



COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

**HOUSE OF  
REPRESENTATIVES**

STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND  
FORESTRY

**Reference: Impact on agriculture of pest animals**

WEDNESDAY, 16 FEBRUARY 2005

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**HOUSE OF REPRESENTATIVES**  
**STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND FORESTRY**  
**Wednesday, 16 February 2005**

**Members:** Mr Schultz (*Chair*), Mr Adams (*Deputy Chair*), Mr MD Ferguson, Mr MJ Ferguson, Mr Forrest, Mr Lindsay, Mr GM O'Connor, Mr Secker, Mr Tuckey and Mr Windsor

**Members in attendance:** Mr Adams, Mr MD Ferguson, Mr MJ Ferguson, Mr Forrest, Mr GM O'Connor, Mr Schultz, Mr Secker, Mr Tuckey and Mr Windsor

**Terms of reference for the inquiry:**

To inquire into and report on:

The impact on agriculture of pest animals particularly:

To identify nationally significant pest animal issues and consider how existing Australian and State government processes can be better linked for more coordinated management of these issues across State boundaries.

To consider the approaches to pest animal issues across all relevant jurisdictions, including

- (i) prevention of new pest animals becoming established;
- (ii) detection and reporting systems for new and established pest animals;
- (iii) eradication of infestations (particularly newly established species or 'sleeper' populations of species which are considered to be high risk) where feasible and appropriate; and
- (iv) reduction of the impact of established pest animal populations.

Consider the adequacy of State Government expenditure on pest animal control in the context of other conservation and natural resource management priorities, with particular reference to National Parks.

Consider the scope for industry groups and R & D Corporations to improve their response to landholder concerns about pest animals.

Consider ways to promote community understanding of and involvement in pest animals and their management.

**WITNESSES**

**BOMFORD, Dr Mary, Principal Scientist, Bureau of Rural Sciences..... 1**

**GRANT, Dr Colin James, Deputy Executive Director, Bureau of Rural Sciences ..... 1**

**HART, Mr Quentin, Project Manager, National Feral Animal Control Program, Bureau of Rural Sciences ..... 1**

**RITMAN, Dr Kim, Program Leader, Bureau of Rural Sciences..... 1**

**THOMPSON, Mr Ian, Executive Manager, Natural Resources Management, Department of Agriculture, Fisheries and Forestry ..... 1**

**VEITCH, Mr Simon Murray, Manager, Sustainable Industry Initiatives, Department of Agriculture, Fisheries and Forestry ..... 1**



**Committee met at 5.24 p.m.**

**BOMFORD, Dr Mary, Principal Scientist, Bureau of Rural Sciences**

**GRANT, Dr Colin James, Deputy Executive Director, Bureau of Rural Sciences**

**HART, Mr Quentin, Project Manager, National Feral Animal Control Program, Bureau of Rural Sciences**

**RITMAN, Dr Kim, Program Leader, Bureau of Rural Sciences**

**THOMPSON, Mr Ian, Executive Manager, Natural Resources Management, Department of Agriculture, Fisheries and Forestry**

**VEITCH, Mr Simon Murray, Manager, Sustainable Industry Initiatives, Department of Agriculture, Fisheries and Forestry**

**CHAIR**—I declare open this public meeting of the House of Representatives Standing Committee on Agriculture, Fisheries and Forestry inquiry into the impact on agriculture of pest animals. This hearing is the first since the inquiry was re-referred to the committee after it lapsed when the federal election was called. We are starting this new phase of the inquiry by hearing from the Bureau of Rural Sciences. The submission from the bureau is wide ranging and will help set the scene for the remainder of the inquiry. I call the representatives of the Bureau of Rural Sciences and thank you all for attending today at short notice. We are extremely grateful that you have done so, because this is a very important inquiry.

Although the committee does not require you to give evidence under oath, I should advise you that these hearings are formal proceedings of the parliament. Consequently they warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as contempt of parliament. Do you wish to make a brief statement in relation to your submission, or would you care to make some introductory remarks and perhaps add to your submission, which was prepared some time ago? First, I will take the opportunity to introduce you to the members of this committee.

**Mr MICHAEL FERGUSON**—I am the federal member for Bass in Northern Tasmania, which includes greater Launceston, some part of the west Tamar, all of the east Tamar, the north-east and Flinders Island.

**Mr FORREST**—I am the member for Mallee, which covers one-third of the state of Victoria, the top north-west corner. It has 1½ million rabbits, probably twice as many kangaroos and heaps of feral animals of all sorts.

**Mr GAVAN O'CONNOR**—I am the member for Corio, a Geelong based seat. We have problems with pests in the bay, with invasive species.

**CHAIR**—I am the member for Hume. My area covers the Southern Highlands and parts of the south-west slopes. I used to have problems with Kosciuszko National Park, but I do not have problems with them any more.

**Mr ADAMS**—I am the member for Lyons, which covers 61 per cent of the landmass of Tasmania. There are lots of pests—a lot of weeds as well as animal pests.

**Mr WINDSOR**—I am the member for New England in northern New South Wales.

**Mr TUCKEY**—I am the member for O'Connor. I am pleased to see you all here.

**Mr SECKER**—I am the member for Barker, which is a seat the size of Tasmania and has 40 per cent of Australia's winegrowing areas. I am sure there are a few pests there we have to worry about.

**CHAIR**—Last but not least, the committee secretariat is led very admirably by Mr Ian Dundas, a man of some considerable experience who is backed up by some very capable people of both genders. Now that we have had those formalities, do you wish to make a brief statement in relation to your submission, or would you care to make some introductory remarks?

**Dr Grant**—I will make a few introductory remarks and then pass to my colleague Ian Thompson to cap those off. Then we could respond to questions that the committee might have or alternatively Mr Hart, who is a specialist in this area, could walk you through the elements of the submission and explain them in more detail if that would suit you. We are very much in your hands.

The Bureau of Rural Sciences has been involved in pest management issues for over a decade, including its current administration of the Natural Heritage Trust's National Feral Animal Control Program. This is a program that supports projects to develop and promote improved pest animal control techniques. Whilst pest animal management is predominantly a state issue, and the responsibility of individual landowners, the federal government assists in a number of ways—including through biosecurity measures to reduce the risk of new pests becoming established, representation on the National Vertebrate Pest Committee and providing support for research and management activities through the Natural Heritage Trust.

