



SPORTING SHOOTERS ASSOCIATION OF AUSTRALIA INC
AND
FIELD AND GAME AUSTRALIA INC
SUBMISSION

INQUIRY INTO THE IMPACT ON AGRICULTURE OF PEST ANIMALS

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EXECUTIVE SUMMARY

Pest species, both feral and indigenous, are causing significant environmental damage in Australia. In terms of financial loss, there has been a rapid increase of more than 70% over a two year time period. Such an unsustainable increase demands immediate and rapid action in response to the impact caused by pest animals in agriculture. Sporting Shooters Association of Australia (SSAA) and Field and Game Australia (FGA) believe that the recreational hunter has a role in assisting in the mitigation of the impact pest animals can cause in agriculture and have the infrastructure in place to coordinate hunter efforts and collate resulting data.

Given the geographical concentration of certain pest species, and the variation in the extent to which different pest species impact upon different regions, it is crucial that the first points of contact be State authorities and local stakeholders. It is essential that the Federal authorities demonstrate leadership on this issue by promoting to the States the importance of utilising hunter volunteers to assist in rapid response and logistics required for addressing the problems of pests in agriculture. An added benefit of utilising hunters in specific situations is that this method of control has a environmental low impact, especially when compared with the potentially adverse nature of other potential methods of pest control.

Current state legislation, both environmental and firearm, can be an impediment to effective pest management programs because it leads to fragmented and delayed response to an existing or an emerging problem. Reduction of any issues associated with cross-border efforts can be achieved by Federal support and encouragement of State cooperation. Pest animal control requires sustained, long term efforts and we must move to an integrated approach that offers a variety of management techniques for different situations and species. The goal must be 'best practice pest animal management' that addresses the effect caused by the pest, remains rapidly adaptable to changing situations and circumstances and uses all available strategic techniques.

Organisations, such as the Sporting Shooters Association of Australia (SSAA) and Field and Game Australia (FGA) already operate conservation and pest control efforts and coordinate hunters for a variety of programs across all Australian States and Territories. These organisations provide a solid foundation and are prepared to expand their infrastructure to link and co-ordinate both localised and/or large scale pest animal management programs for the benefit of landholders and the community.

INTRODUCTION

Not all pest animals are introduced. Indigenous species commonly achieve 'pest' status in some situations. For example: extended drought can cause animals to change their behaviour and habitat in the quest for resources. Unfortunately, there are times when this results in the formation of a new pest situation as populations invade agricultural land and, in an environment modified by humans, multiply to a point where they cause significant impact. Pest animals compete for pasture, can spread serious disease and cause significant environmental damage in natural ecosystems. Apart from the economic losses that can be directly measured because of a measurable effect on agricultural production the indirect effect caused by loss of biodiversity and, in some cases, the extinction of rare and endangered species is almost impossible to quantify in financial or moral terms.

In 2002 Quintin Hart (Bureau of Rural Sciences) reported that the cost of all pest animals in Australia was in the vicinity of \$420 million per annum, mainly in direct costs to agriculture. In 2004, the Pest Animal Control Cooperative Research Centre stated that feral pests alone cost Australia more than \$720 million each year. In just 2 years the damage caused by pest animals, as direct cost to agriculture, has increased by well over 70% of the original 2002 estimate when all pests, not just feral pests are considered. These figures do not even address the indirect or long term effects of land degradation and loss of biodiversity. This increase over such a short time period cannot be permitted to continue.

We must all accept pest animal control requires sustained, long term efforts. Historic 'all or nothing' management approaches do little to control pest animals and we must move to an integrated approach that offers a variety of management techniques for different situations and species. There are times when eradication of a pest species will remain the primary objective and there are times when management of the pest species to maintain acceptable population densities is also adequate and may be the only realistic option. The goal must be 'best practice pest animal management' that addresses the effect caused by the pest, remains rapidly adaptable to changing situations and circumstances and uses all available strategic techniques.

