

SUBMISSION NO. 44

**CHEVIS AGRISERVICES AND CONSULTING Pty. Ltd**

(ABN 90 003 697 489)

14 May 2004.

Mrs. Kay Elson MP,

Chair, House of Representatives Standing Committee on Agriculture, Fisheries and Forestry.

Re: Submission to the Inquiry Into The Impact On Agriculture Of Pest Animals  
By Rodney A. F. Chevis. MVSc; PhD; FRCVS.

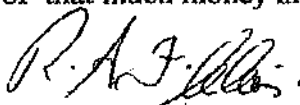
The enclosed short submission is supplied in my capacity as a private, informed citizen. I am Chair of the Moss Vale Rural Lands Protection Board and you will receive a submission prepared by the Managing Ranger (and Chair of the Board's Pest Animals Committee) and his fellow Rangers, all of whom are very experienced people with regard to the Board's core responsibilities, including pest animal control. I have no major difference of opinion with the Rangers even though, in some instances, we may advance different points of view on some matters. I have presented this submission because it puts forward matters as I see them and opinions which are mine alone and have been discussed with no one.

My background is that of a veterinary graduate with some years of farm animal practise here and in New Zealand, then trained in veterinary pathology, following which I worked for three different multi-national pharmaceutical companies on research and development of new animal remedies. I then spent some years as Director of Animal Disease Control with NSW Agriculture, bearing responsibility for both endemic and exotic animal diseases. Finally, I have run my own consultancy company since 1989, dealing with companies active in animal health R&D. My clients include companies located in the UK, USA and Australia. I have also undertaken some research of my own and have a patent pending for the use of a natural product against some allergic inflammatory diseases in mammals.

I was for some time an Adjunct Reader in the Department of Biochemistry and Molecular Biology, at the Australian National University.

I was elected to the Moss Vale Rural Land Protection Board (RLPB) in October 2002 and then elected to the Chair, unopposed, in October 2003. As you will learn, I see a place for the Australian Government in pest animal control in partnership with the RLPB system in NSW, wherein resides all the practical experience and expertise in pest animal work, in this State.

The RLPB system does not have any experience with the research and development of new methods of attacking pest animals, but with my experience in fundamental and field research I perceive them as ideally placed to carry out the field evaluation of experimental approaches to pest animal control. I should be delighted to discuss the possibilities with you, at some time in the future. I commend the Government's approach to a problem which is no less serious now than at any time in the past, despite a recent reduction in rabbit numbers, at least in the Moss Vale Board's district. A more concentrated approach is indicated and by the very nature of the problem will cost money, but if \$20,000,000 were spent, annually, for the next five years, to just halve the present level of loss then agriculture in Australia would soon be on its way to being about \$190,000,000 per year better off, with the possibility that the return might grow further as the campaign progressed. The injection of that much money into the Nation's rural economy would have a significant positive effect.



R.A.F. Chevis.

Secretary: 

ENCLOSURE

17 MAY 2004

 HOUSE OF REPRESENTATIVES  
 STANDING COMMITTEE ON  
 AGRICULTURE, FISHERIES AND FORESTRY

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Summary.

Point 1. Identification of pest animal issues and the improvement of management.

The animals which are pests can be identified and the problems they cause defined.

While those declared under the NSW Rural Lands Protection Act, 1998, (feral pigs, wild dogs and rabbits) are the most important, all pests should be recognised and declared even if only according to a conditional declaration.

The Australian Government could form a consultative body with State Governments to define a mechanism for the declaration of all pest animals and to establish priorities for the application of specific control measures together with the funding of pest control projects with specified aims, operations, reporting and auditing procedures.

Point 2. The approaches to pest animal issues.

2 A. All pests should be recognised and their potential for causing harm to agriculture defined in order to set priorities for control activities.

2 B While pest mapping may be of use in the detection of established pests, public awareness may be immediately effective in having new pests identified.

2 C. Eradication is the best way of achieving pest control. The concentrated effort required may be costly, so support is necessary and new methods of attacking the problem should be sought.

2 D. Energetically applied and coordinated control methods using all available resources and where feasible new approaches should be evaluated.

To achieve the above mentioned ends will require increased support. The Australian Government could assist with grants for specific work programs.

Point 3. The adequacy of funding.