There is an opinion that governments should aim to eradicate widespread animal pests, such as feral pigs. BRS has developed a list of criteria that would need to be met for eradication to be achieved. When you look into this, it soon becomes very clear that, with current technology, these criteria cannot be met for any pest that is widespread on mainland Australia. Any attempt would be unsuccessful and extremely costly, and by that I mean in the order of billions of dollars. Therefore, we need to concentrate on approaches to manage local and regional populations where they are causing unacceptable damage and, importantly, to continue to reduce the possibility of new pests becoming established. The BRS National Feral Animal Control Program works closely with the Pest Animal Control CRC to improve the range of tools available for local and regional groups to more effectively manage pest animals. An example of this is current work on a manufactured feral pig bait that should allow more effective knockdown of feral pigs in a wide range of situations with reduced risks to non-target species. BRS is also working closely with the Australian government Department of the Environment and Heritage to develop risk assessment models to identify potential new pest animals so that the importation and keeping of high-risk species can be restricted or banned. I will now pass over to my colleague.



**Mr Thompson**—I wish to outline the broad context in which the BRS work on pest animals and the national pest animal strategy fits. Through the Natural Resource Management Ministerial Council, the Australian government, the Department of Agriculture, Fisheries and Forestry, and the Department of the Environment and Heritage are coordinating the development of a national invasive species framework. That framework will guide coordinated action in preventing the establishment of significant new invasive species and reducing the impact of current pests and weeds. We expect the framework: to set out the roles and responsibilities of governments at all levels, individual land-holders, non-government organisations and community groups; to identify the key invasive species issues facing Australia; and then to outline and describe the desirable arrangements and interactions necessary for a coordinated national approach to managing the species.

The aim is to have a consistent approach between animal pests, marine pests, weeds and other pests so the same set of principles and arrangements can apply across all of the invasive pests. As I said, the national pest animal strategy is one of those. The National Weeds Strategy is another important one which is being worked on as a priority. Within the framework, some of the key principles that will be developed over the coming 12 months are issues like the prevention of new pest species—which is the first and best option to be emphasised—and the recognition of appropriate risk management arrangements at multiple levels to ensure the early detection of problems and quick action on them. Where eradication or ongoing management to control pests is required, the framework strategy will set out guiding principles and arrangements for strategic and nationally coordinated action. The last key aspect of it will be to ensure high levels of public awareness of these issues so that the public throughout Australia can be involved in the exercise.

**Dr Grant**—Chair, we are very much in your hands to either answer questions or provide further expansion of the issues.

**CHAIR**—If you think it is appropriate to further expand your statements, we would be happy to hear that. Then perhaps we can go to some questions.

**Mr Hart**—I will not go through the submission in any detail, but I would like to reiterate that probably the most important role of the Australian government in pest animal management is in border control and risk assessment to reduce the risk of new pest species becoming established. As far as the management of existing pest species goes, as mentioned, that is predominantly the role of state government agencies and individual land-holders, although the Australian government does get involved in some areas—obviously in the administration of its own lands, defence lands and Australian national parks but also in various research and coordination activities.

The national pest animal strategy that was mentioned is to be developed in 2005 through the Vertebrate Pest Committee. There is a planning workshop for that to be held in late April. It has been felt for some time that something that has been lacking in the pest animal management field, compared to the weed management field, has been a national strategy. Obviously the National Weeds Strategy has been in place for some time now. So we hope that, with the implementation of the national pest animal strategy to start by 2006, that will address some of the concerns about the lack of coordination between state government agencies and the Australian government with regard to pest animal control.

**CHAIR**—Before I start, I introduce Mr Martin Ferguson who has come in a little late. We have a very good depth of members from a diversity of country and city electorates in this committee. I will open the questions by referring to the national pest animal strategy, which is of interest to me. How is that being funded? What contribution do we know or anticipate the states are going to make to that? Have we made approaches to the states and have they indicated any interest in getting involved in a national strategy?

**Mr Hart**—I will comment very briefly on that, because the National Feral Animal Control Program is actually kicking in \$20,000 to fund the planning workshop. A bit of a problem with the pest animal side of things, compared to weeds, is the lack of funding for an executive officer role. That makes doing some of these things a little difficult. I will defer to Simon Veitch, who is the DAFF representative on the Vertebrate Pest Committee, to talk more about NPAS.

**Mr Veitch**—As Quentin mentioned, some of the costs of preparing the discussion papers to go to a national workshop have been met by the National Feral Animal Control Program. The other costs of membership, which ranges across all states and territories and the Australian government, are being met by individual jurisdictions at this stage. So that contribution is seen as a role of representation on the Vertebrate Pest Committee.

**Mr Thompson**—It is being done under the auspices of the Natural Resource Management Ministerial Council at the moment, and people are making their own contributions. As you said, the Commonwealth is meeting the costs of this coming workshop, but the Queensland chair of the Vertebrate Pest Committee is putting time and effort into putting the publication together. At the current stage of developing the strategy, where the costs are relatively low, I think they are essentially being shared around the jurisdictions, consistent with our own interest in the area.

**CHAIR**—I suppose you would have some preconceived idea as to how you are going to prioritise what areas of pest control are the most urgent. I presume it would go down that path.

**Mr Thompson**—That will certainly be one of the issues to be considered in the workshop and as the strategy is developed. I would not like to say we necessarily know the answer yet, but we will have views that we will work through.

**Mr Hart**—There has certainly been discussion of coming up with a priority list of species analogous to the Weeds of National Significance.

**Mr ADAMS**—Is there no money from Natural Resource Management going into those areas?

**Mr Thompson**—There is nothing from a range of Natural Resource Management programs at the moment that contribute to pest animals, for instance. The Natural Heritage Trust contributes to the feral animal program. I have not got the numbers for how much might be being spent on it, but there are other programs involved in invasive species. As we pick up some of the activities that come out of regional plans and land care groups, there can often be other activities that people put forward. The aim would be that, if we could get a national strategy, we could line it up in terms of the priorities and consistency across regions.

