

The duck stops here

Submission to the Victorian Parliamentary Inquiry into Native Bird Hunting Arrangements

Native bird hunting benefits few Victorians and imposes costs on many. Just 0.17% of Victorians hunted ducks in 2022, while 88% are concerned about the birds' suffering. Research commissioned by the hunting regulator suggests that ending native bird hunting reduce gross state product (GSP) by \$3.7 million per year—Victoria's GSP in 2022 was over \$500 billion. Even this impact is overstated due to flaws in the relevant study.

Elizabeth Morison

Rod Campbell

May 2023

ABOUT THE AUSTRALIA INSTITUTE

The Australia Institute is an independent public policy think tank based in Canberra. It is funded by donations from philanthropic trusts and individuals and commissioned research. We barrack for ideas, not political parties or candidates. Since its launch in 1994, the Institute has carried out highly influential research on a broad range of economic, social and environmental issues.

OUR PHILOSOPHY

As we begin the 21st century, new dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed.

The Australia Institute's directors, staff and supporters represent a broad range of views and priorities. What unites us is a belief that through a combination of research and creativity we can promote new solutions and ways of thinking.

OUR PURPOSE - 'RESEARCH THAT MATTERS'

The Institute publishes research that contributes to a more just, sustainable and peaceful society. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them.

The Institute is wholly independent and not affiliated with any other organisation. Donations to its Research Fund are tax deductible for the donor. Anyone wishing to donate can do so via the website at <https://www.australiainstitute.org.au> or by calling the Institute on 02 6130 0530. Our secure and user-friendly website allows donors to make either one-off or regular monthly donations and we encourage everyone who can to donate in this way as it assists our research in the most significant manner.

Level 1, Endeavour House, 1 Franklin St
Canberra, ACT 2601
Tel: (02) 61300530
Email: mail@australiainstitute.org.au
Website: www.australiainstitute.org.au
ISSN: 1836-9014

Summary

Native bird hunting benefits very few Victorians and is opposed by many. On this basis, it should be obvious that ending duck and quail hunting would be beneficial, and that this would have a near-zero, or even positive, impact on the state's economy.

An estimated 11,549 people went duck hunting in 2022—just 0.17% of the state's 6.7 million people. By contrast, 66% of Victorians oppose duck hunting and 88% are concerned about the suffering of ducks.

The minimal economic impact of a ban on native bird hunting is confirmed in research commissioned by Victoria's Game Management Authority (GMA) and written by RM Consulting Group (RMCG) in 2020. Based on RMCG's calculations, the impact on Victoria's gross state product of ending duck and quail hunting would be between \$4 million and \$11 million per year. Victoria's gross state product in 2021–22 was \$501 billion.

Even this overstates the likely impacts, as RMCG's calculations are based on:

- A survey of hunters' expenditure, with "self-selecting" participants—this "skewed" results, suggesting that Victorian hunters spent \$269 per duck shot in 2022, an unrealistic figure; and
- The use of an input-output economic model described as "biased" by the Australian Bureau of Statistics.

The RMCG report emphasises unorthodox economic calculations of "economic footprint" and "gross economic contribution". These inflated headline figures are routinely quoted by hunting advocates and reported in the media with no clarification as to what they represent. The way RMCG have emphasized these figures suggests that either RMCG or their clients, GMA, intended to provide a document more suited to hunting advocacy than to policy development.

This view is strengthened by other material on the GMA website, which extolls Victoria as having "some of the best game hunting opportunities in Australia" and "generous open seasons and bag limits", and urges hunters to "promote the culinary/sustainability benefits of hunting". Such advocacy is inappropriate for a regulator and suggests that GMA has not been reformed adequately following the finding of 2017 review that the Authority was "failing to adequately fulfil its statutory obligations". That review recommended that GMA's functions as a regulator be moved to a different body—the recommendation was not implemented, and still appears to be a worthwhile reform.