Private landholders are legally required to control proscribed agricultural pests, while government conservation agencies have a responsibility to reduce the impacts of pest species on endangered native species and their communities. Yet despite many decades of intensive effort, no widespread pest animal species has ever been eradicated from mainland Australia. However, this does not mean that this objective is unrealistic or that we are required to cease all attempts to manage and control pest species. Although there is a clear need to invest in ongoing research and development of techniques to manage pest animals in agriculture it is also apparent, from the rate at which economic losses are occurring within our agricultural sector, that immediate action is required. We must be wary of naively putting our faith in future methods of control and needlessly misdirecting limited funds available for vertebrate pest management into tenuous and uncertain 'silver bullet' research that will take generations of pest animal reproduction before becoming available. It is vital that we also focus on techniques that are available now.

To date, hunting is one of those techniques that has largely been ignored or not used to its full potential. Internationally there are many examples of the successful use of hunting to reduce the environmental damage from and the impact on agriculture that is associated with some pest animal species. It has even been used to offer alternative ways to manage pest animals to the benefit of landholders and the environment. For example, in New Zealand control of red deer, tahr and chamois achieves sustainable population densities that allow productive agriculture and still caters to a large ecotourism and recreational hunting industry. Likewise, in Africa, Program Campfire reduced poaching, protected the environment and returned economic benefits to the local communities by introducing sustainable hunting of some species.

Within Australia, Operation Bounceback is a prime example of world class 'best practice' pest animal control that was regarded as daring and innovative when it was first initiated over a decade ago. While this program has occurred in National Parks in South Australia, it provides an example of the successful use of volunteer hunters over many years of sustained effort. The outcome is that hunters have assisted National Parks in reducing the feral goat densities from over 25 per square kilometre to less than 1 per square kilometre in these Parks. Yet another example would be the twelve month Victorian Fox Bounty trial conducted during 2002/03. In the report, "Evaluation of the 2002 / 03 Victorian Fox Bounty Trial" prepared by the Victorian Institute of Animal Science Vertebrate Pest Research Department, 150,822 foxes were taken during the first 52 weeks. Not accounted for in the report were a further 48,000, taken during the trial extension period. Key stakeholders first became aware of the trial when it was announced in the media. As a result the trial was poorly implemented, particularly given landowners and shooting groups were not consulted during the planning.

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

Primary producers are committed to the complex task of ensuring their farms remain sustainable and productive over the long term. The legal requirement for controlling pest animal species is often regarded as an onerous, expensive and time consuming task. This task is made more onerous by firearms legislation which results in some primary producers deciding it is not viable for them to continue to maintain a firearm licence or the requirements to transport a firearm within the boundaries of their properties. Some landholders also feel they are wasting their time in controlling pests when an adjoining landholder, whether private, crown or a National Park, fails to concurrently reduce the population density of pest animals to an equitable number.

Thus, while a number of options for control may be available, hunting is one of the tools that is readily adapted to many different situations and is both target specific and humane. A landholder may wish to utilise hunters to assist in reducing numbers for a variety of reasons, including their own reluctance to meet the strict legislative requirements to own and use a firearm. Historically, hunting and hunters provided a

resource that many land managers utilised, but today's modern urbanised society has marginalised the hunter and their strong link with the land. Given the enormity of the pest animal problem in Australia and understanding that land managers need a whole suite of tools at their disposal to carry out effective pest management we would like our traditional role as harvesters of wildlife to be recognised and extended within the context of pest animal management.

Management decisions about pest animals, indigenous or feral, should be made on rational, technical grounds without the distraction of unbalanced, sensational news coverage. In order to provide appropriate assistance to landholders faced with problems of pest animal management Sporting Shooters Association of Australia (SSAA) and Field and Game Australia (FGA) believe that by extending existing partnerships with Government Departments, and by creating new ones with State and Federal Departments, landholders and the community we will be able to better understand and manage the impacts of pest animals in Australia. As we prepare for a future with immense social and environmental challenges our society will need to capitalise on a wide range of wise uses for the environment. We are now positioned to take advantage of the way we manage our remarkable land by making bold changes and we should endeavour to utilise the role that recreational hunters are able to play in making these changes for the better.