**Mr ADAMS**—I say that because I have seen a lot of money spent and a lot of pamphlets written not only on pest animals but on weeds and everything else. But we seem to be past the

pamphlet stage and the information stage. People are really looking to do things. I know it is a state, Commonwealth, local government and landowner issue but—

**Mr Hart**—Some things have happened already but certainly the intention is for a lot more to happen under the regional component of NHT. That is moving from that information and national coordination phase into some on-ground management. As far as what our program does, we support projects to develop and improve techniques and to promote their adoption. We are quite responsive to industry concerns in that regard. We have funded quite a few wild dog projects in the last five years or so. There was quite a lot of concern about feral pigs a couple of years ago and we have attended a national workshop on that issue. We are currently supporting the development of a manufactured feral pig bait in conjunction with the Pest Animal Control CRC and Meat and Livestock Australia.

**Mr ADAMS**—You talk about a pest plan coming together.

**Mr Hart**—Yes. There is some confusion about this. We have a pest plan document which is specifically for regional groups so they can collect all the local information and work through and prioritise which pests they are going to target, where within the region they are going to target them and to what level of control. I have heard mention of another pest plan document which is something different.

**Mr ADAMS**—What groups are you talking about?

**Mr Hart**—We intend the pest plan would feed very much into the regional component of NHT. Having said that, it is a matter for regional groups to identify that pest animals are a priority issue. I have been a bit surprised to find that, even though there is obviously a lot of concern expressed about pest animals, a lot of regions do not actually have pest animal management and management of specific pests, including wild dogs and feral pigs, locked into those plans. This obviously makes it difficult for money to then flow down to controlling those species.

**Mr SECKER**—You seem to concentrate on vertebrates. Is that because you have read that the reference is only talking about vertebrates? Surely you would be involved in invertebrates as well.

**Mr Hart**—Obviously the Vertebrate Pest Committee has traditionally only focused on vertebrate pests. Some of the general principles would be similar but the management and expertise is quite different for vertebrates versus invertebrates. Obviously the Commonwealth government is involved with the Australian Plague Locust Commission and handles invertebrates on that level. Biosecurity Australia is involved with emergency invertebrate management for incursions. The Vertebrate Pest Committee and the national pest animal strategy have decided they will consider freshwater fish but invertebrates have not been included on the agenda.

**Mr Veitch**—In the strategic planning and the national invasive species framework that is being developed it is recognised that invertebrate pests are an important category for consideration. It is largely about then deciding what the national coordinated responses should be, what the key areas of opportunity are and who does what—the roles and responsibilities,

particularly. I should mention in that context that when it comes to marine pests there is also recognition of them as a serious issue. There is a national system for the prevention and management of marine pest incursions that is well progressed in that context.

**Mr SECKER**—On another issue, you talked about the national planning and that we have not really got a national plan yet. I can really see the use of it for border security and in all those sorts of areas for pests. How do you see that reacting with the present set-up where state governments generally handle their own pests in their own states? For example, with fruit fly, we have border set-ups—not very good ones, I might add—where we try and stop fruit fly coming into South Australia. Would we be taking the responsibilities and the financial commitment away from the states, which have traditionally been in this role?

**Mr Thompson**—The aim is not to take responsibility away from the states. This is probably more significantly the role for the invasive species strategy—get those broad principles across the top of who is responsible and can operate it, at which level and for which activity, and then develop cost-sharing arrangements between all the players. With fruit fly, for example, there was always a tri-state fruit fly working group that worked with the Commonwealth, and the Commonwealth was in there to provide coordination. Insect pests can move quite quickly between jurisdictions, and so there is a need to get some consistency in the control measures that are being applied. When it comes to cost sharing, because containment is cheaper than eradication, there needs to be a staged approach. With some of these pests, there comes a time when they are uncontrollable and you have to make the decision that it is time to go over to containing them, or managing them, rather than trying to eradicate them. That needs to be done on a consistent basis across species and across jurisdictions so we can best target the funds and the expertise available.

**Mr FORREST**—I would like to ask about the estimated cost to agriculture. Your submission says it is \$420 million, but we have had other evidence that says it is nearly twice that at \$720 million. I guess they are all just educated guesses because it would be a very difficult thing to assess.

**Mr Hart**—The \$720 million figure was put together by the Pest Animal Control CRC. We were consulted closely and we were closely involved in putting together that report. A lot of their report was based on our report when it came to agricultural costs. The big difference between their report and ours was that theirs considered more species and theirs also tried to place an environmental cost value on a couple of the species, which is a very difficult thing to do. That obviously increased the amount quite substantially. One thing I would say about both of the estimates is that even the \$720 million estimate would be, I think, an extremely conservative estimate of the actual cost. Our estimate of \$420 million was being as conservative as we could and also only included very direct costs. It did not take into account things like long-term land degradation which would, over time, reduce the productivity of the land.

**Mr FORREST**—So would it be right to say that that is the other half of the cost—an assessment about the ongoing damage and future loss of production?

**Mr Hart**—No, because even the Pest Animal Control CRC estimates did not take into account long-term costs; they were only short-term direct costs. The big difference, as I have said, was that their report included a few other species and tried to account for some

environmental costs. Even amongst economists, how you account for the costs of environmental damage is a very difficult thing to do.

**Mr FORREST**—I was going to ask you, although it is probably impossible to do, how that is broken up for all the problem species, in order for us to get a target in an economic context as to which is the most serious pest. Is that possible? Can you say that the greatest contributor to that \$420 million is mice, foxes or something else?

**Mr Hart**—We did break it down. Basically, even with RCD, we still estimated that rabbits were having the major impact. In some ways it is unfortunate that with RCD a lot of focus has gone off rabbits, because there is certainly a need for further routine control there. We estimated \$200 million for rabbits, and we made a very conservative estimate of \$40 million for foxes. That was based on a five per cent impact on lamb production, which would probably be considered quite conservative in some areas.

**Dr Bomford**—You will appreciate that these are just agricultural impacts in our report. If you start looking at the effects of foxes on native species, you are going into a different ballpark.

