11, A National approach towards humane vertebrate pest control,* Discussion paper arising from the proceedings of an RSPCA Australia/AWC/VPC joint workshop, Melbourne, 4-5 August 2003, pp. 13-14.

⁶² Mr Clive Marks, Nocturnal Wildlife Research, Transcript of evidence, 15 June 2005, p. 22.

- 6.62 The committee acknowledges that research in relation to 1080 points to opposing conclusions both in relation to the humaneness of 1080 and its impact on non-target native species. The committee notes that research into the impact of 1080 on non-target species is continuing and considers that is important in resolving the issue.⁶⁴ The committee considers, however, that until such research is conducted, 1080 must remain available to landholders to control pest animal problems on their properties.
- 6.63 The committee takes particular note of preliminary findings that have emerged from research in Queensland and New South Wales on the impacts of 1080 baiting on spotted-tailed quolls. Although final analyses are still outstanding, the results of this research indicate that quoll mortality rates from 1080 are much lower than previously thought. The Steering Committee involved in the research has agreed that aerial baiting should be used as an additional control technique where appropriate.⁶⁵ The committee hopes that state governments that currently place restrictions on the use of 1080 will take this research into account and formulate appropriate policy changes to enable the more effective use of this poison.

Problems with availability and use of 1080

6.64 Some landholders currently experience administrative problems in accessing and using 1080. For example, Steven Plozza, a producer and landholder in the Atherton Tablelands Region of Queensland, noted that the local Department of Natural Resources and Mines (DNRM) employee responsible for the distribution of 1080 does not have time to support landholders in ongoing 1080 programs. A suggestion that 1080 be distributed to farmers through the local council was turned down by council.⁶⁶ Cooloola Shire Council, also in Queensland, gave evidence that regulations governing the use of 1080 are too restrictive, particularly in beef and dairy producing areas with farm size of below 250 hectares.⁶⁷

http://www.nationalparks.nsw.gov.au/npws.nsf/Content/aerial_baiting_quolls>

67 Submission 95.

⁶⁴ Mr Quentin Hart, BRS, Transcript of evidence, 16 February 2005, p. 16.

⁶⁵ Mr Tim Seears, Cooma RLPB, *Transcript of evidence*, 9 September 2005, pp. 1-2, NPWS, *Aerial baiting for wild dogs: the impact on spotted-tailed quol populations*, NPWS, 14 September 2005, viewed 6 October 2005,

⁶⁶ *Submission* 4.

- 6.65 The Carboor/Bobinawarrah Landcare Group of north-east Victoria discussed in its submission the need for a simplified process for farmers to obtain a permit to lay 1080 baits for foxes and rabbits. Currently, farmers are required to attend a two-day course that provides little information about how to bait using 1080. The group recommended a simplified course that would focus on methods of baiting and also include information about other methods of control.⁶⁸
- 6.66 The committee notes that the Tasmanian Government has resolved to end the use of 1080 on Crown land by the end of 2005. It also notes that the federal government made a commitment to phasing out the use of 1080 poison on both government and private land in Tasmania as part of its 2004 election policy.⁶⁹
- 6.67 Concerns expressed in relation to the phasing out of 1080 in Tasmania are that there is currently no suitable, cost-effective alternative with which to manage browsing populations such as possums and wallabies.⁷⁰ Some submitters stated that the removal of 1080 would force landowners to illegally turn to more dangerous poisons such as strychnine to control pest animals on their land.⁷¹
- 6.68 The TFGA, in its submission to the inquiry, pointed out that the use of 1080 in Tasmania has already been reduced to less than 10 kilograms per annum, divided fairly evenly between farmers and forestry industries. The use of 1080 in Tasmania is also heavily regulated and this itself is an impediment to the control of pest animal problems by landowners.⁷²
- 6.69 The committee is concerned that landholders in some areas are having problems accessing 1080. Although a degree of regulation is acceptable and necessary to ensure 1080 is used safely, there is a need for red-tape to be removed if it is preventing farmers from accessing 1080.
- 6.70 It is also of great concern to the committee that the Tasmanian Government plans to phase out the use of 1080 on government-owned lands by the end of the year, despite the absence of any cost-effective alternative for use in baiting programs. The committee believes that this may well lead to problems in relation to the Tasmanian Government, and

- 70 TFGA, Submission 56, Mr Rupert Gregg, TFGA, Transcript of evidence, 29 March 2005, p. 13.
- 71 TFGA, Submission 56, Mr Rupert Gregg, TFGA, Transcript of evidence, 29 March 2005, p. 11.
- 72 Submission 56, Mr Rupert Gregg, TFGA, Transcript of evidence, 29 March 2005, pp. 11, 16.

⁶⁸ *Submission* 54, p. 5.

⁶⁹ The Nationals, *The Coalition Government Election 2004 Policy*, The Nationals, viewed 27 September 2005, <http://www.nationals.org.au/downloads/A_Sustainable_Future_for_Tasmanina_Policy_Do cument.pdf>, p. 6.

in particular state forests, fulfilling their obligations to control pest animal problems on their land. The committee is also of the view that the federal government should reconsider its expressed commitment to phasing out the use of 1080 in Tasmania.

Inconsistencies in bait requirements

6.71 In its submission to the inquiry, Animal Control Technologies, a leading Australian manufacturer of baits, discussed the problems caused by inconsistent requirements in bait composition between states and territories. These inconsistencies lead to reduced economies of scale for the company, cause problems with registering baits through the APVMA, and cause confusion amongst landholders:

> ... when we first started to manufacture fox baits in Victoria we were advised that the then recommended dose of 1080 in Victoria was 3.3mg/bait. In most other states the recommended dose was 3mg/bait but was 4.5mg/bait in WA due to lower sensitivities of non-target animals in that state. The recommended dose for dog baits indicated by the Vertebrate Pest Committee at the time was 6mg/bait and we have adopted this in our bait products for wild dog control. The Victorian Department of Primary industries has now adopted 4mg/bait or 4.5mg/bait for wild dogs, yet we hold a valid registration for a 6mg bait approved by the APVMA and supported at the time of registration by Victoria. The goal posts seem to have moved, presumably as a result of re-consideration of potential non-target impact of potent baits. ... We are unaware as to the scientific basis for the recommendation of a 4 or 4.5mg wild dog bait in Victoria in the face of a VPC recommendation of 6mg per bait. ... Manufacturers can easily prepare baits to any specification but it would be helpful if there was some consistency in this area.73

6.72 The committee notes that differences in bait composition requirements between states and territories may have a scientific rationale, for example, a higher dosage rate in Western Australia due to natural resistance to 1080 in native species in that state. To the extent possible, however, the committee considers that it would be useful if requirements for bait composition across states and territories could be standardised.

73 Submission 84, pp. 39-40.

Aerial baiting

- 6.73 Many submitters advocated the use of aerial baiting to control feral pigs, foxes and dogs.⁷⁴ The committee received evidence that aerial baiting is necessary to control dog populations in some areas because dogs learn to avoid baits left at bait stations. Aerial baiting also enables the baiting of areas that would otherwise be inaccessible for ground baiting, or where ground baiting would not be practical or economically viable.⁷⁵
- 6.74 Because of concerns in relation to the effect of aerial baiting on non-target species, aerial baiting has been stopped in some areas in New South Wales and Victoria. NSWFA gave evidence that aerial baiting was banned in southern NPWS areas in 1997.⁷⁶
- 6.75 Some submissions were critical of this cessation of aerial baiting.⁷⁷ For example, the committee received evidence from Ms Noeline Franklin, a Brindabella, ACT farmer, that aerial baiting was stopped in 1996 in Kosciusko National Park due to fears of its effect on quolls. Since then, Ms Franklin estimates that the increase in the number of dogs has been somewhere in the order of 300 to 400 percent.⁷⁸
- 6.76 In Cooma, the committee received a substantial amount of evidence pointing to the need for effective aerial baiting programs to be recommenced.⁷⁹ The committee was informed that aerial baiting would have a huge advantage, both for producers and for native wildlife, by reducing the area's wild dog population. Aerial baiting was submitted to be both more effective, and less expensive, than the use of bait stations. Mr Bob Maguire, a farmer in the Cooma region, told the committee:

The bait stations are a waste of bloody time. All they do is cost you \$600 a day to maintain, and they educate uneducated dogs. At the moment, there is no reason why we cannot aerial bait, because the

- 76 *Submission* 31, p. 9.
- 77 *Submissions* 22, 31, p. 5, 45, 103, Mr Antony Plowman, Member for Benambra, Victorian Parliament, *Transcript of evidence*, 18 June 2004, p. 36.
- 78 Transcript of evidence, 11 August 2004, p. 10.
- 79 Mr Tim Seears, Cooma RLPB, *Transcript of evidence*, 9 September 2005, p. 3, Mr John King, Monaro Merino Association, *Transcript of evidence*, 9 September 2005, pp. 13, 22, Mr Michael Litchfield, NSWFACDC, *Transcript of evidence*, 9 September 2005, p. 25, Mrs Ellen Green, NSWFACDC, *Transcript of evidence*, 9 September 2005, p. 25, Mrs Sylvia Golby, NSWFACDC, *Transcript of evidence*, 9 September 2005, p. 33, Mrs Marion Kennedy, *Transcript of evidence*, 9 September 2005, p. 40.