TERMS OF REFERENCE

The House of Representatives Standing Committee on Agriculture, Fisheries and Forestry is to inquire into the impact on agriculture of pest animals particularly:

- 1. To identify national 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.*

Although State authorities clearly recognise the need for pest destruction, destruction is all too often undertaken by individuals on the basis of perceived 'need', rather than by groups of volunteers acting within carefully defined guidelines. In many cases, current state legislation is an impediment to effective pest management programs.

Australia does not have a coordinated policy on recreational hunting. This is a puzzle to some wildlife managers not only in Australia but also overseas where hunting is an important economic and conservation activity. There are models that could be examined in Europe, USA, Canada, New Zealand and Africa where much of the responsibility for management of abundant game or pest species rests with regional and local communities in collaboration with landowners and responsible hunter organisations. These decentralised approaches allow benefits to accrue at regional, local and individual property levels and therefore provide maximum incentives to conserve local wildlife habitat because they have the capacity to be tailored to suit the local landholder(s) and/or landholders or pest situation.

Such an approach would also assist in addressing the problem of response time to pest animal management. Currently, response times to pest animal problems are often poor due to the bureaucratic processes that have to be completed before pest control activity is authorised. This leads to frustration on the part of landowners who often consider undertaking unauthorised activities to protect their livelihoods.

While local and regional programs, such as coordinated intensive hunting, will assist in the immediate mitigation of an emerging problem or boom cycle for a pest species there are times when more broad scale, sustained approaches will be required. This approach currently does not occur because there appears to be poor cross border cooperation and coordination between the states on Pest animal programs. For example, when Victoria conducted a trial Fox Bounty program two years ago it is alleged that many of the foxes were taken in New South Wales. If the program had been coordinated between the between the states or had been a National program, it would have been far more effective. Another example is Eastern Grey Kangaroos, many states have a well managed commercial kangaroo industry yet Victoria does not. This is a situation where the need for higher levels of harvesting to reduce the pest effect may not support a full time professional, who requires high returns because this is the sole income. However, hunters can be utilised through coordinated programs and, if legislation permits, as it should to adhere to the principles of wise use, they can also make full use of the hides and carcasses. While pest destruction permits offer a practical solution it often takes time to obtain them, the numbers issued are inadequate and current destruction permits demands wastage of culled animals. The wastage of resources, even those resulting from culled animals, is ethically unsustainable. Furthermore, it can lead to an increase in other pest populations by providing a ready resource which encourages an increase in numbers, e.g. the fox accessing carrion from discarded carcasses.

Organisations, such as the Sporting Shooters Association of Australia (SSAA) and Field and Game Australia (FGA) already operate and coordinate hunters for a variety of programs on a National basis, while at the same time maintaining and protecting the autonomy of the State organisations. These organisations provide a sound foundation, and are prepared to expand their infrastructure to link and co-ordinate both localised and/or large scale pest animal management programs. Elaine Barclay has already identified one of the existing roles of recreational hunters, working with landholders, to prevent poaching and assist in surveying and monitoring programs⁴. The author of this report also stated “Clearly better communication between hunting organisations and government agencies such as National Parks and State Forests, farmer organisations and local communities would lead to possible cooperative ventures to benefit the objectives of all stakeholders.” Integrating the role of the hunter with other ongoing strategies could be achieved by forging stronger links with relevant government departments such as Department of Primary Industries, Departments for Environment and Heritage and National and State Farmer Federations. SSAA and FGA can provide these links immediately.

2. *To consider the approaches to pest animal issues across all relevant jurisdictions, including:*

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

There are current examples of emerging pest species, such as the pied currawong, crimson rosella, lorikeets, grey-headed flying fox and the crow as species with little-known, but significant impact on orchards. These species are native, but changing environmental conditions, such as the ongoing drought, in their preferred habitat often drive them to switch food sources and location to situations where they can breed unchecked or cause significant economic loss in localised areas.