**Mr FORREST**—And it is the same with wild dogs. You have identified the two I have to put up with there. I come from broad, dry, low-rainfall, flat land, so calici worked there for rabbits. But, anecdotally, after seven years I am noticing more and more rabbits on the road at night. Is the reintroduction of calici or something else being considered? Is an assessment being made?

**Mr Hart**—Once again, not only have eyes been taken off the ball with regard to actual management of the calicivirus disease, with a lot of people—including a lot of land-holders—thinking that the problem is solved, but it has been unfortunate that the research focus has also gone off rabbits a bit, including how we maximise the impact of calicivirus disease and whether or not we try to do anything about improving the strains of calicivirus disease. We have actually supported CSIRO to do some work in that area over the last few years. We are currently supporting the South Australian Animal and Plant Control Commission to look into disseminating RCD on a bait. There is currently an application before the Australian Pesticides and Veterinary Medicines Authority for an RCD bait. We obviously hope that that does go through, because that would certainly improve the management of RCD and its effect, particularly in high rainfall areas, where it has had less effect than in the arid zone.

**Mr TUCKEY**—I guess this inquiry is very much focused on the collective response to pest animals, particularly by governments. I have written a note down here. From my experience over 20-odd years, the role of state agencies in agriculture and everything has moved from people who went out to help farmers to people who go out and tell farmers what they are not allowed to do. They have virtually become regulators. I think in that process there has been a lot of ‘funding’ that has been withdrawn and is simply not available. There seems to be a substantial problem there.

I note in your report feral pigs and the particular campaign with which I had some involvement in Cape York through the Natural Heritage Trust. That was hair-raising. We talk about expanding it beyond agriculture. The average pig tract up there had 100 frogs—one had 300 in its belly—and you wonder why we are getting a bit short of frogs. The whole thing about it was that I looked at Cape York and thought how close it is to New Guinea et cetera. You say

that FMD might be contained within the national park, and I think the issue of national parks in terms of pest animals is a very significant issue which is being raised. But the great problem for Australia in terms of its agriculture is not that an FMD outbreak in Cape York might be able to be contained there; the next day half the world would say, 'We won't buy your agricultural products, your meat.' America found two cows with mad cow disease and the Japs have just stopped buying their meat, irrespective of that.

**Mr MARTIN FERGUSON**—That actually helped us.

**Mr TUCKEY**—It certainly did, yes, but we could be next. I think they are issues on which we need advice. The other issue that worries me, when you mention doing this and that out of NRM, is that my observation in my electorate is that we are starting to spread NRM like Vegemite. It is not going to do any good anywhere, because we are trying to do too many things with it. On your advice to this committee that, for instance, there needs to be some discrete funding—and I take on board Patrick's comment—unfortunately every time the Commonwealth comes along and says, 'We might like to help,' state governments, whatever their political make-up, say, 'Yes, here's the problem,' and walk away. That is the difficulty that we would confront with our money managers. But it seems to me that the whole process of control is very disjointed. Clearly, with rabbits, we ought to have been developing the next strain of calici or whatever at the time the first one got away. But you never leave these things, because we all know immunity is a common factor. Do you want to talk to this committee about a grand scheme without leaving the Commonwealth carrying the entire financial bag?

I think things are getting worse in agricultural pest animal control, particularly for the four-footed ones. Farmers themselves take the attitude: 'It's an economic issue now. If they only kill half the bloomin' cattle, I might still be in front.' There is a serious worry about it and about the intrusion of wild dogs into agricultural regions where they have not been seen for years et cetera. Are you prepared, consequently, to speak to this committee about how we might deal with this? The weeds example is a classic one. We ended up identifying 20 different weeds and so on, and presumably we got some deals. This is what I would like this committee to be able to recommend to government: how to better manage the whole outfit. I think you are the people whose advice would be helpful.

**Mr Thompson**—I understand your concerns about the availability of money, the lack of coordination, the need for coordination and the risk of spreading money too thin. They are all recognised and are part of the reason that we have embarked on putting together a strategy over the next 12 months. At this stage, I think it would be pre-emptive to say we have a grand plan for invasive pests and we know what the hit list is with X at the top and Y at the bottom. What we would like to do is to work through that.

Certainly some of the criteria that would be thrown up might be ones that are not dissimilar from weeds—you have to look at the economic impact, you have to look at the feasibility of control, you have to look at who can do what, you have to look at the timeliness of responses and those sorts of things. The issues will then start to come through. Some pests may well be something that could be built into the management regime around a farm but others are the sorts of things which impact on large numbers of people in broad areas and cannot be controlled. For instance, while in parts of southern Australia feral pigs might be something that national parks should be working on, when you look at Cape York, because of the potential for them to be a

disease vector, it becomes a very different situation. We are actually working on them from those points of view.

A lot of those issues which you have raised are the very issues which sent us down the path of putting this strategy together and working on some of the methodologies and criteria for risk assessment which the BRS have put some work into so that we can actually put this framework together. But, as you are aware, the Commonwealth has some role to play in this area and so do the state and local governments and land-holders. We would actually like to work that through with those players before we say that we know what the answer is. I do not think we are in a position to talk about a plan at this stage.

**Mr TUCKEY**—How do we come to a conclusion in this committee to make some recommendations on how that might work in the future? You have virtually said that there is a need for a national strategy. I accept that you cannot tell us what it is at this stage, but where do you see us going on this? I think this is fundamental to our inquiry.

**Mr Thompson**—I think some of the material about what the issues are and the likelihood of response are contained in things like the submission that the BRS have put together. Some of the other principles of risk assessment and the identification of problems are contained in the material that is available. As we continue working on this over the coming months, there might be an opportunity for various people to re-engage with this committee. No doubt you will be talking to other stakeholders, such as state and industry bodies and environmental groups. I do not think there is a lot of difference in opinion between people about animal pests being a problem and so there will be a range of views that will come together. Perhaps we could further discuss how those developments are taking place.

**Mr ADAMS**—How much work have we done through the CRC on how we turn a pest into a positive and gain economic benefits from it? I used to make money out of rabbit skins when I was a kid, but we have stopped all of that. How much work has been done to look at that?

