

**Game and Pest Management Advisory Board Response to recommendations of the
Natural Resources Commission document entitled:**

“Shared Problem, Shared Solutions. Pest Animal Management Review”

The Game and Pest Management Advisory Board (GPMAB) has carefully reviewed the recommendations of the Natural Resources Commission (NRC) document entitled “Shared Problem, Shared Solutions: Pest Animal Management Review”. The document has strengths and weaknesses at present, but is a good first step to developing sound policy. In this document the GPMAB has a number of general comments about the draft report, and has also made specific comments about each of the recommendations, as follows:

General Comments

One of the six guiding principles for the review, listed in table 1.1, is that decisions must be “evidence based”. The GPMAB strongly agrees with this principle, and agrees with the stated need for greater investment in research, especially for the emerging pest species listed. However, what is the veracity of the economic impacts data listed throughout the report? How were the algorithms developed to estimate these, and how reliable are they? When commenting on deer the NRC authors acknowledge on page 72 of their report that “there are no direct population counts so precise population sizes both locally and across the state are difficult to establish (a constraint which is common with all pest species)”. The GPMAB contends that the “evidence base” for many of the statements made in the report is lacking, and the GPMAB recommends that this needs to be addressed urgently to give the document stronger credibility.

- 1) From page 1 the NRC authors commence the use of negative language by declaring that all introduced animals are pests, and that all pests are pervasive and have negative impacts. The cited cost estimates are sourced from a number of publications, and some of these sources rely on anecdotal data.. The GPMAB recommends further research to validate triple bottom line costs and benefits of each species. The social benefits of some of the emerging pest species (as yet unsubstantiated for some species of deer, and horses) have not been quantified for this or any other report. This needs to be done. We agree with the report that “For many widespread species, such as dogs, pigs, rabbits and foxes, a number of sound practices have been developed out of extensive research and on-ground knowledge built to date”. The GPMAB recommends that further research be carried out to better understand whether local versus general impact of some species, the social benefit of certain species in local areas (eg. horses in Kosciusko will likely not be totally culled because of their social importance), and economic benefit to rural communities of recreational hunting for certain species (eg. all species of deer), are properly subjected to cost/benefit analysis. In some instances this may relieve the need to explore problems that do not exist, or expose the need to address emerging problems more urgently.

- 2) The GPMAB recommends that DPI be the lead agency for management of established terrestrial pest animals at the regional level, not LLS as suggested. In a recent (2015) state-wide customer satisfaction survey of LLS performance there was wide variation between regions for overall satisfaction levels. In addition the report noted that “Areas for improvement in LLS values include enhancing the perception that it delivers good value services, is accountable, alerts customers to new ideas and offers new ways of doing things. These aspects are of high importance to private land managers and currently LLS is scoring lower than the average for all the values measured.” The NRC report provides no justification for LLS to be the lead agency in managing established terrestrial pest species. The GPMAB members regularly consult with landholders and other rural and peri-urban constituents, and from those discussions the LLS is widely considered to be failing in the activity of managing terrestrial pest animals. We therefore do not support the recommendation for LLS to be the local lead agency, as this would reinforce poor performance of an existing government agency.
- 3) In a previous document provided to the NRC review committee the GPMAB expressed concern that native species were excluded from the review. We do not resile from that position. The NRC authors of the draft report “promote an integrated management approach that incorporates the control of multiple pest animals”, but ignore the ‘elephant in the room’ – kangaroos. In many localised areas the common wombat (*Vombatus ursinus*), and many grain eating native birds could also be declared pest species using the definition provided by the National Biosecurity Committee (2015) of: “a pest animal is any animal with the potential to have a negative effect”. For a properly co-ordinated approach to pest animal management in a region, all animal species that fit into the definition of what a ‘pest animal’ is must be considered, in a whole of landscape approach.
- 4) Recommendation 5 states that “Regulation of non-indigenous species is commensurate with the risks they pose”. By this standard alone it is unnecessary to declare all species of deer a pest. Their overall numbers are low, and in most cases their impact is localised and largely unquantified. In particular the inclusion of Hog Deer (*Axis porcinus*) in the suite of species listed as pests in NSW cannot be justified by any measure. The GPMAB strongly recommends the need for research funds to understand the biology and environmental impact of the various species of deer in the landscape far more than we currently do so that a credible Deer Management Strategy, similar to the Wild Dog Management Plan, can be developed.
- 5) The GPMAB supports the position stated in the report that “Joint landscape planning provides for robust and transparent governance, allowing a strategic and adaptive approach”. There is no better example than deer in support of this notion. In the case of deer the report acknowledges mechanisms in the Game and Feral Animal Control Act 2002 that support the current management of localised deer populations. Suspension of regulations has been enacted recently in a case where the local population of deer was considered to be of ‘pest’ proportion. This is a good model, and evidence to support the Game and Feral Animal Control Act 2002.