Hunters and landowners are closely in tune with their natural environment and are often the best people to involve in the early detection of new or emerging 'sleeper' pest problems and assist in the maintenance and provision of information for monitoring systems. They have a strong interest in the natural world and often have extensive knowledge of flora and fauna from their observations of changes in climate, habitat and animal behaviour. Their experience, as well as the theoretical understanding of academics (including academics, who are themselves hunters), must be considered in order to achieve a balanced view of the bigger picture.

Whilst we recognise that many individual states have some specific pest animal issues that do not directly impact on other states, it is important that we have monitoring and reporting systems in place so that we can truly gauge the extent of the problems and continually adapt our management responses as new information and knowledge comes to hand. Many State Departments already have databases that have been compiled via the utilisation of volunteer survey work undertaken by sport shooting organisations and there is a strong need for State and Federal Governments to encourage and expand such linkages. The Hunting and Conservation Branch of SSAA also maintain a database of their activities and associated notes related to the ecosystem they undertake work in. Coordination and cooperation are the keys needed to bring all the various stakeholder and interest groups together under a National approach to Pest Animal Management and we are prepared to initiate such a program.

The following species are now presenting as pest species in many agricultural areas of Australia and are offered as examples of sleeper populations:

Magpie geese – Whilst these birds are prolific in the Tropical Coastal areas of Australia. There is anecdotal evidence that they are moving south along the Eastern Australia coast. Cane farmers and horticulturalists report that magpie geese can damage crops on a scale similar to pigs. They dig holes to feed on the bulbs of plants and in large numbers this damage is significant. There is plenty of evidence available in the Northern Territory of the damage geese wreak on wetlands.

Maned Geese (Wood Duck)

It is suggested that this species is now in greater numbers than at the time of white settlement. Wood duck have adapted particularly well to the agricultural practises that have seen increased areas of pasture and irrigation. They now present as pests in many rural and urban area of Australia and are prolific along river and creek systems. Race and Golf course curators in particular have severe problems with these birds. The SA Department of Conservation has recognised this problem and removed the bag limit on the species during the prescribed hunting season. In Tasmania, Wood Duck were protected until 2003 when they were added to the Game list and are now included in the hunters bag. This was a result of monitoring by the wildlife agencies that showed that numbers had

increased significantly and were now creating problems for land managers by impacting on pastures, rice crops, water quality of farm dams and other storage impoundments.

These are just a two examples of pest species that did not receive adequate management when they were first detected despite existing knowledge of the biology and ecology of these species and the urging of hunters to allow increased harvesting of the species. The biology of the species and their ability to become pests in other countries highlighted the potential for them to become pests. Various Animal and Plant Control Commissions and Bureaux of Rural Science have produced risk management and assessment protocols to address the issue of sleeper or new pest species. These assessments would have indicated the risk associated with the above mentioned species and novel ones, not yet present in Australia and provide an opportunity for extension programs heightening the need for hunters and landholders to record the presence and density of species identified as being in 'potential risk' category.

The hunter cannot directly assist in formulating such risk assessments, but they clearly have a role to play in the monitoring and whereabouts of species reported to be present without control in the Australian environment. Hunters can provide information on both the location and number of species identified as 'risk' species if there is greater coordination between theorists providing risk assessments and hunter organisations. Likewise, they can provide immediate assistance in control or eradication measures that are species specific and do not impact on non-target species in the same way that poisoning or baiting programs will.

While it is accepted that hunting alone will not eradicate a pest species, there are clear benefits to encouraging the traditional recreational hunter and the conservation hunter to form part of an overall long term management strategy. Hunting can be used to reduce population numbers in localised areas or, as in Operation Bounceback, with the assistance of dedicated groups, it can be used to assist in keeping numbers of pest species below a specific population density over a prolonged time period.