⁷⁴ *Submissions* 5, p. 3, 11, 18, 22, 35, 60, 61, 66, 75, 77, p. 2, Mrs Marion Kennedy, *Transcript of evidence*, 9 September 2005, p. 40.

⁷⁵ *Submissions* 45, 84, p. 34, B Moore, 'Address', in *Exhibit 3, Proceedings of the National Wild Dog Summit*, Wodonga, 22 February 2002, pp. 1-2.

quoll trials have been finished. ... In April 2004 the minister approved 1080 for Adaminaby-Yaouk. It has been done once, and that is a bloody disgrace because once is just no good at all. The first application knocked the dogs, but they are back in greater numbers. Something like 500 sheep have been killed in the area this year, which is far greater than last year.⁸⁰

- 6.77 At the National Wild Dog Summit in February 2002, all but two of the 400 people present voted in favour of the reintroduction of aerial baiting across the wild dog breeding areas of all mainland states and territories.⁸¹ The participants called for review and alignment of aerial baiting practices across all states and territories, to remove inconsistencies that currently exist.⁸² A motion to call for reintroduction of aerial baiting in Victoria was unanimously passed at a Wild Dog meeting held in Albury in June 2004.⁸³
- 6.78 The committee notes that the New South Wales General Purpose Standing Committee inquiry into feral animals recommended that the precautionary principle should prevail in the absence of conclusive research into nontarget impacts of 1080 and whether alternatives to aerial baiting are as effective in controlling wild dogs.⁸⁴
- 6.79 The committee is aware that aerial baiting in Kosciusko National Park was resumed in late 2004.⁸⁵ Attendees at the 2005 New South Wales Pest Animal Control Conference were told about the success of aerial baiting to control wild dogs in eleven RLPB areas, including Armidale, Tamworth, Northern New England, Gloucester, Grafton, Kempsey, Mudgee, Hunter, Maitland, Cooma and Braidwood.⁸⁶
- 6.80 Although this would appear to be a step in the right direction, the committee received evidence in Cooma that the reintroduction of aerial baiting in these areas has been a 'token' effort, and that there has been little real attempt to reintroduce aerial baiting, particularly in national parks.⁸⁷ The committee is hopeful that an effective aerial baiting campaign will

⁸⁰ Transcript of evidence, 9 September 2005, p. 41.

^{81 &#}x27;Copy of Motions', Motion One, in *Exhibit 3, Proceedings of the National Wild Dog Summit,* Wodonga, 22 February 2002.

⁸² N Ward, 'Summation', in *Exhibit 3, Proceedings of the National Wild Dog Summit*, Wodonga, 22 February 2002.

⁸³ Exhibit 4, Motions for Wild Dog Meeting, Albury, 17 June 2004, Motion No. 3.

⁸⁴ General Purpose Standing Committee No. 5 (NSW Legislative Council), *Feral Animals*, Parliamentary Paper No. 158, New South Wales Government, October 2002, p. xvi.

⁸⁵ Mr Tim Seears, Cooma RLPB, Transcript of evidence, 9 September 2005, p. 4.

^{86 &#}x27;Aerial baiting hits feral dogs', The Border Mail, 9 July 2005.

⁸⁷ Mr Tim Seears, Cooma RLPB, *Transcript of evidence*, 9 September 2005, p. 3, Mrs Susan Litchfield, Monaro Merino Association, *Transcript of evidence*, 9 September 2005, p. 18.

resume following the release of research showing that dog baits do not harm native wildlife.⁸⁸

- 6.81 The committee also notes that a press release by the VFF on 13 May 2005 indicates that attempts by the Federation to reinitiate aerial baiting programs in Victoria have stalled.⁸⁹
- 6.82 Animal Control Technologies provided the following evidence in relation to aerial baiting:

... without any doubt, the nation must face the reality of aerial baiting campaigns if we seek to make a serious impact on the pest problems in larges (sic) areas of low human density or inaccessible country and where budgetary constraints limit other options. The only debate is on how to best mange (sic) the slightly higher nontarget risk that may be associated with such baiting. In doing so the analysis should not only consider the risk but also the benefits from the control operation. The do-nothing option is always risk free but the downside is that there are no benefits either. This is the current approach at many sites and it is a totally reprehensible abrogation of responsibility.⁹⁰

6.83 As with the use of 1080 generally, the committee considers that it is important not to withdraw a method of control that is effective in reducing pest animal populations where there is no solid evidence to support the need for withdrawal. Although the committee understands the rationale behind adopting a precautionary approach, the committee notes that native species populations are already being adversely affected by wild dogs. Aerial baiting should accordingly be available as a control method in all states and territories, with local pest animal groups responsible for determining on an individual basis whether aerial baiting should be used in a particular area. The potential for non-target impacts can be taken into account at the local or regional level in deciding whether or not to conduct aerial baiting campaigns.

⁸⁸ ABC Rural, 'Aerial baiting resumes in NSW', ABC, 14 September 2005, viewed 27 September 2005, <http://www.abc.net.au/rural/content/2005/s1460071.htm>, ABC News Online, 'More national parks to be subject to wild dog baiting', ABC News Online, 14 September 2005, viewed 27 September 2005, <http://www.abc.net.au/news/newsitems/200509/s1459810.htm>, 'Wild dog baits to be extended', *The Border Mail*, 13 October 2005, viewed 18 October 2005, <http://www.bordermail.com.au/newsflow/pageitem?page_id=1067747>.

⁸⁹ VFF, 'Thwaites: Killer dogs more precious than people', Press Release, 13 May 2005, viewed 11 October 2005, http://www.vff.org.au/index.php?id=70233>.

⁹⁰ *Submission 84*, p. 35.

6.84 Some concern was expressed about the impacts of aerial baiting with 1080 on non-target species.⁹¹ Other, conflicting evidence was provided that aerial baiting *increases* the population of native wildlife.⁹² The committee was informed at Cooma about recent research indicating that aerial baiting has a minimal impact on spotted-tailed quolls.⁹³ The committee believes that the AIA CRC should consolidate existing research and conduct further research if necessary to determine the impacts of aerial baiting on non-target species, but in the meantime that aerial baiting should remain as an option for pest animal control where it is needed.

Recommendation 22

6.85 The committee recommends that the Australian Government:

- reconsider its commitment to phasing out the use of 1080 poison and facilitate discussions with state and territory governments to encourage the continued availability of 1080 poison and the removal of unnecessary restrictions and administrative red-tape where that is hindering access by landholders to 1080;
- encourage the New South Wales and Victorian Governments to remove prohibitions on aerial baiting; and
- encourage state and territory governments to make local pest animal control groups responsible for decisions about whether aerial baiting should be conducted.

⁹¹ Humane Society International, Submission 88, Attachment, p. 7, Colong Foundation for Wilderness, Environment Minister introduces Quoll and Dingo extinction program, Media Release, Colong Foundation for Wilderness, 24 August 2004, viewed 27 September 2005, http://www.colongwilderness.org.au/media_releases/MR04082400.html>.