More could and should be spent because the results, where RLPB's undertake the work on contract to NPWS, show that continuous control can be effective. While this work could be subsidised the outcome, in terms of increased commitment by the NPWS, is questionable. Pressure applied to the NPWS might have the desired effect.

Point 4. The scope for industry groups and R&D Corporations.

A coordinated pest control campaign is an absolute imperative and industry groups, subsidised by grants from the Australian Government, could play an important part in bringing a campaign to life. R&D aimed at discovering new ways of attacking pest animals should be undertaken and could be supported by direct grants from the Australian Government.

Point 5. Promotion of community understanding and involvement.

A well planned and coordinated campaign to acquaint people with the effects of pest animals could be conducted by the Australian Government. This could lead to a further

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campaign to involve concerned members of the community in reporting the activities of pest animals. An organisation (the RLPB's in NSW) responsible for responding to such reports would have to be nominated and adequately funded.

**Recommendations**

1. That the Australian Government commit funds for the establishment of consultative bodies with State and Territory Governments to plan and support a coordinated campaign to inform the whole community of the costs and animal welfare concerns, associated with the depredations of pest animals.
2. That the Australian Government attempt to have the control of pest animals become the duty of the State government in NSW, acting through the Rural Lands Protection Boards.
3. That the Australian Government establish a special fund with which to promote pest animal control work by direct grants to approved agencies with established expertise and a history of activity in the field.
4. That the Australian Government provide funds to support R&D activities aimed at the discovery of new and improved methods of pest animal control and that the work be carried out by entities with connections to the Rural Lands Protection Boards in NSW.

## THE SUBMISSION.

**POINT 1. Identification of significant pest animal issues and the improvement of coordinated management.**

Pest animals are important because of the damage that they can cause to one, or more, of the following:

- (a) crops and pasture;
- (b) farm livestock;
- (c) soils; and
- (d) native animals, birds and vegetation.

Additionally, they are reservoirs of animals susceptible to a range of emergency (exotic) diseases of considerable economic significance.

Finally they can spread endemic or exotic diseases of veterinary and public health importance (zoonoses), some of which may be of little consequence in most people, but which pose a potent threat to anybody with impaired immune functions arising from therapy or disease. Others, such as rabies, certain viral encephalitides and some haemorrhagic diseases are of universal concern.

The species of importance as pest animals are:

- (a) feral pigs;
- (b) foxes;
- (c) wild dogs;
- (d) feral cats
- (e) rabbits;
- (f) feral goats;
- (g) deer living free; and
- (h) mice.

It should be noted that only feral pigs, wild dogs and rabbits are declared pest species in NSW. This leaves foxes and feral cats, both significant predators, not officially recognised as pests, even though 1,000,000 fox baits were issued to landholders in NSW, during 2002. This suggests that landholders are well aware of the fox problem, but lacking any lead in combating that posed by cats. Goats and deer living in the wild are of concern and should be considered along with the other pests, while the cost of recurrent mouse plagues should be documented and work undertaken to anticipate and combat future population explosions. The application of control measures such as the use of pindone oats and 1080 (sodium fluoroacetate) baits might be strategically instituted. It would appear that NSW is in need of a new mechanism for recognising, declaring and attacking species that have become pests.

In certain circumstances even native animals (kangaroos, wallabies in crops, flying foxes in fruit) and birds (currawongs in Sydney) can become pests and appropriate action is indicated so that a more normal balance can be achieved without landholders being harassed by well meaning, but misguided, conservationists, both official and private.

It is difficult to list the pests in order of importance since the pattern will change when different criteria are applied. The declared species, in NSW, must, however, be regarded as requiring immediate attention.

The issues that confront us are then:

- (a) direct damage by the predation of lambs and calves or the mutilation of older

- animals;
- (b) the potential threat as reservoirs of animals susceptible to a range of exotic animal diseases, some of which are zoonoses of considerable public health significance;
  - (c) the threat posed to the purity of town and city drinking water supplies by animals (possibly infected with an endemic zoonotic disease) which drink from the reservoirs and which defecate and urinate close to the water's edge or on land which is later inundated again, in this context native animals could be regarded as pests;
  - (d) the damage to crops and pasture by grazing, or invasion of grain silos; and
  - (e) the damage to the soil by overgrazing of large areas.

The list does not include damage by plague locusts, since they are not animals, nor does it recognise the predation of native animals and birds by several pest species, declared and undeclared.