- 6) Reference is made in the report that hunters are useful in complimentary pest management programs, and the GPMAB commends that view. The report also emphasises that illegal hunting is having a negative impact with land holders, and this is seen as an impediment to integrated pest management programs. The GPMAB is strongly of the view that ‘Game’ licenses must be maintained, and perhaps extended more widely across firearm owners in NSW. An increase in licence fee income will increase the number of compliance officers for surveillance of hunters and hunting in NSW, which would likely reduce illegal hunting activities.
- 7) Management of game and pest animals in NSW is increasingly important as part of the general biosecurity duty of land managers, as this state moves in harmony with implementation of national biosecurity legislation. The biosecurity risk created by smaller land holders is noted in the report, and shared responsibility for management of game and pest species is strongly endorsed by the GPMAB. The suggested reduction in rateable land area would increase opportunities to influence compliance with pest animal orders, and is supported by the GPMAB.
- 8) Some aspects of the review are very general, and in other places contradictory, which is likely the result of a lack of credible supporting research to substantiate anecdotal observations. The heading used on page 72 in relation to deer is also very strongly presented as an opinion, and quite different to headings leading to discussion of other species. The GPMAB is concerned that use of such language may be an indication of premeditated bias. The GPMAB requests consistent consideration of all species, consistent reference to the principles underpinning the report, and draws the NRC authors back to the important tenant of evidence based reporting. In support of adherence to these principles the Game and Pest Management Advisory Board will strongly endorse research efforts to gather and store scientifically generated data so that future decisions are increasingly evidence based.

Comments on each of the recommendations provided in the Natural Resources Commission draft report titled: “Shared Problem, Shared solutions. Pest Animal Management Review”, are presented as follows:

Recommendation Number	Page Number	Comments
1	5 of 130	These are generalised statements that provide nothing specific or new for better management of pest species. The GPMAB strongly supports part vii) “on-going research and development is prioritised”
2	5 of 130	Rec 2.i.b. The leadership for management of terrestrial pests should be provided by DPI, not LLS as suggested in the report. This would integrate management of weeds, aquatic pests and terrestrial pests under the control of one government department.

		<p>Rec 2.i.c. No criteria are provided to support the Biosecurity Advisory Committee in deciding when a species transitions in status. What data will be used in this process? What consultation will be undertaken during this process?</p> <p>Rec 2.ii. The report provides no justification to confirm the status of the Biosecurity Advisory Committee (BAC).</p> <p>Rec 2.v. No justification is provided to support this recommendation.</p>
3	6 of 130	<p>This entire recommendation just supports another layer of bureaucracy to an already inefficient system of pest management. For example, Rec 3.i re-states the presumed role of LLS as a competent pest management agency. Recs I, ii, and iii reinforce bureaucratic layering. For more streamlined management DPI should be represented and lead regional groups, with LLS a participant not a leader.</p> <p>Rec 3.iv. How will regional priorities be rated on a state-wide perspective?</p> <p>Rec 3.v. Of reduced value if kangaroos are not included.</p> <p>Rec 3.vi. Requiring LLSs to consult with BAC will result in further delays to an already bureaucratic process. This recommendation is inconsistent with the Terms of Reference (dot point 3) to better manage pest species.</p>
4	6 of 130	No comment
5	7 of 130	<p>Rec 5.ii. No justification is provided for this recommendation. The NRC demonstrates its bias against the <i>Game and Feral Animal Control Act 2002</i> with this recommendation and the recommendation is also not consistent with the ToR. Which non-indigenous game birds are they referring to?</p>
6	7 of 130	<p>'Must first establish capability of agencies based on recent track record'. Again there is little data to support this recommendation. Re-enforcement of poor performance in existing agencies should not be promoted. Capability and on-going funding for this work needs to be guaranteed. Centralising resources in to the lead agency (eg. DPI) will be more powerful and will achieve more, compared with a resource dispersal model across several agencies.</p>
7	7 of 130	<p>Too generalised. What does this recommendation bring to the discussion? Development of some specific recommendations is required. The GPMAB suggests that citizen scientists, including the use of the volunteer workforce represented by NSW's 180,000 shooters with "rec hunting" as a genuine reason, could be engaged in timely detection of new pest animal incursions.</p>
8	7 of 130	<p>Follows from Rec 7; lacks specificity to be useful. Of course pest animal management needs to be informed by the best available information! The GPMAB strongly recommends establishment of a data collection and management section within DPI that collects information from all agencies in NSW dealing with pest species. At present there are too many data repositories, most of which do not share compatible IT operating systems.</p>
9	7 of 130	<p>Again very general, although the GPMAB is in agreement with the general sentiment. Adaptive management is reliant on</p>