⁹² Mr John King, Monaro Merino Association, *Transcript of evidence*, 9 September 2005, p. 13, Mrs Susan Litchfield, NSWFACDC, *Transcript of evidence*, 9 September 2005, p. 29, Mr Ian Lobban, VFF Barnawartha Branch, *Transcript of evidence*, 18 June 2004, p. 26, Mr Antony Plowman, Member for Benambra, Victorian Parliament, *Transcript of evidence*, 18 June 2004, pp. 35-36.

⁹³ Mr Tim Seears, Cooma RLPB, Transcript of evidence, 9 September 2005, p. 1, DEC, Research suggests wild dog baiting doesn't harm quolls, Media Release, DEC, Sydney, 24 August 2004, viewed 27 September 2005, <http://www3.environment.nsw.gov.au/npws.nsf/Content/media_240804_dogbaitingquolls >.

Recommendation 23

- 6.86 The committee recommends that the Australasian Invasive Animals Cooperative Research Centre:
 - consider ways to provide support to Nocturnal Wildlife Research and other companies investigating the use of anxietyreducing agents in conjunction with 1080 and other poisons; and
 - consolidate existing research and conduct further research if required to determine the comparative advantages and disadvantages of aerial baiting in remote areas where that is the only feasible alternative for feral animal control.

Recommendation 24

- 6.87 The committee recommends that the proposed National Pest Animals and Weeds Committee:
 - take steps to ensure that the final recommendations of the Australian Pesticides and Veterinary Medicines Authority in relation to use of 1080, when released, are implemented and that best practice for 1080 use is followed in all 1080 baiting campaigns; and
 - coordinate with state and territory representatives to achieve standardised baiting composition requirements across jurisdictions.

Trapping

- 6.88 Although trapping did not feature significantly in evidence presented to the inquiry, some submissions referred to trapping as one of the methods that contributes to an effective pest animal control strategy.⁹⁴ Trapping is currently the only organised method of killing cane toads; the toads are trapped and then collected and gassed with carbon dioxide.⁹⁵
- 6.89 The BRS noted that trapping is not always effective, poses some non-target risks and is labour-intensive and therefore expensive.⁹⁶ The NSWFA gave the following evidence in relation to trapping:

Trapping can be a useful method for wild dog control but only when used in conjunction with strategic aerial and ground baiting programs. Trapping is principally used for targeting specific 'problem' wild dogs rather than general population control.⁹⁷

6.90 Dr Bidda Jones, of RSPCA Australia, told the committee:

I think one of the issues is that a method in itself can be more or less humane depending on how it is applied. An example of that is the use of leg-hold traps. Putting aside steel-jawed traps, if you are using a padded leg-hold trap to catch a wild dog and you are checking the trap on a regular basis — say, at least every 24 hours then that is a relatively humane method. If you are not checking that trap for a week, it is an extremely inhumane method because the animal is going to die a very painful death before you have got to it. So how the method is applied is very important.⁹⁸

- 96 Submission 76, p. 6.
- 97 Submission 31, p. 11.
- 98 Transcript of evidence, 16 March 2005, p. 15.

⁹⁴ Submissions 31, p. 11, 35, 59, p. 16, 66, 71, 77, p. 1, 95, Mr Trevor Barnes, FFIC, Transcript of evidence, 29 March 2005, p. 43.

⁹⁵ A Wahlquist, 'Sentenced to Death', *The Australian*, 9 August 2005, viewed 11 October 2005, http://www.theaustralian.news.com.au/common/story_page/0,5744,16193840%255E28737, 00.html>.

6.91 The committee notes that animal welfare concerns have been expressed about the use of steel-jawed traps.⁹⁹ To the extent that these can be made more humane, for example by rubber-padding, the committee believes that this should occur. In relation to other traps, best practice should always be followed to ensure that trapping is as humane as possible.

Recommendation 25

6.92 The committee recommends that the proposed National Pest Animals and Weeds Committee ensure that best practice is always followed in relation to the use of trapping to ensure that it is conducted as humanely as possible.

Doggers and other pest animal controllers

- 6.93 The committee received a substantial amount of evidence emphasising the need to employ trained, experienced doggers to deal with the wild dog problems experienced by sheep and cattle farmers.¹⁰⁰ Doggers perform onground control, destroy animals that will not take baits, and also play a vital role in helping to strategically plan aerial and ground baiting exercises, because of their special knowledge of the habits of wild dogs.
- 6.94 Mr Clive Anderson, who farms on the outskirts of the Benambra township in Victoria, gave evidence that the local dogger in his area trapped more than forty wild dogs within 10 kilometres of his property and more than 80 wild dogs in the local area within about a year following the January 2003 bushfires.¹⁰¹ This is only one example of a number of submissions received

⁹⁹ Animal Control Technologies, Submission 84, p. 21, Dr Bidda Jones, RSPCA Australia, Transcript of evidence, 16 March 2005, p. 2, Exhibit 11, A National approach towards humane vertebrate pest control, Discussion paper arising from the proceedings of an RSPCA Australia/AWC/VPC joint workshop, Melbourne, 4-5 August 2003, p. 15.

¹⁰⁰ Submissions 7, 10, 11, p. 2, 22, 26, 30, p. 2, 36, Attachment, 39, 40, p. 4, 42, 51, 53, p. 3, 61, 65, p. 2, 66, 74, 77, p. 2, 83, 85, 86, p. 3, 87, p. 2, 101, Ms Noeline Franklin, Transcript of evidence, 11 August 2004, p. 11, Mr Russell Murdoch, New South Wales Upper Murray Graziers, Transcript of evidence, 18 June 2004, pp. 42-43, Mr Douglas Paton, VFF Corryong Branch, Transcript of evidence, 18 June 2004, p. 47, Mr John Sinclair, Transcript of evidence, 18 June 2004, p. 73, Exhibit 2, TFAWG, Submission to the New South Wales General Purpose Standing Committee No 5 Inquiry into Feral Animals, August 2001, p. 5, Exhibit 4, Motions for Wild Dog Meeting, Albury, 17 June 2004, Motion No. 3.

¹⁰¹ Submission 65, p. 2.

indicating the important role that dog trappers play in helping to control wild dog numbers in rural areas.

- 6.95 Much of the evidence received pointed to the need for governments to commit funds for the employment of doggers over an extended period.¹⁰² The sporadic nature of funding is an ongoing problem in relation to the continued employment of experienced doggers. When new doggers come to an area, it takes time for them to learn about the area and where the dogs are located. The short-term nature of funding for doggers means that doggers are sometimes moved on just as they are beginning to know the area and to have a positive impact on the pest animal problem.¹⁰³
- 6.96 Mr John Sinclair, a private farmer from Yea-Alexandra, discussed the problem with short-term funding:

If I went out to trap a dog, all I would catch would be a cold at the ends of my fingers. It is a very skilful business when you are trying to get a dog in thousands of hectares to put his foot on a plate about that big. ... It is a very skilled task. If we lose good people because they are on short-term contracts and suddenly the money runs out for a short period and then say, 'Heck, we want him back again,' guess what: we cannot get him back again.¹⁰⁴

6.97 Kathy and Malcolm Boladeras, from the north-east Goldfields region in Western Australia, stated:

Each year the Kalgoorlie ZCA (Zone Control Authority) has to decide how best to allocate funding among its various interest groups, and each year it is a battle to make the funding go far enough.

Last year all dogging groups were allocated \$40,000, which is only enough to employ a full-time dogger for 6 months.

Some areas may only require a part-time dogger if dog activity is spasmodic, but our situation remains constant until the number of dogs is drastically reduced.¹⁰⁵

105 *Submission 87*, p. 3.

¹⁰² Kathy and Malcolm Boladeras, Submission 87, p. 3, Mr Russell Murdoch, New South Wales Upper Murray Graziers, Transcript of evidence, 18 June 2004, p. 42, Mr Geoffrey Burston, Transcript of evidence, 18 June 2004, p. 61, M Litchfield, B Jamieson, J Coman, G Hillyer and W Phillips, 'Summary of the Wild Dog Situation in the Cooma Rural Lands Protection Board District', in Exhibit 3, Proceedings of the National Wild Dog Summit, Wodonga, 22 February 2002.