Likewise, failing to capitalise on international initiatives and allow landholders of the fiscal benefits of safari style tours and farm-based hunting operations for both feral and native pest species can deprive land holders alternate ways to manage their land and remove an important incentive in terms of environmental rehabilitation. We maintain that landholders able and wishing to supplement their income through expanded recreational hunting activities are more likely to consider options such as the reforestation of unproductive land, the restoration and maintenance of degraded watercourses, and reduced stocking rates for sheep and cattle. This notion is supported by the Senate Rural and Regional Affairs and Transport References Committee's report:

“Hunting has considerable potential to assist with conservation objectives. Ironically, this is often so for areas of land which are perceived to have little other economic value (such as swamps and wetlands).”¹

In addition to the various existing Codes of Practice, such as the Model Code of Practice for the Welfare of Animals and the Prevention of Cruelty to Animals the 1990 Resolution of the IUCN provides excellent guidance to policies incorporating hunting,

together with suggestions as to how these policies should be implemented and monitored³.

3. *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.*

Control of non-indigenous vertebrate pests in Australia costs governments and landholders over \$60 million each year and additional research activities cost around \$20 million annually⁵. This equates to a total of 11% of the total estimated damage costs made by the Pest Animal Control Cooperative Research Centre (\$720 million per annum for specified pests). Given that landholders would contribute a majority of the funding for control programs it appears that State expenditure is inadequate compared to the size of the problem. Also, it is very difficult to quantify how much of pest animal control budget is spent on “on ground” efforts versus administration and publicity.

National Park budgets are woefully inadequate with respect to the hectares they must manage and it appears that funding for pest animal control is frequently sourced via special funds, such as the National Heritage Trust. This is a worrying aspect given that pest animal control must be viewed over the long term, rather than the short term. The activities of SSAA Hunting and Conservation Groups across all the States have supported National Park programs via volunteer hunters who are deeply committed to the conservation of the natural environment. Some idea of the commitment made by members of the Hunting and Conservation Branch of the SSAA can be provided from the statistics collected on just one State alone (South Australia) for the year of 2004. The members of this State Branch volunteered 10,806 man hours and clocked up 117,667 kilometres on hunting activities for National Parks. This estimate of time and distance did not include the time and effort coordinating the activities. All of these efforts, across all the States and Territories, have been at no cost to the relevant State Governments or Departments. Without the support of hunters for over a decade Operation Bounceback may not have been so successful.

The conclusion is that State Governments may need, not only to review annual expenditure, but also consider that programs be developed and funded over a longer time period than the normal 3 or 5 year programs that are now prevalent. State and Federal Governments may also need to review the marginalisation of hunters over the decades in line with Senate Rural and Regional Affairs and Transport References Committee’s report on The Commercial Utilisation of Australian Native Wildlife.

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

In line with the comments made above, it is imperative that industry and R&D programs develop rapid response and long term management strategies for a range of situations. Likewise, minimising legislative impediments to rapid response is also paramount. This may involve working more closely with hunter organisations that can provide valuable data input and intellectual input to practical research and its implementation. It is important to note that many hunters work within academic and research environments – thus providing an excellent method of liaising between the practical and theoretical components of pest management.

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

It could be said that Community education is the most important part of any Pest Management Program. There have been scant resources dedicated to educating the community on the interaction between animal and human species. Killing of animals is something that some people may find abhorrent, even though it is necessary for food production and conservation and biodiversity management. There is also confusion about what constitutes pest animal management and what consists of unnecessary slaughter. This confusion is exploited by radical Animal Rights extremists.

Two classic examples of the lack of community education exist. The first relates to the decimation of the fur industry by animal rights activists. This had many unintended consequences ranging from the irreparable damage caused to international indigenous groups reliant on the income from the sale of fur to the loss of hunters supplementing primary incomes by supplying fox pelts to the fur industry and the subsequent uncontrolled expansion of fox numbers. Whilst acknowledging the need for the humane treatment of animals bred in captivity for furs, the need to protect rare and endangered animals from being killed to supply an illegal fur trade and the need to harvest wild animals humanely, it is clear that allowing emotive campaigns to mislead the public caused great ecological damage and human tragedy.