**Mr Hart**—In the early nineties BRS did some work on that. We put together a book on the commercial use of wild animals and that covered wild introduced species as well as some natives. There is no doubt that in times of drought things like feral goat harvesting and feral pig shooting can inject some significant resources into some communities, but they also cause a fair bit of conflict between land-holders—for example, land-holders who want to drive goats down to very low numbers versus land-holders who want to keep them as a sustainable resource so they can continually harvest them.

State agencies all have different legislation on how they handle that situation, and they are trying to grapple with that. I think most state agencies are now moving towards saying: 'If you want to maintain high numbers of goats, effectively you will have to have them behind wire. You can't allow them just to wander between properties.' So it can be significant in some cases, but I think compared to the costs of pest animals the economic benefits are very low, particularly when looking at species such as goats and pigs that can transmit disease. I am not just talking about exotic disease; I am talking about endemic disease. Obviously, having animals like that that can move freely between properties is not a good thing.

**Mr ADAMS**—Rabbits and wallabies?

**Mr Hart**—Certainly since RCD, any prospect of commercial use of rabbits has largely gone out the window. There is some harvesting of wallabies and possums in Tasmania. I will not comment on the native species management at this stage. That is a fairly controversial issue. I would like to get back to the previous point about fobbing off responsibility for pest animal management from one party to another—from states back to the Australian government or from land-holders to government et cetera.

With regard to the national pest animal strategy possibly being seen as the Commonwealth putting up its hand to take greater responsibility and therefore funding obligation for pest animal management, I do not think that will happen through that process because that is through the Vertebrate Pest Committee and so it is a joint state and Australian government process. But I do think that there is a bigger issue of any government, state or Australian government, putting up its hand to announce any sort of initiative that would have a large funding implication—for example, any eradication program. We do not think it is at all scientifically feasible or economically sensible to embark on that. One of the big problems with the Australian government putting its hand up is that sense of responsibility going from individual land-holders, which is where it should be, back to government. That in itself would be very counterproductive.

Even with something like RCD, you get the message that these problems will be solved by silver bullet solutions; scientists will come and solve the problem for us. The reality is that scientists and programs like ours can come up with improved techniques, but they are not going to solve the problem on their own and they need to be combined with routine control at the individual property level.

**Mr GAVAN O'CONNOR**—I do not know whether any of you can help me on this, but I am interested in the role of local government in this process. Traditionally, local government had a role but, of course, squeezes on budgets and changes in function over time have seen that diminish. Can you give an assessment of the current role that is played by local government and how you see that role in the future? I know that is a broad question, but where do they fit in?

**Mr Hart**—Obviously it is different between different state agencies. For most state agencies it is still the state government agency that coordinates regional control programs through their rangers. Queensland is a little different: there has been a move in Queensland to put a wide range of natural resource management responsibilities back to local government. That has caused a bit of toing-and-froing because local governments have not traditionally had the expertise in that area and they were a bit reticent to take on extra funding liabilities. In Western Australia they have another model again, whereby the Agriculture Protection Board provides funding directly to local district control authorities—I forget what the exact acronym is. Basically, they are regional groups that include land-holders and they set their priorities at that level.

**Mr GAVAN O'CONNOR**—Land protection zones?

**Mr Hart**—Yes. But where that happens I think it is still very important that they get expertise from the state agencies because traditionally that is where the technical expertise lies.

**Mr GAVAN O'CONNOR**—You have identified land-holder apathy as a barrier to effective control. Who are we talking about here? Are we talking about farmers or the new land-holders in urban encroachments?



**Mr Hart**—A common cause of concern is peri-urban areas, hobby farms and de facto farmers, I guess. Even within the general farming community, amongst farmers themselves, there are concerns, particularly about some highly mobile species like feral pigs and feral dogs. It is very important to control those species at a regional level. If one or two properties do not get involved in that regional control program, they can then jeopardise the effectiveness of the whole program. So some land-holders become a source of frustration for neighbouring land-holders, obviously.

**Mr Thompson**—I do not think there is a rise, across Australia, in land-holder apathy. Out in the peri-urban areas we have people who are doing other things or who are unfamiliar with the nature of the problem and, in some cases, their responsibilities. That is where awareness and particularly local government and Rural Lands Protection Board involvement can be important. They can approach the people directly and say, 'Are you aware you've got foxes on your property? It is your responsibility to deal with it,' and it can be dealt with. In other areas, farmers in different financial circumstances or different farming operations do not fit into the sort of pattern that people are trying to implement. There are all those difficulties of handling things in a rural community in a coordinated way.

**Dr Grant**—I think social attitudes are changing as well to some extent. The peri-urban development—I am part of that, not that I share in all of the social attitudes—is one in which social changes are taking place. There is concern for animal welfare and the Bambi factor in terms of feral deer and things like this, which people see as being quite attractive on their properties but which on the other hand can be just as destructive in the case of a vector borne disease situation as are other animals. I think there is a very wide array of impacts bearing on this issue, and I do not think it is just a simple issue.

**Mr MICHAEL FERGUSON**—I would like to ask a question about control. Like any war—to the farmer, this is a war against pest animals—you might have a strategy of containment just to stop the problem from getting worse and becoming more of a problem than it already is. But then, of course, the holy grail would be to eradicate. I have thought about the different means of control there might be, such as biological controls, physical controls—like fencing, which you have identified—hunting, chemical controls and even genetic control. My question is really only: what is the future? How much innovation, science and research are you aware of that holds out hope that some of these problems which today just seem impossible to deal with may actually have a silver bullet? What research is happening and, if improved levels of research are happening, how can we manage that?

**Mr Hart**—Research has happened, and a lot of research is happening. We always try to talk down the prospects of the silver bullet. 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. So that is why, through the CRC and through our own funding program—the National Feral Animal Control

Program—we focus very much on the less sexy, traditional control techniques that have shorter term horizons and a greater chance of providing a usable control technique to land-holders.

**Mr SECKER**—I am reminded of a certain state minister in South Australia who went to a farming group and said that she was going to bring in fertility control for dingoes. One wag got up and said, ‘Minister, that’s all very well but the dingoes don’t eff the sheep to death; they eat them.’