¹⁰³ Mr John Sinclair, Transcript of evidence, 18 June 2004, pp. 80-81.

¹⁰⁴ Transcript of evidence, 18 June 2004, pp. 80-81.

- 6.98 Proceedings from the National Wild Dog Summit in Wodonga noted that, in order to carry out their operations effectively and economically, doggers require appropriate vehicles, baits, traps and other equipment; adequate support from government organisations; security of employment; rates of pay that recognise the expertise involved; and formalised and recognised training for apprentices.¹⁰⁶
- 6.99 Although submissions varied in their estimates of the amount required per annum for the employment of a dogger,¹⁰⁷ the average appears to be in the vicinity of \$80,000. This figure should be applied in determining funding for additional doggers in regions where feral dogs are a particularly serious problem.
- 6.100 The committee is convinced that the employment of doggers on a regular and continuous basis is an indispensable part of a concerted effort to control the wild dog population in Australia. Government funds must be committed for the purpose of employing doggers on an ongoing basis in regions where wild dogs are a significant problem for sheep and cattle farmers. Measures must also be taken to ensure that adequate numbers of new doggers are being trained in the skills of dog hunting and trapping.
- 6.101 The committee was also told that some areas may benefit from funding to enable the employment of pest animal controllers on a contract basis to undertake short-term control operations where required for other species. At Warrawagine Station in Western Australia, the committee took evidence that pastoralists do not have the time necessary for controlling feral camels on the property and have difficulties finding people willing to come to the area for employment.¹⁰⁸

¹⁰⁶ M Litchfield, B Jamieson, J Coman, G Hillyer and W Phillips, 'Summary of the Wild Dog Situation in the Cooma Rural Lands Protection Board District', in *Exhibit 3, Proceedings of the National Wild Dog Summit*, Wodonga, 22 February 2002. See also Mr John W Gell, *Submission 83*.

^{107 \$100,000 (}Victorian and NSW Wild Dog Coordinating Committee, Submission 66), \$80,000 (Hume RLPB, Submission 77), \$100,000 (Mr Bart Jones, PGA, Transcript of evidence, 20 July 2005, p. 5), \$40,000-80,000 (Mr Antony Plowman, Member for Benambra, Victorian Parliament, Transcript of evidence, 18 June 2004, p. 38), \$80,000 (Mr Russell Murdoch, New South Wales Upper Murray Graziers, Transcript of evidence, 18 June 2004, p. 41), \$60,000-70,000 (Roundtable with Leonora pastoralists, 12 April 2005).

¹⁰⁸ Discussions at Warrawagine Station, Western Australia, 21 July 2005.

- 6.102 The Wodonga District Council of the VFF called for a federally-funded apprenticeship scheme to train pest animal control officers who would have the ability to travel widely and move into problem areas.¹⁰⁹
- 6.103 The Victorian and New South Wales Wild Dog Coordinating Committee requested that the federal government form a Pest Animal Control Unit to employ experienced and professional pest animal control staff. These staff would be funded to carry out pest animal control across all land titles and boundaries.¹¹⁰
- 6.104 The committee considers that the proposed National Pest Animals and Weeds Committee should administer a special fund contributed to by DAFF, and state and territory governments on a dollar for dollar basis. The fund would be used for the employment and training of full-time doggers in areas where they are most needed, and for the employment of pest animal control officers to carry out pest animal control activities as required. Community groups and local governments in affected areas could bid for available funds on the basis of evidence of need. The proposed National Pest Animals Advisory Committee would advise the Committee as to the appropriate distribution of funding. The committee emphasises that this funding must be directed at on-ground control and not administrative expenses.

Recommendation 26

- 6.105 The committee recommends that the Australian Government Department of Agriculture, Fisheries and Forestry coordinate with state and territory governments to provide dollar for dollar funding to a special fund to be administered by the proposed National Pest Animals and Weeds Committee, to be used solely for the purposes of:
 - employing doggers on a regular and ongoing basis in areas where wild dogs are a serious problem;
 - providing programs for skilled doggers to train new doggers by means of an apprenticeship or other training scheme; and
 - employing pest animal controllers on a contract basis where they are needed to carry out *ad hoc* pest animal control activities.

¹⁰⁹ Submission 53, p. 2.

¹¹⁰ Submission 66.

Fencing

- 6.106 Evidence in relation to the efficacy of fencing as a control measure was mixed. Some people indicated that it is effective at helping to keep pest animals away from crops and livestock.¹¹¹ Other submissions indicated that fences are either ineffective or simply divert pest animals from one area to another, without actually dealing with the problem.¹¹² The high cost associated with erecting and maintaining fences was also an important consideration for many people.¹¹³
- 6.107 Some of the problems associated with fencing as a means of pest animal control were discussed in the submission from the TFGA:

Fencing is a practical option in particular situations, and is widely used, but has characteristics which make it impractical elsewhere.

- Effective fencing is a relatively expensive option (installation cost of up to \$3 000/km), because it needs to be netting fencing of a relatively small mesh, effectively fastened to the ground (if not buried in the ground) along its entire length, and with a "floppy" top where possums are a problem.
- Fencing needs ongoing inspection and maintenance in light of possible damage from wombats and falling trees and tree limbs.
- In more remote areas fencing materials are liable to theft.¹¹⁴
- 6.108 The committee acknowledges that fencing in itself is not a solution to pest animal problems. In certain circumstances, however, the committee considers that fencing can be a vital tool in helping to control pest animal populations. This is particularly so in areas where pest animals are native species that cannot be dealt with by other means.
- 6.109 Where fencing is an integral aspect of pest animal control, it is important that it be constructed and maintained properly and to appropriate standards.¹¹⁵ Fencing is expensive, and although the benefits in terms of protection of crops and livestock can be significant, there is the potential for enormous waste of resources if fencing is not built and maintained properly.

- 114 Submission 56.
- 115 Mr Noel Cheshire, Submission 73.

¹¹¹ *Submissions* 40, 56, p. 3, Mr John Alcock, Monaro Merino Association, *Transcript of evidence*, 9 September 2005, p. 17, Mr Quentin Hart, BRS, *Transcript of evidence*, 16 February 2005, p. 12.

¹¹² *Submissions 74, 83,* Mr James Neary, Ovens Landcare Network, *Transcript of evidence,* 18 June 2004, p. 5.

¹¹³ Submissions 56, 76, p. 14, 81, p. 11.

- 6.110 Mr Noel Cheshire, a third-generation farmer in the north-east of Victoria at Burrowye, gave evidence that electric fences are often not constructed to an appropriate standard. He suggested that a standard be set that must be met in order for the person constructing the fence to receive funding.¹¹⁶
- 6.111 The committee also received evidence that in Victoria, for example, it is not feasible to rely upon a continuous electrified boundary due to different fence management between properties, lack of interest and initiative by some landholders and lack of power within government departments to enforce fence maintenance.¹¹⁷
- 6.112 The committee received evidence from a number of sources that government regulations in some jurisdictions impede landholders in constructing and maintaining fences. Mr Neil Clydsdale, a grazier in the Tintaldra area, stated:

In terms of wildfire and those sorts of issues, you are not allowed to clear back from that boundary fence properly. There is no access along that boundary fence, so you cannot do control burning from that point. There are all those sorts of issues. So it is not just one issue; it is a whole host of issues. If you want to put up an adequate electric fencing system to keep out not only wild dogs but also other animals, it is very difficult to do that.¹¹⁸

- 6.113 A number of submitters gave evidence that overregulation and restrictions on clearing adequate boundaries are an impediment to constructing and maintaining effective fencing.¹¹⁹
- 6.114 The committee received a submission from Mr Peter Spencer, a sheep farmer at Shannons Flat in New South Wales. Mr Spencer pointed out how the problem of wild dogs coming from national parks, combined with restrictive native vegetation clearing laws, makes sheep grazing virtually impossible:

As the kangaroos (from adjoining National Park area) enter the farm they do not eat the native grass they prefer to eat the improved grass and the dogs follow them. The dog's (sic) eat, traumatise and scatter through the forests the sheep and then the native vegetation, *which sheep are no longer there to eat*, re-grows.

¹¹⁶ Transcript of evidence, 18 June 2004, p. 49.