The second example relates to the damage caused by koalas on Kangaroo Island, South Australia. This damage has been acknowledged by ecologists and wildlife biologists for almost 50 years, yet we have avoided addressing the problem. The result is a management problem requiring the harvesting of overwhelming numbers of koalas in order to leave a sustainable population. The community is shocked by the scale of the planned culling but, at the same time has not been provided with the knowledge to appreciate that a healthy ecosystem or that the koala population itself will only survive into the future if a reduction in total koala numbers is undertaken. Instead they fear that the entire community of koalas will be eradicated. In such cases, we cannot let extremists speak for the wider public, much as they wish to. Nor do the public wish to be spoken for in this way. The Kangaroo Island situation and indeed other examples, such as the need for kangaroo harvesting at Puckapunyal, shows that despite extensive documentation supporting the need for a humane cull, a handful of extremists were unwilling to acknowledge this viewpoint and as a result impeded what was a necessary process.

The Australian public has shown that they care deeply about our unique environment. The concepts of ecosystem conservation have been readily understood and embraced by many, but the practicalities of population dynamics and management for individual species within ecosystems have not been part of education programs associated with conservation. Scientists, academics and bureaucrats have been advancing arguments for the long term management of pest animals, indigenous or introduced for more than a decade, yet the need for integrated management has not been adequately promoted in the public forum. There is still confusion among the general public about the difference between managing wildlife to the benefit of all concerned and the reduction in numbers of what are perceived to be iconic species.

An illustration could be the case against the use of poisons as a control method. It is general knowledge that landholders lose money because of pests and registered poisons are one control method available. Yet poisons, such as 1080, have stringent handling procedures, there are risks associated with their use and transport and, most importantly to the community, they have non-target effects. Poisons also take time to distribute and many would see the use of these slow acting poisons as an inhumane end to an animal. Both farmers and the public would prefer an alternative, although the reasons for such an alternative may not be the same. The general community do not want to see endangered species come under further threat, while landholders may be seeking a cost-effective and efficient alternative to the risky use of large scale poisons.

The need for an alternative is common ground across all key stakeholders and one where the shared goal is to reduce pest animals in an efficient manner with minimal suffering and minimal likelihood of affecting other species. Community engagement and support can be achieved if a suitable alternative can be offered. Hunting is a valid and useful alternative that the general public can be encouraged to embrace, while landholders would embrace a network of volunteers who would assist in reducing the numbers of pest animals causing damage. The public would also support this cost effective measure because it leaves resources free for other important undertakings while still achieving desirable outcomes. In terms of cost benefit analysis, hunting has obvious benefits to all parties concerned.

Hunters have long recognised the need to protect habitat and manage wild populations and are an integral part of pest animal management. Yet as indicated above, there is no coordinated policy on hunting, nor even government recognition of the role hunting plays within the dynamics of wildlife management, which would encourage hunting organisations to continue their involvement in controlling pest animals. The role of hunting is crucial in that it provides a humane, target specific, rapidly adaptable tool to assist in managing pest populations. In light of the numerous financial challenges already faced by the Australian Government, and the fact that any expenditure must produce the greatest return possible, it is time to consider that a truly cost effective and environmentally responsible approach to pest animal control must necessarily involve hunting.

¹Parliament of the Commonwealth of Australia. 1998. Commercial utilisation of Australian native wildlife. Report of the Senate Rural and Regional Affairs and Transport References Committee, Canberra.

² *ibid.*

³"IUCN Policy Statement on sustainable use of wild living resources" and "Analytic Framework for Assessing Factors that Influence Sustainability of Uses of Wild Living Natural Resources"

⁴ Chapter 5 "Attitudes to recreational use of rural properties" A Report for the Rural Industries Research and Development Corporation October 2004, RIRDC Publication No 04/123, RIRDC Project No UNE-84A

⁵Bomford, M. and Hart, Q. (2002) Non-indigenous vertebrates in Australia. Pp 25–44 in *Biological Invasions: Environmental and Economic Costs of Alien Plant, Animal, and Microbe Invasions.* (Ed. D. Pimental.) CRC Press, New York.