**Mr MICHAEL FERGUSON**—Thanks for the interlude. My follow-up question is Tasmania specific, I think, and about is 1080. That has been a very controversial use of chemical control in Tasmania, although it has not been controversial so far as the farmers are concerned because it has been so effective. Are you aware of the government’s commitment to at least investigate alternatives and of what the vision may be at the moment in terms of finding an effective replacement?

**Mr Hart**—Obviously the state government has made a commitment to phase it out in the next year or two. About 10 years ago BRS funded some work into alternatives to exclude wallabies, for example, from pasture land. We funded some exclusion-fencing work which showed that the technique certainly works, but it is very expensive. There has been some work on repellents to reduce possum and wallaby impact on forest production—for example, on forest seedlings—but they are not without problems either. Finding alternative solutions to that problem is not simple. If you decide that you are still going to use lethal techniques, such as shooting, you are still going to be killing native animals and obviously that is not going to be popular with a fair sector of the community.

**Mr MICHAEL FERGUSON**—Do you think it is even reasonable for a state government to talk about phasing 1080 out when there is no alternative yet identified that is as effective?

**Mr Hart**—That is a state government policy matter and I would not comment on that. I would just say that certainly there are some alternative techniques that can work and, in the absence of 1080 availability, those techniques might be viewed as being more cost effective than they were when 1080 was available. Obviously 1080 can be applied quite cheaply, while exclusion fencing is quite expensive, but exclusion fencing can work.

**Mr MARTIN FERGUSON**—In the submission the point is made that, whilst there is always going to be a debate about how much money there is to spend, we have made some progress with respect to the performance of state, territory and federal governments et cetera. You also raise the issue, which has partly been touched on by Gavan O’Connor, that in the end we have some of the farming organisations failing to pull their weight in getting the word through to their different constituencies. You also raise the issue of some farmers not accepting their responsibilities. Michael Wooldridge actually did a good job with immunisation in Australia when he was health minister by basically saying, ‘If your children aren’t immunised then you don’t get access to some social security payments.’ Have you given any thought to some incentives or penalties that could be applied to individual farmers who do not pull their weight, given that a whole program can be undermined in a given regional community by a couple of slackers? If not, are you prepared to give some thought to that and come back to us with some ideas? We have actually had to do it in the community on other issues.

**Mr Hart**—It is a state government issue, and most states certainly do have things in place in terms of theoretical penalties for a lack of control of any species that has been declared as noxious in that state. For example, in South Australia in extreme cases the Soil Conservation Board could move onto someone's property, rip the warrens on that property and then bill the land-holder. That is relatively straightforward for something like rabbits where you have very obvious physical evidence in the form of rabbit warrens and it is very easy to see when you have ripped those warrens. It is a little more complicated for some other pest animals that are very hard to monitor in terms of numbers both before control and after control. It is a difficult issue, and the priority would obviously be to use the carrot approach rather than the stick approach. The way state government agencies use the carrot approach is to do things like provide free baits to land-holders so that the land-holder requirement then just becomes a commitment to some labour, for example.

I should say that, whilst these gaps in land-holder activity are a problem, some land-holders are extremely passionate about pest animals and will manage them to a state that would not even be considered economic. In some rangeland properties some land-holders have such a vehement dislike of having even a single rabbit on their property that they will rip from one end of their property to the other and then start again five or 10 years later at the other end. That is extremely expensive and probably would not be considered economic, but that is their personal attitude. At the other end of the scale are land-holders who tolerate pest animals in quite high numbers.

I should say that there has been a dramatic change in the way pest animal control has been conducted in the last decade. State government rangers used to go out and do a lot of the control themselves, and therefore they could only treat a relatively small number of properties. What they now do is coordinate land-holders to do large-scale control programs. That regional control, which has started to happen over the last 10 years, has proven to be far more effective than individual property control.

**Mr MARTIN FERGUSON**—Is there any document you know of that actually pulls together an audit of what potential penalties exist at every state and territory level that we could have a look at? There might be weaknesses in some states and ideas or policy options existing in others which could be extended. That could be part of our recommendations.

**Mr Hart**—Alby would be very familiar with this document because he launched it for us a few years ago. BRS have basically prepared a series of species management guidelines over the last 10 years or so covering the main pest species of agriculture, including rabbits, foxes, feral goats, feral pigs, wild dogs, feral horses, carp and mice. There is a table in each one of these books which identifies the respective state government legislation pertaining to that species and what they are declared as.

**CHAIR**—Picking up on the comments that you just made, I want to make the point that in the Gundagai area about five or six years ago the local land-holders got together with the National Parks and Wildlife Service, State Forests of NSW and the Sporting Shooters Association. They ran a very professional herding and culling of wild goats using skilled shooters from the Sporting Shooters Association and rounding goats up with helicopters. Over a three- or four-day period—I think they did it over a long weekend—they killed somewhere in the vicinity of 300 to 400 goats. That was very effective. It did not hurt anybody and it did not damage any property,

hurt any domestic animals or anything like that. It was a very good shoot. Has that sort of thing been looked at and trialled since then? Do you know of any similar projects that have occurred?

**Mr Hart**—I presented a paper at a conference a few years ago on this issue—the ability of recreational hunters to contribute to pest animal control. It can work. It is often impressive when people produce figures of the number of pest animals that they have killed, but it is obviously the number of animals that remain that matters. It is often quite hard to count these animals in rugged terrain and forested country. So it is possible that there were still quite a few goats left in that situation but, even if there were not, the concern would be that if that was just a one-off program and not done very regularly then obviously the goats would reinvade that area and breed up et cetera.

Where it does work quite successfully with the Hunting and Conservation Branch of the Sporting Shooters Association is in the Gammon Ranges of the Flinders Ranges in South Australia as part of the Bounceback program. The shooters went in initially with techniques such as water point trapping, mustering and helicopter shooting to get the population down to quite low levels. Now they basically go in there on a regular basis to keep the numbers at low levels. You are not talking about eradication, but with constant activity you can keep them at quite low levels. That has been quite successful. But, in general, realistically there just are not enough recreational hunters to provide that sort of pressure on the population. Shooting and trapping are also quite labour-intensive and inefficient techniques compared to baiting and aerial shooting.