¹¹⁷ Geoff and Alison Burston, Submission 22.

¹¹⁸ Transcript of evidence, 18 June 2004, p. 47.

¹¹⁹ Mr Garry Breadon, Submission 3, Dr Colin Grant, BRS, Transcript of evidence, 16 February 2005, p. 17, Mr Ronald Briggs, VFF Wangaratta Branch, Transcript of evidence, 18 June 2004, p. 14, Mr Fraser Barry, Transcript of evidence, 18 June 2004, p. 57.

I am not permitted to clear the re-establishing regrowth as a right and each year more and more is regrowing as I cannot put the sheep back due (sic) the wild dogs being more prevalent as the native vegetation becomes more dense. This becomes thicker and provides more habitats for more fauna including Pests.¹²⁰

6.115 The committee notes that, where fencing is an important part of the strategy to control pest animals, it must be properly constructed and maintained. The proposed National Pest Animals and Weeds Committee should coordinate between states and territories to agree on guidelines for fence construction and maintenance and remove regulatory impediments to land clearing required for construction of appropriate fencing.

Recommendation 27

6.116 The committee recommends that the proposed National Pest Animals and Weeds Committee work with government representatives to agree on appropriate guidelines for the construction and maintenance of exclusion fencing and remove regulatory impediments to land clearing required specifically for fencing for the purposes of pest animal control.

Dog fencing in Western Australia

- 6.117 The committee notes that, due to its large land mass and topography, Western Australia is in a different position to most other states and territories in relation to pest animal issues.
- 6.118 In particular, the committee notes that pastoralists must rely heavily on fencing as a means of controlling pest animals, particularly dogs and emus, as opposed to other methods that are difficult to utilise over large areas of land.
- 6.119 The committee received evidence in relation to two different dog fences in Western Australia. The existing fence includes portions of the original rabbit proof fence constructed in the early 1900s. The fence starts at Kalbarri, north of Geraldton, runs east towards Yalgoo, then moves south through Morawa and out south-east between Southern Cross and Coolgardie. There is a gap in the fence of 30 to 40 kilometres and then a

different section of the fence begins at about Lake Grace and runs down towards the coast to just between Ravensthorpe and Hopetoun.¹²¹

- 6.120 WAFF gave evidence that the barrier fence has deteriorated to the extent that it is ineffective in many areas of the state.¹²² Pastoralists at Yuin Station, where the committee visited in April, indicated that sections of the existing fence need to be upgraded from emu-proof to a dog-proof standard, at a cost of \$13,000 per kilometre. This could be achieved, for example, by the insertion of an outrigger wire about a foot out from the existing fence, which would have the added benefit of deterring kangaroos.¹²³
- 6.121 Mr Bart Jones, a member of the PGA, whose family farms in the Eastern Goldfields region, told the committee that the existing fence should be extended by constructing a barrier fence that begins at Esperance and comes up to Madoonia Downs and out to Cunyu Station, north of Wiluna. The fence would be an estimated total distance of 1,500 kilometres and would cost roughly \$15 million.¹²⁴
- 6.122 The second fence has been proposed by ZCA Number 9 in the northeastern sector of the state to assist with the significant dog problems being experienced there, which are the worst they have been for years.¹²⁵ The proposed new fence would run roughly from Port Hedland south to the Kalgoorlie area then east to Mundrabilla, allowing for natural barriers. It is estimated that the fence would be approximately 3,000 kilometres long and cost \$10,000 per kilometre, at a total cost of \$30 million. The fence would also assist in the control of feral donkeys and camels. It was proposed that construction of the fence be funded through a combination of rating all land users, community rates and state or federal government assistance.¹²⁶
- 6.123 The committee considers that there is merit in these proposals for fence upgrade and construction in Western Australia. The committee notes, however, that the amount of funding required for these purposes is substantial, and must be compared with the cost of alternative control measures, for example the employment of doggers. It is significant that alternative means such as baiting, trapping and shooting have the

¹²¹ Mr Edgar Richardson, PGA, Transcript of evidence, 20 July 2005, p. 3.

¹²² Submission 36.

¹²³ Inspection at Yuin Station, Western Australia, 12 April 2005.

¹²⁴ Transcript of evidence, 20 July 2005, p. 6.

¹²⁵ Peter and Flora Axford, Submission 86, p. 3.

¹²⁶ *Wild Dog Problem and Solutions in the Goldfields (Zone 9 ZCA),* material provided by Edgar Richardson, 9 March 2005.

potential to reduce pest animal populations, rather than simply confining them to an area. The committee believes that fencing may be an appropriate project for funding under the Australian Government's Regional Partnerships Program. The committee believes that the Australian Government should ensure that available tax concessions for landcare operations apply to pastoralists who contribute funds for pest animal exclusion fences.

Recommendation 28

6.124 The committee recommends that local governments and declared animal groups in areas requiring pest exclusion or barrier fencing upgrades or construction apply for funding under the Australian Government's Regional Partnerships Program.

Recommendation 29

6.125 The committee recommends that the Australian Government ensure that available tax concessions for landcare operations apply to pastoralists who contribute funds for pest animal exclusion fences.

Netting to protect crops from grey-headed flying fox

- 6.126 In the case of the grey-headed flying fox, netting is virtually the only method of control open to fruit farmers to protect their crops, as widespread culling of the grey-headed flying fox is prohibited.¹²⁷
- 6.127 The erection of netting as a control method was supported by Humane Society International, which expressed concern about culling of greyheaded flying foxes due to their protected status.¹²⁸
- 6.128 The cost of exclusion netting is between \$20,000 and \$35,000 per hectare, which is prohibitive to growers.¹²⁹

¹²⁷ NSWFA, Submission 31, pp. 15-16.

¹²⁸ Submission 88, pp. 3-4.

¹²⁹ Mr Ed Biel, Submission 21, p. 4.

6.129 The committee considers that problems experienced by fruit farmers with grey-headed flying foxes may be alleviated if its recommendations in relation to shooting of localised pest species are implemented. However, given that this process may take some time, the committee considers that fruit farmers should be provided with tax relief in relation to construction of netting to protect their crops from damage. This may take the form of allowing farmers to claim immediate depreciation for the costs of purchasing and erecting exclusion netting.

Recommendation 30

6.130 The committee recommends that the Australian Government provide favourable taxation treatment to fruit farmers purchasing netting to exclude grey-headed flying foxes.

Other methods

6.131 The committee also received evidence about a range of different methods that are capable of being used in conjunction with, or as alternatives to, the methods considered above.

Radio telemetry

- 6.132 Mr David Saxton, of TFAWG, described how the group has been working on the use of radio-tracking collars in conjunction with state forests and national parks in New South Wales. This entails capturing pigs and dogs, radio collaring them and releasing them. This enables colonies of animals to be located and eliminated.¹³⁰
- 6.133 The committee received more detailed advice about the use of tracking collars at a public hearing held in Broome.¹³¹ Field officers from DAWA attended and provided evidence to the committee in relation to the Department's Judas donkey program. The program involves trapping donkeys and fitting them with an electronic collar that can be monitored from the air. The donkey is released and will usually seek out other donkeys to travel with. The collared donkey is located and the other donkeys running with it are destroyed by aerial shooting. The Judas

¹³⁰ Transcript of evidence, 18 June 2004, p. 67.

¹³¹ Mr Richard Watkins, DAWA, Transcript of evidence, 22 July 2005, pp. 4-13.

donkey is then released to seek out other donkeys and the process is repeated at regular intervals.

- 6.134 Approximately 81,000 donkeys have been culled since the Judas donkey program commenced in 1994. Local eradication of donkeys has occurred on approximately 50 percent of targeted properties in the region. During aerial shooting campaigns, other pest animals, such as feral horses, pigs and camels are also shot. The radio telemetry system has the potential to be used for camels, and is currently being used in Western Australia for starlings. Judas collars, used in combination with harnesses, have also been trialled on feral pigs in Guy Fawkes River National Park.¹³²
- 6.135 The committee considers that it would be useful if the Western Australian Judas program were documented to provide guidance for similar programs targeting other pest animals. It was indicated that so far little documentation has occurred in relation to this particular program.¹³³

Recommendation 31

6.136 The committee recommends that the proposed National Pest Animals and Weeds Committee encourage the representative from Western Australia to arrange documentation of the Judas donkey program, so that the program can be considered for implementation with other animals, such as camels, in other states and territories.

