VIEWPOINT

The Conservation Hunting Con

ACCORDING to the Game Council NSW (2008, 2009a), recreational hunters can feel very proud of their contribution to conservation: every time hunters kill a fox they allegedly conserve 26 native birds a year, and killing one rabbit rids the environment of dozens of future rabbits¹.

Hunters are "first in conservation", claims Game Council advertising, and recreational hunting has been rebadged as "Conservation Hunting".

Coming from a body that has legal responsibility for advising the New South Wales (NSW) Government on feral animal control, such claims are worrying, for they ignore biological realities. The end result has been very poor government policy.

The claims take no account of population biology or the science of feral animal control.

The 724 foxes killed by hunters across about 1.5 million ha of NSW state forests in 2007–08 would have been largely young, inexperienced foxes who would have died anyway due to lack of resources (part of the 'doomed surplus'), or been quickly replaced (Fairbridge and Marks 2005, Saunders and McLeod 2007). These small numbers (compared to populations) are unlikely to have had any environmental benefits, but the Game Council conducts no monitoring to assess hunter impacts.

And the fact that one rabbit can produce prodigious numbers of young (up to 40 a year) is exactly the reason why the killing of 4076 in NSW state forests in 2007–08 by hunters would have been futile (Table 1), for 90–99% of rabbits do not survive their first year (Sharp and Saunders 2007a) — this is the converse of the logic that the Game Council used in applying a multiplication factor to the claimed benefits of killing rabbits.

To reduce feral animal densities often requires more than half a population to be killed annually. Victorian biologists estimated that figure to be 65% for foxes, and concluded that the 2002–03 fox bounty was ineffective, despite its tally of 170,000 foxes (Fairbridge and Marks 2005).

The hunting effort on NSW public lands is too ad hoc and limited to achieve population reductions. It breaches almost all standards developed by pest experts (e.g., see Norris and Low 2005, Sharp and Saunders 2007b) by operating with no specific goals, no targets, no monitoring, no quality control over skill, and no integration with other programmes. It is further constrained by the limited effectiveness daytime ground shooting, hunters' preferences for trophies (i.e., male animals) and their motivations to sustain and increase game populations.

Contrary to the Game Council Public Relations, it is futile to kill feral animals unless it contributes to reduction of impacts. CEO of the Invasive Animals CRC, Professor Tony Peacock, has likened recreational hunting for feral animal control to using a water pistol on the Black Saturday bushfires in Victoria (60 Minutes programme, 24 July 2009).

Ignoring their own biologists, the NSW government has used the excuse of feral animal control to open up 2 million hectares of state forest to hunting and provided close to \$3 million funding a year to the Game Council for the past two years (2007–2009). They are also considering legislation to allow the release of game birds, the establishment of private game reserves, and recreational hunting in national parks for alleged feral animal control.

The Victorian government is also touting the bogus claims of "conservation hunting" to fund hunters — including prizes for hunters who kill foxes — and to support the establishment of private game reserves.

In both states, the reason is not a surging interest in feral animal control, but the growing political influence of the hunting lobby, with The Shooters' Party holding the balance of power in NSW's upper house and the Country Alliance (a pro-hunting party) almost winning an upper house seat in the last Victorian election.

Recreational hunters *can* contribute to feral animal control in specific circumstances:

• when they contribute to proper control programmes — skilled recreational shooters have been

29 April 2008 Game Council media release

Launch of the Conservation Scorecard highlights the positive role that volunteer Conservation Hunters play in feral animal control in NSW, Game Council NSW Chief Executive Officer Brian Boyle said today.

Table 1. Game Council performance statistics 2007-08, NSW public lands.

Feral animals killed	7761
Rabbits killed	4076 (53% of the total)
Area state forest for hunting	~1.5 million hectares
Feral animals killed / area	$0.005/\text{ha} \text{ or } \sim 1/200 \text{ ha}$
Hunting days in state forests	8600
Feral animal killed / hunting day	0.9
State government funding of Game Council	\$3.5 million
Game Council expenditure	\$2.04 million
Expenditure / feral animal killed	\$263

The Scorecard lists more than 11,000 feral animals removed from State forests since conservation hunting was first declared in March 2006 including 4952 rabbits, 2059 goats, 1761 feral pies, and 1015 foxes.

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"As the average fox consumes 26 native birds per year, that's 26,000 more honeyeaters, native lorikeets, and magpies in our State forests," Mr Boyle said.

used to supplement aerial shooting and baiting in Operation Bounceback in South Australia; or.

when they exert sufficient sustained pressure over small accessible areas.

But the *ad hoc* hunting being promoted in NSW and Victoria does not contribute to conservation — if it were only that simple, Australia would not have the feral animal problems it does (see Box 1).

The greenwashing of recreational hunting and the growing political power of the hunting lobby should be of concern for conservationists — not only because it is futile for feral animal control and government funds are being wasted, but because of the potential perverse outcomes.

Our biggest concerns are the influence the hunting lobby has on feral animal policy and the actions of maverick hunters in spreading feral animals.

Deer are probably Australia's worst emerging feral animal threat (Low 2008). Populations are expanding and spreading (Moriarty 2004, West and Saunders 2007). Herbivory and degradation by feral deer are listed as a key threatening process in NSW and Sambar Deer *Cervus unicolor* are listed as such in Victoria, but these states and Tasmania protect deer as a hunting resource. There are bag limits, closed seasons, and other restrictions to protect populations, and landowners are not required to control deer.