**Mr WINDSOR**—I want to follow up on the comment Martin made. I think Colin referred to the social change that is occurring too. Probably in defence of land-holders, in a sense, part of the social change that has occurred is the relationship with neighbours—whether that be national parks or railway lines. Some years ago there was a better relationship, but in some states a lot of land-holders would feel as if it is useless doing something if they happen to be near a national park and there is a particular problem. There has to be some overcoming of that problem. The other problem—and you mentioned it, Quentin, in relation to feral goats and the harvesting of goats—is that there are also difficulties with vegetation management policy at a state level, in relation to woody weeds, for instance. A lot of properties have become uneconomic for sheep, mainly, or cattle in some of that western red country. The capacity to do something with the woody weed problem has been removed from some farmers, so the only viable animal that can use it is a feral goat. It is not just about having the strategies to get rid of the animal. A lot of people are reacting to policies by government that are already there and then, in some cases, throwing their hands in the air and saying, ‘What’s the bloody use of it?’ I am not saying that occurs in all cases but, if we are looking at some sort of overarching national approach to these sorts of things, you have to have some influence on policy at a state level and also at some sort of catchment level. My question is: is it worth the effort? Do we really need a national approach, or are we just going down another bureaucratic path where we are pouring money in? Is it better to pour money into bounties so that people go out and shoot the things?

**Mr Thompson**—I think you are correct about the interrelationship between pest animals and overall whole-farm and, in that context, whole-regional management of what pests are in there. I do not think we could say at this point of time which sort of control is best for which region for which species as a general rule, because you have to look at it in that situation. As Quentin was saying, what we want to do is work out the strategies at a regional level so that we get a national framework which talks about some priorities and the pests that look like they can be contained,

eradicated or prevented but then work out the principles that we might apply and work at that regional level so you can draw in the national parks service, the forest service and the willing farmers and get a bit of local pressure so we can say, 'We're going to go in and do this now.'

The local level is the best place to say: 'We might be able to go and do a big feral pig campaign in the eastern part of the wheat belt in New South Wales. The farms are looking pretty good, but the farmers are sick of the pigs coming in and tearing up their crops.' But then you go out to western New South Wales and they say: 'Our problem out here is actually woody weeds. Let's deal with the weeds first, and we'll come back to the pigs afterwards.'

**Mr WINDSOR**—Why do we need a national approach to do that, though? Why do we need a national government approach to get from one side of the Murray to the other?

**Mr Thompson**—Sorry, in that context it could be handled within a state, but in other cases you have things that cross borders. The majority of the money—if there were money available for pest animals through a program—would not go into the strategy. It is just to get some consistency. As you are aware, people are saying, 'Why are you controlling pigs in Queensland whereas in Victoria you've put the focus on rabbits?' It is because the chance of getting success is greater in one place than another. It is really just so a program can be rolled out that is not subject to criticism and so people do not waste their effort. They seem to respond much better if there are some common guidelines that they are working to. As someone said, some people can get quite passionate about removing rabbits from their property to an uneconomical level. It would be a bit unfortunate if everybody in the region tried to do that almost against their will, whereas there are other things that might be worth while putting a really big effort into.

**Mr WINDSOR**—You mentioned some new bait for pigs. What is the bait?

**Mr Hart**—I guess it can be most closely compared to a salami-looking sort of a thing. It has a polymer rod inside it which contains the 1080, but that polymer rod could contain any toxin. Alternative toxins are something that the CRC and also our program will look at in coming years. It is something that can be used in a wide range of environments and that is attractive to pigs in a wide range of environments. They can be thrown out of a plane pretty easily, and obviously in rangeland areas you are really looking at aerial baiting.

**Mr WINDSOR**—I am probably asking a question you cannot answer but, at a practical level, one of the disputes at the moment in relation to the use of 1080 and dogs is that we think it kills the native quoll. There is a lot of research going on as to whether it does or it does not, how many and so on. Using that as an example, how at a national level could you conceptualise having an impact on that particular problem?

**Dr Grant**—The non-native species target problem?

**Mr WINDSOR**—Yes. That is where politics and policy come into it. You cannot kill one quoll even though you might kill 15,000 dingoes.

**Mr TUCKEY**—The evidence in Albury, nonetheless, addressed that quite significantly, because the people said, 'Not so'. They reckon the dogs kill more quolls than the poison might.

**Mr Hart**—There is actually a meeting on this very issue in Sydney next Tuesday, and one of our projects is going to be represented at that meeting. We are funding a project on that at the moment. When you ask how the national strategy contributes to that sort of thing, it is in improving the ties between state agencies and the Australian government that allow things like that meeting next Tuesday to take place; it is in that coordination of policy makers and researchers.

**CHAIR**—Didn't the wild dog-fox control program in the Brindabella get over that problem?

**Mr Hart**—The nil tenure approach? I am not sure if they totally got across the quoll problem. Obviously it is trying to work out a perception versus reality, and there have been some flaws with past research into this area. That is why this meeting next Tuesday is to decide on an experimental design that will much more conclusively determine to what extent there is any impact.

**Mr TUCKEY**—Coming back to fencing for a moment, my thoughts on Cape York, the national park and feral pigs have been sort of resuscitated by this discussion today. I think it is Denham Peninsula, the peninsula near Shark Bay on the West Coast, that they put a fence across. Because it was a peninsula, they fenced a sector and then went into a process of eradication of everything on the other side, particularly all the risks to wildlife. Considering the huge threat that the wild pig represents on Cape York, is there anybody in the Bureau of Rural Sciences that might tell us the quality of fence and where it might be positioned, by way of a further submission? We might be able to do that in that area in terms of the pig population et cetera.

While I am on it, where—if anywhere—are there any statistics to the extent to which effective fencing is surrounding our national park estate? That is a huge complaint. Further, we now have a lot of clearing controls that will not allow the clearing of a fence line sufficient to stop a tree falling over the fence that a farmer might build. I think these issues are significant to us, but I am just interested in your comments on those things.

**Mr Hart**—The Peron Peninsula in WA is quite a narrow peninsula, and that is what made it economic to fence that off. It simply would not be economic to fence off Cape York. I guess the other problem with that part of the world is its wet season and the river systems up there. Putting exclusion fencing in that part of the world would be very difficult; maintaining it as an exclusion fence would be almost impossible, I would think.