Guard animals

6.137 Animal Liberation provided evidence that the use of Maremma guard dogs, alpacas and llamas with sheep flocks can reduce predation by foxes, pigs and dogs and increase lambing percentages.¹³⁴ They stated:

[Alpacas and llamas] are very effective in protecting sheep flocks. They keep sheep and lambs together, patrol constantly and remain alert. Putting two mature alpaca wethers in with ewes a few weeks

¹³² S Boyd-Law and R Spark, 'The Practical Viability of Ground Tracking Judas Pigs to Reduce Feral Pig Densities in the Guy Fawkes River National Park', in S Balogh (ed), *Proceedings of the Third NSW Pest Animal Control Conference*, NSW Department of Primary Industries, 4-7 July 2005, pp. 43-47.

¹³³ Mr Richard Watkins, DAWA, Transcript of evidence, 22 July 2005, p. 5.

¹³⁴ Submission 69. See also Carboor/Bobinawarrah Landcare Group, Submission 54, p. 3, Exhibit 7, TFAWG, Co-operative Wild Dog/Fox Management Program, Draft no. 5, March 2002, p. 21.

before lambing and leaving them there until weaning, can solve the problem of lamb losses to foxes. Farmers have observed alpacas and llamas chasing foxes away. It is their natural instinct to chase and trample.

Use of Alpacas and llamas reduces the need for poisoning or shooting. They protect the animals against predators and have been seen standing guard over a lamb whose mother had died. Farmers using these animals report an improved lambing rate from 80% to more than 120%. Alpacas and Llamas are also used to protect goats, poultry and even cows when they are calving.¹³⁵

6.138 The following evidence was provided to the New South Wales General Purpose Standing Committee inquiry into feral animals in relation to 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.¹³⁶

- 6.139 A Queensland Government DNRM document listed the advantages of using guard animals as a high public acceptance, being useful on the urban fringe, and having the potential for adding income. Among the disadvantages are high costs, difficulties in obtaining suitable animals, and a high level of animal training required.¹³⁷
- 6.140 A number of organisations indicated that more research is required into the use of guard animals to determine whether it is in fact an effective method of control.¹³⁸

¹³⁵ Submission 69.

¹³⁶ Evidence of Ms Glynda Bluhm, alpaca and llama producer, *Transcript of evidence*, Sutton, 7 February 2005, p. 58, cited in General Purpose Standing Committee No. 5 (NSW Legislative Council), p. 75.

MS O'Keeffe and CS Walton, Vertebrate pests of built-up areas in Queensland, DNRM Queensland, June 2001, viewed 27 September 2005,
http://www.nrm.qld.gov.au/pests/management_plans/pdf/vertebratepests_psa.pdf>, p. 43.

¹³⁸ NSWFA, *Submission 31*, p. 11, General Purpose Standing Committee No. 5 (NSW Legislative Council), Recommendation no. 15.

6.141 The committee believes that the available evidence in relation to the use of guard animals to protect livestock is interesting, but inconclusive. The committee agrees with the New South Wales General Purpose Standing Committee that further research in this area is warranted.

Biological and fertility control

- 6.142 The committee received some evidence in relation to biological and fertility control. The most successful example of biological control in pest animals to date has been the rabbit calicivirus, also known as rabbit haemorrhagic disease (RHD). Its success was noted in a number of submissions.¹³⁹
- 6.143 The Foundation for a Rabbit-Free Australia, in its submission, noted the existence of a 'post-RHD complacency', leading to neglect in research and development to continue controlling rabbits, which are one of Australia's most significant pest animals. A workshop on rabbit research and development directions, held in Adelaide in May, recommended that new biological controls for rabbits be sought.¹⁴⁰
- 6.144 The committee notes the excellent results that have been achieved by myxomatosis and RHD in helping to reduce rabbit populations. Although research into biological controls is expensive and requires long-term investment, the benefits are likely to exceed costs where there are extensive infestations of a pest species.¹⁴¹ In particular, the committee notes the urgent need for a biological control to halt the rapid spread of cane toads throughout Australia. The committee was pleased to hear of the federal government's recent commitment of \$3 million for CSIRO research to finding a biological control solution to toads, in addition to funding for other cane toad research programs.¹⁴²

¹³⁹ Submissions 55, p. 9, 81, p. 3, 84, p. 17, 97.

¹⁴⁰ *Submission* 97 and Attachment 1.

¹⁴¹ CSIRO, Submission 55, p. 7.

¹⁴² Letter from Senator the Honourable Ian Campbell, Minister for the Environment and Heritage, received 5 September 2005.

- 6.145 Some people were positive about the potential for use of fertility control as a pest animal control measure,¹⁴³ particularly in relation to the advantages from an animal welfare perspective.¹⁴⁴ The committee notes that research into fertility control is currently being undertaken by a number of organisations, including CSIRO and the New South Wales NPWS.¹⁴⁵
- 6.146 Mr Quentin Hart, from the BRS, gave the following evidence in relation to Australian progress on fertility control:

A hell of a lot of money has been spent by the federal government in the last 10 years on fertility control. That has not to date yielded anything. When I say 'not anything', I mean progress has been made but it certainly has not resulted in a technique that can be applied as yet. Some good progress has been made for mice, but for rabbits and foxes the work has not been so promising. There are currently high-tech solutions proposed for carp management and also for cane toads, but this sort of research is expensive, it is high risk and it is long term. It often sets up an expectation that the silver bullet is just around the corner but, as I said, with 10 years of fertility control work that has not proved to be the case.¹⁴⁶

6.147 Even if research into fertility control reaches the stage at which it can be effectively implemented, this form of control does not address the problems of damage caused by existing adult animals within the species. There are, in addition, a number of difficult issues associated with fertility control that must be addressed before it can be successfully used as a means of control:

The development of a genetically engineered virus to carry antifertility vaccination agent was always an extraordinarily high risk approach.

Such a virus is not only difficult to construct but there are a vast array of practical questions that needed to be answered before such an approach would ever have been deemed effective. Questions such as what antigen should the virus be coded to express, when

¹⁴³ Dr Kevin Doyle, AVA, *Transcript of evidence*, 15 June 2005, p. 10, Ms Kristi-Anna Brydon, Animals Australia, *Transcript of evidence*, 16 March 2005, p. 7.

¹⁴⁴ Animal Liberation, Submission 69.

¹⁴⁵ CSIRO, Submission 55, p. 8, Associate Professor AW English and Dr RS Chapple, A Report on the Management of Feral Animals by the New South Wales National Parks and Wildlife Service, 5 July 2002, viewed 27 September 2005, http://www.nationalparks.nsw.gov.au/PDFs/english_report_pest_animal_progs_fullreport.pdf, p. 26.

¹⁴⁶ Transcript of evidence, 16 February 2005, pp. 11-12.

should the virus express it, how reliably will the target immune system respond with the right type of immune response, will the response be at the right time of the season, will the response last for a long time or require annual boosters, is the carrier virus reliably infective to the target animals, what is the risk of resistance or pre-existing immunity, what is the reliability of the technique across seasons, what is the risk of attenuation or further mutation, what are the transmission rates, how specific is the carrier virus and the immunising protein to the target host, what is the persistence of the virus in the field and what proportion of targets need to be sterilised to achieve adequate levels of pest management? This is a massive research undertaking.¹⁴⁷

6.148 The committee notes that the efforts to date with fertility control appear to have been largely without a successful outcome. As discussed above, the committee is aware of the tremendous success of RHD for rabbits and supports further research into biological controls, in particular for rabbits and cane toads. The committee recommends that the AIA CRC give priority to further research into biological controls, where there is reason to believe that is a feasible control option.

Habitat reduction and fumigation

- 6.149 The Bombala RLPB emphasised that habitat and harbour reduction should not be overlooked as an important aspect of pest animal control programs.¹⁴⁸
- 6.150 The committee notes that animal welfare concerns exist in relation to the use of fumigants and warren-ripping for rabbit control. The inhumane effects of warren ripping can be minimised by conducting operations at times when rabbit numbers are lowest and soil conditions and equipment are optimal.¹⁴⁹

¹⁴⁷ Animal Control Technologies, Submission 84, pp. 15-16.