The hunting lobby periodically denies that deer cause environmental problems and has opposed moves to have feral deer declared a pest or threatening process. In Victoria, the Australian Deer Association took the government to court to try to stop the declaration of Sambar as a threatening process (Australian Deer Association 2008). In NSW, the Game Council has declared its opposition to any pest declaration for deer (Game Council NSW 2009b).

Much of the deer problem Australia faces is due to hunters shifting them into new areas. A survey in 2000 found that 58% of populations had probably established due to illegal translocation (Moriarty 2004).

Maverick hunters have also shifted pigs into new areas, as substantiated by genetic evidence (Spencer and Hampton 2005). The federal threat abatement plan for pigs notes that "continued release of feral pigs for hunting, either in new areas or in areas that they do not currently occupy is a major threat to effective management of feral pigs and their damage" (Commonwealth of Australia 2005). Escaped hunting dogs are also a problem.

In claiming that hunters were among the first conservationists², the Game Council overlooks that hunters were responsible for some of Australia's worst environmental problems in their introduction of foxes and rabbits. And in proposing to release new exotic animals, hunters are perpetuating the acclimati-

²Until recently, the claim was on the home page of the Game Council's website.

zation practices of the 19th century. The NSW Shooters' Party's Game Feral and Animal Control Amendment Bill 2009 would make it legal to release nine exotic game bird species, all of which have formed feral populations elsewhere in the world and have been assessed by the Australian Vertebrate Pests Committee as posing a serious or extreme pest threat to Australia. There is evidence these birds are already being illegally released, undermining claims that hunting is about reducing feral animal problems.

Some hunters have a strong conservation ethic and want to contribute to feral animal control. However, they shouldn't delude themselves that every kill is a hit for conservation. One dead pest does not necessarily equal one less pest.

REFERENCES

Australian Deer Association. 2008. Deer hunters take the State Government to the Supreme Court over the flora and fauna listing of sambar deer. Media release.11 March 2008.

Box 1

Why recreational hunters are generally not effective

- Feral animals are typically highly mobile and fecund and many populations are saturated with a large "doomed surplus" (who would normally die due to lack of resources), factors which enable them to quickly replace animals killed by hunters.
- Ground shooting (using skilled shooters) is not an effective means of primary control for most feral animals and according to government standards should only be used as part of co-ordinated programmes, usually as a supplement to other methods of control.
- Hunting in NSW state forests is *ad hoc* with no specific environmental goals or monitoring. The licensing system deliberately spreads hunters out over NSW forests (at most 1 hunter/400 ha) limiting their capacity to exert pressure in any one area.
- Hunters often prefer to kill large trophy males, which makes little contribution to control because in polygamous species such as deer, pigs and goats the remaining males can inseminate all the females.
- Hunters are often motivated to maintain feral animal populations for future hunting, leaving young and females.
- Hunters have highly variable skill levels (no skills tests are conducted for licensing) in 2007–08, each hunting day in state forests resulted on average in 0.9 feral animals killed. Variable skill levels no skills test 0.9 killed/hunter/year.

- Commonwealth of Australia. 2005. Threat abatement plan for predation, habitat degradation, competition and disease transmission by feral pigs. Canberra: Department of the Environment and Heritage. www.environment.gov.au/biodiversity/threatened/tap-approved.html.
- Fairbridge D, Marks C. 2005. Evaluation of the 2002/03 Victorian Fox Bounty Trial. Vertebrate Pest Research Unit, Department of Primary Industries, Frankston, Victoria.
- Game Council NSW. 2008. The conservation scorecard: 11,018 good reasons to support conservation hunting in NSW. Media release 29 April 2008.
- Game Council NSW. 2009a. Invasive Species Council – the bunnies of conservation. Media release 6 July 2009.
- Game Council NSW. 2009b. Declare Invasive Species Council feral, not wild deer. Media release 2 June 2009.

- Low T. 2008. Family Cervidae. Deer *in* The Mammals of Australia. ed by S. Van Dyck S and R. Strahan R. New Holland Publishers, Sydney.
- Moriarty A. 2004. The liberation, distribution, abundance and management of wild deer in Australia. *Wildlife Research* **31:** 291–299.
- Norris A, Low T. 2005. Review of the management of feral animals and their impact on biodiversity in the rangelands. Pest Animal Control CRC, Canberra, ACT.
- Saunders G, McLeod L. 2007. Improving fox management strategies in Australia. Bureau of Rural Sciences, Canberra,
- Sharp T, Saunders DA. 2007a. Model code of practice for the humane control of rabbits. NSW Department of Primary Industries, Sydney, NSW. http://www.invasiveanimals.com/downloads/COP for rabbits.pdf.

- Sharp T, Saunders G. 2007b. Model code of practice for the humane control of foxes. NSW Department of Primary Industries, Sydney, NSW. http://www.invasiveanimals.com/downloads/COP_for_foxes.pdf.
- Spencer PBS, Hampton JO. 2005. Illegal translocation and genetic structure of feral pigs in Western Australia. *Journal of Wildlife Management* **69:** 377–384.
- West P, Saunders G. 2007. Pest animal survey: 2004-2006. A review of the distribution, impacts and control of invasive animals throughout NSW and the ACT.: NSW Department of Primary Industries, Sydney, NSW. http://www.invasiveanimals.com/publications/research-reports/index.html.

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