In NSW the responsibility for the control of pest animals rests with the landholder/occupier and while advice is readily available from Rural Land Protection Boards (RLPB's) many small landholders are unaware of their responsibilities. Many of these people assume that RLPB's are responsible for the control of pest animals and are dismayed when the facts are revealed. As pest animals pose a threat to all of the community, in one way or another, it seems logical for the problem to devolve upon and be paid for by State instrumentalities. In NSW the RLPB system already carries out such work on contract to the National Parks and Wildlife Service (NPWS) and NSW Forestry as State instrumentalities, as well as golf clubs (private or public) and parks maintained by municipal councils. With funding from the public purse a free service could be extended to private land holders as this would facilitate better planning, coordination and application of control activities, than that which applies at present.

- The Australian Government could form a consultative body with State Governments to define a mechanism for the declaration of all pest animals and to establish priorities for the application of specific control measures together with the funding of pest control projects with specified aims, operations, reporting and auditing procedures.

## POINT 2. Consideration of the approaches to pest animal issues.

### 2 A. Prevention of new pest animals becoming established.

In-so-far as this concerns animals not at present in Australia, the border control activities which now apply must be maintained and the risk factors attached to the importation of animals (or semen, embryos etc) birds or fish must be considered and decisions validated before importation of species, which are new to Australia, is permitted. In some circumstances already established import permits may have to be reconsidered. These are, of course, matters already under the control of the Australian Government, so need no further comment.

With regard to animals already present in Australia, all pest species must be recognised and their full potential for harm to agriculture documented, since only in this way can priorities for control programs be established. At the same time factors contributing to the damage would become amenable to analysis, which may then suggest appropriate control measures and facilitate the costing of such activities.

Pest mapping has been carried out in NSW, in the past and should be encouraged in the future. It should be extended to include as many pests as possible together with livestock and native animals, where it is feasible.

The apparent increase in the number of deer living in the wild suggests that we have an undeclared pest with the potential to do considerable harm in high rainfall areas or locations subject to serious flooding. Judging by the effect that deer have had on the New Zealand native vegetation, together with accelerated soil erosion, steps to control them in parts of NSW, are needed urgently.

It must be recognised that any farm animal can become a pest if allowed to roam free. Feral horses and cattle can destroy vegetation and fences, so consideration must be given to circumstances under which they can be declared a pest, in a nominated and defined area. The NSW Game Act may, perhaps, be of some help when it is applied.

#### 2 B. Detection and reporting for newly established species.

While pest mapping may be of use, I suspect that mapping will not reveal the early stages of a pest build-up at a specified location, let alone while well dispersed. On the other hand, if the public is made aware of the necessity to report the sighting of farm animals in locations where they have not previously been seen and not obviously under any care and control, or of feral animals in new locations or in larger numbers than in the past, then I am sure that new 'colonies' will be reported to a nominated organisation. An effective public education campaign is required to acquaint people with the circumstances under which reporting is necessary. I am sure that the discovery of cattle, goats or sheep grazing on Randwick or Warwick Farm racecourses would prompt the AJC to decisive action, so the appearance of horses wandering stock routes or in bushland should be seen to be reason enough to contact a nominated organisation. The appearance of feral pigs, wild dogs or rabbits, in any locality, should prompt a report. But people need to know the name and contact number for the nominated organisation. In NSW, for instance, it is the local RLPB, but not everyone is aware of that.

New 'colonies' of feral pigs frequently appear on the outer perimeters of Sydney and are reported to the Moss Vale RLPB by concerned members of the public. A publicity campaign would, almost certainly, have such 'colonies' reported sooner and before they became a major problem. A 'colony' of about 25 feral pigs had to be trapped and destroyed at Badgerys Creek, during March. The location is between Liverpool and Penrith and close to the site of the proposed new airport. Because of the numbers involved the cost was significant.

- The Australian Government could support an appropriate information campaign in conjunction with local authorities.

#### 2 C. Eradication of infestations of newly established species.

Eradication of infestations is, of course, the most effective method of controlling a pest population, but requires continuous, concentrated effort, which may be costly. In NSW the RLPB's would be the logical organisation to undertake such work. It would, however, have to be funded from the public purse with the money paid directly to the Boards. The RLPB's have a very high level of cooperation with landholders in each Board's area and this can be improved with further support and training in the use of new approaches to pest control. The method by which a new infestation would be eradicated depends, of course, on the species concerned and the locality. In NSW, RLPB Rangers have detailed knowledge of their districts and understand the restraints which may be placed upon eradication procedures by locality.