		available resources and rapid response.
10	7 of 130	Agree
11	8 of 130	Rec 11.i. This process is in place now. This recommendation re-enforces the view that the current LLS structure is not working well. Each region should have co-ordinated leadership from DPI so that local problems can be quickly addressed with local solutions, which includes support from LLS.
12	8 of 130	Again this is just a general statement that needs to be supported with data to be useful. For instance, is there any data available or outcomes based feedback on the effectiveness of current LLS “education and capacity building programs”? At present LLS seems to be disconnected from other agencies engaged in pest management.
13	8 of 130	No comment
14	8 of 130	The GPMAB wishes to advise the authors that there are many training packages already developed, and others are being developed, by DPI GLU. Additional training packages may be available from agencies in other states of Australia also, such as Queensland and Victoria in particular.
15	9 of 130	We agree.
16	9 of 130	A biased recommendation which is not underpinned by evidence. At present this recommendation is based on localised incursions of deer, and does not take account of mechanisms within the Game and Feral Animal Control Act 2002 for suspension of regulations to control deer should that be necessary. A lot more data needs to be collected on the impacts and benefits of deer before this recommendation can be properly considered.
17	9 of 130	We agree
18	10 of 130	We agree
19	10 of 130	We agree
20	10 of 130	Not consistent with Recommendation 16. Makes reference to heritage in relation to horses, but ignores heritage in relation to other species, and is inconsistent with the ToR.
21	10 of 130	Inconsistent with the text of the document. Why single out Indian myna birds in an LGA context, and not mention starlings in a wider context, for instance? Again there are many species of native birds that are considered pests in some contexts (eg. ibis, corellas, galahs) which escape management options in this report yet are significant pests in some regions.
22	10 of 130	The GPMAB strongly agrees that this recommendation should be enacted so that this under-utilised resource can assist regional groups to control vertebrate pests. This activity has an established and successfully implemented model within DPI, managed by the Game Licensing Unit (GLU).
23	11 of 130	We agree with this recommendation in principle, as long as policies and procedures currently in place for licensing hunters, educating hunters and hunting safety currently mandated to the DPI GLU are carried into the recommendation for hunting on private land.
24	11 of 130	The recommendation endorses various state initiatives already

		in place. The GPMAB supports the need to work with industry and the Commonwealth to continue existing markets and open new markets for harvested wild animals.
25	11 of 130	This recommendation is inconsistent in the context of the ToR, which does not consider indigenous pest animal management. However, the GPMAB supports this recommendation, and would extend the recommendation to include limited harvesting of kangaroos for private use.
26	11 of 130	The GPMAB supports this recommendation as more research funding is essential for data generation, development of new control techniques, and ongoing population surveillance. Firstly though, analysis of currently used methods such as the PestSmart portal should be carried out, and the contribution to existing pest management determined. Do we know how continuation of the program will lead to better pest management outcomes?
27	12 of 130	This recommendation has previously been advocated by the GPMAB, and is fundamental to evidence based decision making. A weakness of the current draft NRC report and recommendations is that data were lacking to underpin recommendations. This is not the fault of the authors, but if biosecurity and pest management plans are to be effective in NSW this recommendation needs to be quickly adopted and properly resourced for long term support. As suggested earlier this resource should be established and resourced within DPI, with information links to all agencies in NSW entrusted with pest management and control.
28	12 of 130	No comment.
29	12 of 130	No comment.
30	12 of 130	The GPMAB needs more evidence of the current effectiveness of LLS in management of pest species before it can comment on this recommendation. As suggested earlier, the Board supports establishment of regional groups led by DPI, and development of regional strategies which include LLS support.