¹⁴⁸ Submission 80, p. 2.

¹⁴⁹ *Exhibit 11, A National approach towards humane vertebrate pest control,* Discussion paper arising from the proceedings of an RSPCA Australia/AWC/VPC joint workshop, Melbourne, 4-5 August 2003, p. 14.

6.151 The committee was provided with disturbing evidence about the welfare impacts of fumigation with chloropicrin:

Chloropicrin is a rabbit warren fumigant. This is a World War I warfare agent that is still registered in Australia. It is blown down rabbit warrens. It causes immediate irritation to mucus membranes on contact. It is a tear gas. The animal effectively drowns in its lung secretions. It does cause extreme distress for a prolonged period before death. ... Recent scientific literature suggests that there are human health impacts associated with accidental exposure to chloropicrin. Chronic exposure at levels which are not detectable — in other words, with a tear gas which will not cause your eyes to water — may be associated with disease.¹⁵⁰

6.152 The committee understands that a carbon monoxide fumigator has been developed to replace chloropicrin as a more humane form of fumigation, however financial support is required to achieve registration, manufacture and distribution.¹⁵¹ The committee believes that the AIA CRC should investigate how support can be provided to further develop this research to the application stage.

Recommendation 32

- 6.153 The committee recommends that the Australasian Invasive Animals Cooperative Research Centre:
 - coordinate research into the use of guard animals, such as llamas, alpacas and Maremma dogs, to protect livestock;
 - give priority to research into biological controls, where that is believed to be a feasible control option for a species; and
 - provide support for implementation of existing research work into the development of an alternative to chloropicrin for rabbit control.

¹⁵⁰ Mr Clive Marks, Nocturnal Wildlife Research, *Transcript of evidence*, 15 June 2005, pp. 21-22. See also Animals Australia, *Submission 32*, Attachment, G Oogjes, *The ANZFAS View of Vertebrate Pest Control using Chloropicrin and 1080 Poisoning*, 27 March 1996, pp. 3-4.

¹⁵¹ Mr Clive Marks, Nocturnal Wildlife Research, *Transcript of evidence*, 15 June 2005, pp. 22-23, *Exhibit 11, A National approach towards humane vertebrate pest control*, Discussion paper arising from the proceedings of an RSPCA Australia/AWC/VPC joint workshop, Melbourne, 4-5 August 2003, pp. 13-14, F Gigliotti, 'Development of a Carbon Monoxide power fumigator for rabbit warrens', in S Balogh (ed), *Proceedings of the third NSW Pest Animal Control Conference*, NSW Department of Primary Industries, 4-7 July 2005, p. 41.

Monitoring results of control programs

- 6.154 As with any program, it is important to know whether measures being taken for pest animal control are having a positive effect in terms of population reduction and harm minimisation.
- 6.155 In relation to the effects of pest animal control on native ecosystems, DEH commissioned the Arthur Rylah Institute for Environmental Research to undertake a project aimed at improving understanding about the effectiveness of feral animal control. The second stage of that program identified gaps in knowledge on control activities.¹⁵²
- 6.156 The report highlighted the need for monitoring changes in the abundance of the pest animal species and the benefits of pest animal control for native species and ecological communities.
- 6.157 The committee notes that the need for monitoring the effectiveness of pest animal control techniques applies to pest control directed at agriculture, as well as the environment. The committee considers that appropriate measures should be taken to ensure that, wherever possible, pest animal control techniques are monitored and evaluated for their effectiveness.

Recommendation 33

6.158 The committee recommends that the proposed National Pest Animals and Weeds Committee investigate how pest animal control programs can be monitored for effectiveness, in particular by the development of standard protocols for estimating pest animal population reduction and overall benefit.

¹⁵² B Reddiex and DM Forsyth, *Review of existing Red Fox, Feral Cat, Feral Rabbit, Feral Pig and Feral Goat control in Australia. II. Information Gaps,* DEH, Canberra, 2004, viewed 27 September 2005, http://www.deh.gov.au/biodiversity/invasive/publications/information-gaps/, Executive Summary.

Government funding for pest animal control

- 6.159 A number of submissions drew attention to inadequate expenditure by governments on pest animal issues.¹⁵³ The committee believes that the threat to agriculture and the environment posed by pest animals is so significant that it is vital that additional resources be directed at the problem. Part of the problem associated with funding is the lack of understanding about who has responsibility for managing and funding pest animal control.
- 6.160 Another aspect of the problem identified by individuals and organisations that made submissions to the inquiry is the diversion of funds away from on-ground control and into the upper echelons of management. Frustration has been expressed that a large percentage of funding allocated to pest animal management is 'skimmed off' the top, limiting the funds ultimately available for management and control.¹⁵⁴ The issue of distribution of funding has therefore also been considered by the committee.

Allocation of responsibility for funding

6.161 One of the difficulties associated with ensuring that pest animal management is properly funded is determining who has the responsibility to pay for what. Integral to this difficulty is the fact that control or destruction of pest animals can benefit private landholders, but also has a public benefit in terms of protection of the environment and growth in the agricultural sector. This was summarised by the Western Australian Government in its submission when it stated:

The issue of 'user pays' versus 'public good' is central to how resources will be allocated to the management of pest animals in the future. This issue requires clarification and commitment from stakeholders, the broader community and all levels of government. Until issues of long-term resourcing commitments are made clear and ongoing control funds are increased, there remains the real problem that ground control of pest animals on both private and public lands will continue to be less than is required.¹⁵⁵

¹⁵³ Submissions 3, 22, 36, 59, p. 15, 74, 79, 90, p. 8.

¹⁵⁴ Mr Greg O'Brien, Mansfield Wild Dog Group, Transcript of evidence, 18 June 2004, p. 75.

¹⁵⁵ Submission 70, p. 7.

6.162 The committee agrees that, although allocating responsibility for funding pest animal issues is not an easy task, it is vital to ensure that there is a clear delineation of responsibilities amongst stakeholders. The committee believes that allocation of funding responsibilities should be addressed in the national strategy being developed for pest animals.

Recommendation 34

6.163 The committee recommends that the National Pest Animal Strategy, currently under development, address the issue of appropriate allocation of funding responsibility amongst stakeholders.

Amount of available funding

- 6.164 A number of submissions expressed the view that the funding allocated to pest animal problems is generally inadequate.¹⁵⁶ The problem of insufficient funding was particularly emphasised in relation to control of pest animal issues on government lands, which is addressed in Chapter 7.
- 6.165 The North East Pest Animal Advisory Committee called for a review of the way that RLPBs are funded, by increasing both the ratepayer base and the amount of additional government funding provided.¹⁵⁷
- 6.166 In New South Wales, General Purpose Standing Committee No. 5 in its report on feral animals found a need for increased funding for feral animal control in the state. In particular, the committee expressed concern about the level of funding committed to feral animal control by the Department of Land and Water Conservation, State Forests and, despite the provision of significant funding by them, NPWS.¹⁵⁸
- 6.167 Victorian Government expenditure on pest animal issues was referred to by one submitter as "... abysmal compared with that spent by other State Governments".¹⁵⁹

¹⁵⁶ Submissions 22, 27, p. 5, 36, 59, p. 15, 74, 79, 90, p. 8.

¹⁵⁷ Submission 57.

¹⁵⁸ General Purpose Standing Committee No. 5 (NSW Legislative Council), Chapter 4.

¹⁵⁹ Mr Garry Breadon, Submission 3.