**Mr Thompson**—I should just comment on the national parks exercise. It is also very expensive to fence national parks, since they tend to be islands in the middle of a landscape.

**Mr TUCKEY**—I was going to raise the question of why we should have so many.

**Mr Thompson**—I think that is an issue for another department and other jurisdictions.

**Mr TUCKEY**—Where might we get some statistics on how many of Australia's national parks, which are declared with gay abandon by politicians, are effectively fenced to keep their own trouble inside their boundaries? It is a huge problem.

**CHAIR**—The answer is there are none.

**Mr TUCKEY**—It might be a matter of record for us, Chair, that there are none.

**Dr Grant**—I think the point that is coming out here—and this is where I think the development of this strategy is so significant—is that it is consistency that will get us a better result than we are getting at the moment. I am talking about consistency across the board on all of the issues that bear on this sort of problem. That is where I think we need state, federal and local government input and land-holder input to get a strategy worked out that talks about things like what happens if you have preclusions on land clearing near to fence lines when, in a particular circumstance, the fence line is seen as the best control method for a particular species. Until we get that sort of level of consistency into the thinking, we will get perverse outcomes and conflicting decisions.

**Mr TUCKEY**—I would buy that.

**Mr ADAMS**—What about the dingo fence, the dog fence? Is that still effective?

**Mr Hart**—It is still effective. It is handled differently in every state according to who is responsible for managing it and the relative land-holder to state agency contribution to managing it. It is a different design in different states. In some cases it is just a netting fence and in other cases it is electrified. In some cases it is just the fence, and in other cases there is a buffer zone and baiting to reduce the pressure of dogs on that fence. I presume it is still considered effective for the government agencies and land-holders to keep putting so much money into it.

**Mr WINDSOR**—Would it be considered uneconomic to do now? You said that exclusion fencing is uneconomic for large areas. There are 5,000 or 6,000 kilometres of it.

**Mr TUCKEY**—They did it with a pick and shovel once.

**Mr Hart**—With current labour rates, possibly. Obviously now the fence is established and you are just talking about the maintenance costs, which are still quite high. To have to establish it from scratch would be a very expensive exercise.

**Mr GAVAN O'CONNOR**—How do the environment groups feature in the dialogue on these matters? Where do they fit into the picture? They have an interest in biosecurity issues and biodiversity. Do they have a voice at all? Are they anywhere in this dialogue?

**Mr Thompson**—The work that goes on in any of these things to do with vertebrate pests at the government level is done on a whole-of-government basis. Around the table there are environmental departments as well as agricultural departments. In some cases they hold slightly different points of view when it comes to native animal pests, but there is a lot of commonality of view on things like foxes, rabbits and cats. The environment groups themselves are very key stakeholders in all of this, and in some cases they are recipients of and participants in programs. Just as the organised agricultural groups provide submissions and comment, there are some very well-organised environmental groups right across the spectrum who want to play a role in parts of it. Some of them are active participants in managing them, and others—

**Mr ADAMS**—There are no pig huggers left, are there?

**Mr Thompson**—I do not think many environmental groups are involved in pig hunting. I am no expert on that, but there are certainly—

**Mr ADAMS**—Pig huggers, I said; people who want to keep the pigs.

**Mr Thompson**—No. But there is an animal welfare movement, as Colin mentioned, which is interested in how animals are controlled. That can affect the nature of the control measures put in place. That is not an insignificant issue for agriculture because, if feral animals are being controlled, allegedly for agricultural reasons, in an inhumane way, there are plenty of demonstrators who could appear in other places in the world who could use that as an argument against agriculture. I believe in many of these instances the environmentalists in the broad spectrum and the agriculturalists have a lot of common interests, and there are some examples around where they have worked together.

**CHAIR**—I want to raise a question and then we might consider with the committee whether any more questions have come to mind and then close the hearing down. I noticed in your submission that there is no reference to deer and the deer problem. There has been a recent press report that says the Australian government is funding a project to look at the impact of feral deer. Are you aware of that? What is involved in the study and how serious is the deer problem?

**Mr Hart**—That is actually our project—the National Feral Animal Control Program project. There are a few species which we certainly consider to be an emerging pest issue in that they are increasing their range and their density within that range and the awareness of their impacts is increasing, even though there is not that much research into their impacts. They include deer and camel. Because of that, under our last funding round, which was announced by Minister Truss in December, we are supporting a camel and a deer project, basically to try and get a handle on the situation before our organisation and other organisations decide where to go as far as putting money into research and management.

**Dr Bomford**—Deer populations are expanding and they have the potential to become significant pests.

**CHAIR**—Yes, I am aware there is a serious problem in Victoria. That is one of the reasons why it was pointed out to me. I have one final question. In Victoria they had a bounty system. I do not know whether it was a lotto system—one of the Victorians might be able to tell me. There was some sort of a lotto system for foxes if you produced a scalp. How did that work?

**Mr Hart**—The fox lotto system did not work that well, and neither did the much more recent Victorian fox bounty of a couple of years ago. The problem with those systems, as with most bounty systems, is that they are clearly subject to fraud. In cases where they are state specific, such as the Victorian one, near the New South Wales and South Australian border you effectively have foxes harvested from areas where they are easiest to get rather than necessarily those areas where they are causing the most damage. The schemes are expensive to administer and they also encourage the use of quite inefficient control techniques, such as trapping and shooting. What happens is that a lot of much more useful techniques such as baiting go out the window in some areas. I think with the fox lotto scheme the return rate was the same or might even have increased through the years of that scheme, so to suggest that it reduced the fox population in Victoria would be pretty dubious.



**CHAIR**—I was not suggesting that.

**Mr Hart**—I know, but some people have.

**CHAIR**—I thank each and every one of you for giving up your time to come and address the committee today. The contribution you have made has been very constructive. I know we have got a lot out of it and it has given the members an opportunity to ask some questions that they may not have otherwise been able to ask.

Resolved (on motion by **Mr Adams**, seconded by **Mr Forrest**):

That this committee authorises publication of the transcript of the evidence given before it at public hearing this day.

**Committee adjourned at 6.38 p.m.**