#### 2 D. Reduction of the impact of established pest animal populations

The best way of reducing the effect of existing pest animals is to encourage control programs using official operators, professional (meat) shooters and recreational hunters, as may be effective. The official operators could use some unconventional methods, see under point 4. For best effect the efforts of all three groups would require coordination, through the RLPB's

in NSW. Coordination over large areas eg several RLPB districts in NSW, would require the nomination of a 'supervising RLPB' with whose nominee all negotiations would be carried out.

**POINT 3.** The adequacy of State Government spending on pest animal control in the context of other conservation and natural resource management priorities, with particular reference to national parks.

Large tracts of land have been declared national parks in NSW, during the last several years and while pest animal control should be undertaken as an integral part of the conservation effort it seems to be relegated to a 'keep the neighbours from complaining' role. The National Parks and Wildlife Service (NPWS) uses the expertise of the RLPB's in pest animal control activities, where the NPWS regard it as appropriate. Where this work is diligently pursued, by NPWS, the complaints regarding livestock losses by local farmers decline, but do not always cease. Control activities must be maintained and even increased if livestock losses are to be kept low while, at the same time, native animals and birds are protected. NPWS must be encouraged to set a realistic annual budget for pest control work, in the frame work of a three year planning cycle and long term contracts with RLPB's, in NSW. While the Australian Government could, perhaps, subsidise the pest control work in national parks I am cynical enough to believe that the NPWS would then substantially reduce their contribution. Firm budget control and auditing would be required.

**POINT 4.** The scope for industry groups and R&D corporations to improve their response to landholders concerns about pest animals.

Pest animal control must become a coordinated activity, nation wide, with long term planning, realistic and achievable goals and a properly defined reporting system. The importance of the work must then be conveyed to the Nation by a well planned publicity campaign which could, in part, record the contributions of individual organisations. It would not be inappropriate to start the publicity campaign in the schools with factual data on the real effects of pest animals, properly presented. Pest animal control could be promoted as an integral part of protection of the environment. In this area the Australian Government could play a leading role, especially with the general publicity campaign and in the schools. The successful use of pindone oats against rabbits should be emphasised.

In addition the R&D corporations could seek unconventional methods of achieving control of pest animals eg the use of orally active phenothiazine tranquillisers to facilitate the hunting of deer, goats, pigs and perhaps, wild dogs. Additionally, it has been shown in sheep that it is possible to over activate certain female hormones to prevent ovulation and breeding for at least one season. The same effect might be obtained in other mammals. Practical ways of applying this technique should be sought. In the same vein the administration of female hormones to male animals can reduce their libido and thus, possibly reducing breeding. These approaches could reduce the population of several species, including rabbits. Furthermore, the excessive administration of certain chemicals which stimulate the immune system can inhibit immune responses. This might render pest animals prone to infection with existing pathogens to which, under normal circumstances, they have a functional immunity. These compounds are active when ingested in quite small quantities.

The Australian Government could support the research work which would be necessary to ensure the ingestion and activation of the chemicals. The work should be done using captive animals, initially, then in locations where there are populations of feral pigs, deer, goats, dogs etc to use in field trials. It should be emphasised that these chemicals have a wide safety margin and would not cause animals to suffer.

**POINT 5. Promotion of community understanding of the importance of pest animal control.**

The community must first become acquainted with the details of the damage that pest animals cause such as the cost in terms of money and the wastage of food crops, caused by locust and/or mouse plagues, the loss of lambs, kids and calves and the damage to older animals by wild dogs, soil degradation from rabbit plagues and the potential threat of zoonoses. So a well planned, continuous and progressive publicity campaign is necessary. In order to illustrate the effects of different pests it may be necessary to set up experimental 'plots' in different areas of Australia and to record the progressive damage, as well as the recovery when the predators and crop despoilers are excluded. The effect of feral cats, foxes and ferrets on native animals and birds should be stressed and may be the starting point of the publicity campaign.