- 6.168 QFF calculated annual expenditure by DNRM and local governments on pest plants and animals to be \$22 million. This was considered inadequate given the large economic cost of pest animal problems, even with an announced \$6 million boost to funding for fire, weed and feral animal management over three years.¹⁶⁰
- 6.169 The Shire of Laverton in Western Australia indicated in its submission that both the APB and DAWA appear to have insufficient resources to prevent the establishment of new pest plants or animals in WA.¹⁶¹
- 6.170 Some submissions called for funding of pest animal issues to be consistent and ongoing.¹⁶² The Western Australian Government noted that 'stop-start' control strategies, where a flush of control activity is followed by a lack of action, need to be avoided.¹⁶³
- 6.171 The evidence presented to the committee demonstrates that state and territory government expenditure on pest animal issues is inadequate. Given the tremendous impact of pest animals on the Australian economy and on the environment, a much stronger commitment to addressing these issues is required at all levels of government. The committee believes that the Australian Government should strongly urge state and territory governments to substantially increase funding for on-ground pest animal control operations, in addition to the funding for employment of doggers and pest animal controllers recommended above.
- 6.172 The committee took note of evidence received from Western Australia about the success of programs such as the Judas donkey program. This program has been funded using levies from landholders, matched dollar for dollar by government contributions. With the addition of some other *ad hoc* funding, this money has funded the removal of approximately 80,000 donkeys from the Kimberley and Pilbara regions.¹⁶⁴
- 6.173 The committee believes that there is much to commend the approach of joint community and government funding. DAWA also provides dollar for dollar funding to the state's Declared Species Groups, and noted in its submission to the inquiry:

These initiatives enable community groups to take ownership of their pest animal problems, and need to be encouraged by

¹⁶⁰ *Submission 59*, p. 15.

¹⁶¹ *Submission* 7.

¹⁶² *Submissions 3, 54,* p. 4, 80, p. 3.

¹⁶³ *Submission* 70, p. 7.

¹⁶⁴ Transcript of evidence, 22 July 2005, pp. 2, 11.

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minimising bureaucracy and providing the necessary technical guidance.¹⁶⁵

6.174 The committee considers that the proposed National Pest Animals and Weeds Committee should examine ways in which joint community and government-funded schemes can be utilised in all states and territories, whether those are in the form of Declared Animal Groups, Landcare or other organisations.

Recommendation 35

6.175 The committee recommends that the Australian Government strongly urge state and territory governments to substantially increase funding for pest animal control, in addition to providing funding for the employment of doggers and pest animal controllers, and that this funding be directed towards on-ground control operations.

Recommendation 36

6.176 The committee recommends that the proposed National Pest Animals and Weeds Committee liaise with state and territory representatives to determine how joint community and government-funded schemes can be utilised to facilitate pest animal control.

Distribution of funding

6.177 The committee has concerns that a significant portion of the funding available for pest control is swallowed up through a system of 'top-down' rather than 'bottom-up' bureaucracy. The committee believes that it is vital that much-needed funds for pest animal control be delivered to the local and community groups responsible for control, rather than disappearing in administration costs.

¹⁶⁵ Submission 70, p. 14.

6.178 The committee received several submissions expressing concern about the lack of funding which filters through to on-ground controllers.¹⁶⁶ In relation to wild dogs, the nature of the problem was discussed by Mr Phillip Coysh, a farmer in the Tintaldra district of Victoria. He gave the following evidence:

The chap who spoke from Khancoban, Mr Murdoch, made a very valid point when he said that an amount of money had been set aside, yet only \$40,000 of it got across this side of the divide. A lot of the funding for these wild dogmen they have put on since the fires – because obviously the dog problem has been exacerbated because the dogs have been pushed out of fire areas – must get chewed up in bureaucracy. We know it does. ... Perhaps, rather than this money being channelled into the Department of Sustainability and Environment, that money should be channelled to our local dog group to be spent as it sees fit.¹⁶⁷

6.179 Ms Noeline Franklin, of Brindabella in the ACT, made a similar point in relation to funding for doggers:

We need funding. We need to reduce the length of the food chain. We have people administering these things, taking a few dollars off as it goes down. We need a more streamlined management structure so that funding from the Commonwealth and/or state is actually going on the ground, as opposed to getting carried around and then the dog trapper has to have a lamington drive to organise some new tyres for his vehicle, and that is basically what is happening at the moment.¹⁶⁸

6.180 It was submitted that there is also a lack of funding for on-ground government pest control officers to monitor compliance with landholder obligations and enforce them where necessary:

The state of Victoria is extremely legislated for. If we had the law enforcement on the ground to assist the land-holders and Landcare groups, we should not have a rabbit or a pest or a weed problem because everything is in place to do it. There just are not enough people on the ground or the priority areas are too small and too defined to support the positive land-holders doing the work. This

- 167 Transcript of evidence, 18 June 2004, p. 52.
- 168 Transcript of evidence, 11 August 2004, p. 15.

¹⁶⁶ Submissions 19, p. 3, 43, p. 2, 60, 73, 84, p. 12, Mrs Coral Talbot, Transcript of evidence, 9 September 2005, p. 48, Dr Linton Staples, Animal Control Technologies, Transcript of evidence, 15 June 2005, p. 14, Mr Phillip Coysh, Transcript of evidence, 18 June 2004, p. 52, Discussions at Warrawagine Station, Western Australia, 21 July 2005.

does not mean to say that we need people out there in uniforms prosecuting everybody, but at least they need to be there directing people to do it or directing people to be responsible for their land and carrying out feral animal and pest works.¹⁶⁹

- 6.181 Dr Graham Hall, who works for the Tasmanian Game Management Services Unit (TGMSU), also spoke in a private capacity about the gradual phasing out of extension officers in government departments over the last twenty years, which has deprived landholders of a valuable source of advice and information.¹⁷⁰ The phasing out of extension services in Western Australia was also discussed.¹⁷¹
- 6.182 The committee believes that the allocation of funding to address pest animal issues is meaningless unless the vast majority of those funds are directed towards on-ground control and extension services rather than bureaucracy. To that end, as indicated in Recommendation 35, the committee believes the Australian Government should encourage state and territory governments to increase the amount of on-ground funding available for pest animal control.
- 6.183 The committee notes that there is a lack of available information about the level and distribution of state and territory government expenditure on pest animal issues. A report prepared by the AEC Group for the Local Government Association of Queensland in October 2002 indicated that a comparison of Queensland expenditure with other states and territories was difficult due to the fact that responsibility in other states and territories was allocated across a range of government departments and local government areas.¹⁷² To address this problem, the committee recommends that state and territory government representatives of the proposed National Pest Animals and Weeds Committee provide an annual statement to that Committee indicating the level and break-down of funding that has been provided to address pest animal issues.

¹⁶⁹ Mr Alby McIntosh, Ovens Landcare Network, Transcript of evidence, 18 June 2004, pp. 2-3.

¹⁷⁰ Transcript of evidence, 29 March 2005, p. 34.

¹⁷¹ Ms Anna-Marie Penna, CCWA, *Transcript of evidence*, 11 April 2005, pp. 4-5, Roundtable with Leonora pastoralists, 12 April 2005.

¹⁷² Exhibit 1, AEC Group, Economic Impact of State and Local Government Expenditure on Weed and Pest Animal Management in Queensland, Local Government Association of Queensland, October 2002, p. 8.

Recommendation 37

- 6.184 The committee recommends that state and territory representatives of the proposed National Pest Animals and Weeds Committee provide annual reports to the Committee indicating their state or territory's level and breakdown of funding for pest animal issues.
- 6.185 From all the information received by the committee, it is apparent that wild dogs, feral pigs, rabbits and foxes are the most significant national pest animal problems that Australian farmers currently face. Each of these species causes serious economic and environmental damage, and wild dogs and feral pigs in particular pose a huge threat of disease spread, which can no longer be ignored. The committee believes that a large-scale, coordinated effort aimed at combating these species is urgently required.
- 6.186 In the interests of initiating a campaign against these four target species, the committee recommends that the Australian Government make a substantial investment towards on-ground campaigns to eliminate these species. This would be in addition to providing funding for the employment of doggers and pest animal controllers as recommended above. Taking into account the evidence reviewed above about the need to channel funds towards on-ground control, this funding should be directed at local, regional and community groups responsible for pest animal control programs, which may bid for funds on the basis of established need. The proposed National Pest Animals Advisory Committee could advise on the distribution of funding.

Recommendation 38

6.187 The committee recommends that, in addition to providing funding for the employment of doggers and pest animal controllers, the Australian Government make a significant investment towards on-ground control of wild dogs, feral pigs, rabbits and foxes, to be directed at local, regional and community groups responsible for pest animal control on the basis of established need.