Just as the community has taken the 'Clean up Australia' campaign to heart so then it can be expected to lend support to a well planned and presented campaign to 'spot a pest, give it no rest'. Obviously, the success of any such campaign will rest upon the availability of an agency from which people can get advice and guidance on control methods which can be employed by individuals or local pest control groups, or have the problem taken over by the agency which must be staffed by trained professionals. In NSW the most appropriate agency would be the RLPB's since they already deal with pest animals and have accumulated a host of local knowledge applicable to their respective Board districts. There are close to 130,000 ratepayers in the NSW, RLPB system, with whom direct communication is maintained. A small sample could be used for the development of a control campaign and the remainder for the first steps in getting the whole community involved. No doubt the Departments of Agriculture or Primary Industries in other States and Territories would be able to provide similar support. The various conservation organisations could be expected to lend enthusiastic support.

The unqualified support of both State and Federal Governments would be crucial to the successful launch and long term viability of any campaign to control pest animals. There would be significant costs associated with the coordination of activities in the States, continual provision of pest animal intelligence via radio, TV and the visit of pest animal communicators to local groups, which would have to be sustained until such time as sponsors could be found. The Australian Government could help with the funding of the control campaign.

In NSW it would be important that the State Government require instrumentalities such as NSW Agriculture, NPWS and Catchment Management Authorities (CMA's) etc to support the campaign both morally and financially, at least at the level presently planned or undertaken. We do not, however, require a new instrumentality to administer the campaign and its funds, as the RLPB's all have well trained and experienced staff quite capable of such work and audited by the Government Auditor. It would be imperative that the RLPB's have direct access to funds provided for approved projects, as presently occurs with payments for contract work carried out by the individual Boards. Furthermore, while the Australian Government would have to establish a body to control the flow of funds, the number of people involved could be kept to a minimum by the establishment of a part-time Board of Directors (all suitably experienced), with a small secretariat supplied and maintained by the appropriate Commonwealth Department. The Directors could be paid for a defined number of meetings each year, the perusal of applications for funds from approved agencies and the provision of reports and recommendations. While the Chairman might have to be employed almost full-time (eg 3-4 days per week) for the first year or so, that time could be reduced once the system becomes established.

- In the absence of a coordinated campaign it would be possible for the Australian Government, through a committee of people with pertinent expertise and experience, to define the important facets of pest animal control and the criteria to satisfy the acceptance as an



'approved agency'. The Australian Government could then invite 'approved agencies' to submit properly detailed applications for financial support from a special fund. The applications would have to define a project relevant to one of the important facets, with nominated resources and staff, a work plan with stages and achievement points, periodic reporting times, a budget with a cash flow against which grant money is to be paid and the timing and framework of the final report. The special fund would have to be administered and the Board of Directors, as outlined for the full campaign, would be appropriate.

In this context the formation and encouragement of local pest control groups could be defined as an 'important facet' of a control program.

Approved agencies would be confined to bodies already directly engaged in pest animal control activities, with experienced staff holding all necessary approvals and with all the relevant facilities available to them.

Regardless of how the Australian Government decides to attack the pest animal control problem it is pertinent to point out that in NSW the RLPB system is the ideal medium for the initial development phase of any new pest animal control campaign. The District Veterinarians and Rangers employed by the individual Boards are all experienced (or being trained in the case of new employees), each Board district is defined and the pest animal problems within those boundaries well understood. It is not, of course, necessary to work with all the Boards during the development phase, since working intensively with one from each of the coastal region eg Moss Vale, the tablelands, eg Yass, the slopes, eg Tamworth and the western division, eg Wilcannia, would provide ample experience and feed back. Staff from the 'experimental' Boards could then be used to guide other Boards, firstly at the regional conferences held each autumn and then at the annual conference of RLPB's. They could also be used in other States, if required.

It should be noted that there is a State Council of the RLPB's but that it is a coordinating body and does not control the day to day activities of individual Boards, many of which already carry out work on contract to large bodies such as the NPWS or individual golf clubs and municipal councils.

I have no authority for naming the above mentioned Boards, but have no doubt that the Moss Vale Board would be anxious to participate in both the early development stage and the later applied stage of a properly supported and coordinated pest animal control campaign. I anticipate that the other nominated Boards would also be prepared to discuss involvement in a control campaign, as would many other boards.

- In my role of Chairman of the Moss Vale RLPB I can assure you that I, my fellow Directors and our Rangers would all be happy to discuss any facet(s) of pest animal control with you and your committee at any time.

  
R.A.F. Chevis.