Introduction

The Australia Institute welcomes the opportunity to submit to the parliamentary inquiry into Victoria's recreational native bird hunting arrangements. Our submission addresses the economic impact of native bird hunting, part of point (d) of the terms of reference.¹

The Australia Institute supports ending native bird hunting in Victoria, with possible exemptions for First Nations cultural hunting. Duck hunting is already banned in Western Australia, New South Wales, and Queensland and is under review in South Australia.

In 2012, The Australia Institute published *Out for a duck: An analysis of the economics of duck hunting in Victoria*.² That report explained that duck hunting has minimal economic impact and, that ending the practice would be likely to have a positive economic effect.

The first reason for this finding was that while duck hunting and its animal welfare impacts are of concern to most Victorians, very few Victorians are licenced duck hunters. In 2012, around half of one percent of Victorians were licenced duck shooters. In 2022, this has declined to just 0.34% of the state's population; of the state's population of 6.7 million people, only 23,908 are licenced hunters.^{3,4} Of these licenced hunters, only 11,549 actually went duck hunting—just 0.17% of Victorians.

By contrast, the RSPCA commissioned polling in 2022 which found that four times as many Victorians oppose duck hunting (66%) as support (16%); that 88% are concerned about long-term injuries to ducks who survive being shot; and that 86% are concerned about the impact on non-game animals being shot by duck hunters.⁵

Duck hunting provides benefit to very few Victorians and is opposed by many. On this basis, it should be obvious that ending duck hunting would be beneficial, and that this would have a near-zero, or even positive, impact on the state's economy.

This conclusion is supported by research commissioned by Victoria's Game Management Authority (GMA), although this support from GMA is unlikely to have been intentional.

¹ In this submission 'native bird' hunting refers to ducks and quail. Many sources refer only to duck hunting.

² Campbell, Denniss, Baker (2012) *Out for a duck – an analysis of the economics of duck hunting in Victoria*, <https://australiainstitute.org.au/report/out-for-a-duck/>

³ GMA (2022) *2022 harvest estimates*, https://www.gma.vic.gov.au/__data/assets/pdf_file/0003/907410/2023-Duck-season-considerations-Final.pdf

⁴ Victorian Government (2023) *Population dashboard*, https://public.tableau.com/app/profile/planning.victoria/viz/PopulationDashboard_16680490256660/PopulationDashboard

⁵ RSPCA (2023) *RSPCA Victoria submission – Duck hunting season 2023*, https://www.gma.vic.gov.au/__data/assets/pdf_file/0004/911128/RSPCA-Victoria-Duck-Hunting-Submission-2023.pdf

GMA economic research

In 2020, GMA published a report from RM Consulting Group (RMCG) titled *Economic contribution of recreational hunting in Victoria*.⁶ This report has several flaws that lead it to overstate the economic impact of hunting. However, even taking its results at face value, the paper provides strong support for the view that a ban on native bird hunting would have near-zero economic impact. The flaws in the RMCG 2020 report relate to its survey of hunters, the input-output economic model used, and the emphasis placed on hunting's gross economic contribution.

SURVEY OF HUNTERS

The RMCG 2020 report is based on a survey of 1,671 hunters relating to their hunting and related spending. The spending patterns of the respondent hunters was then applied across the estimated number of hunters in Victoria, with some adjustment for activity levels, to estimate the overall spending of the state's hunters. The total claimed expenditure in 2019 was \$351 million.

This estimate almost certainly overstates hunters' spending. RMCG report that 19% of the \$351 million was related to duck hunting, approximately \$64 million. GMA estimates that 238,666 ducks were killed in 2019,⁷ which works out at \$269 per duck. This implausible result is likely driven by flaws in the survey methodology:

- As the RMCG report states on page 92, “the survey sample was not random, therefore self-selection bias was expected to skew the results to over represent hunters who take more trips”;
- The potential for strategic answers to exaggerate spending. Pro-hunting groups have been involved in promoting surveys, urging their members to fill them out, and highlighting their potential for lobbying purposes. For example, the Australian Deer Association promoted the RMCG 2020 survey, stating that it would be “an important tool in helping advocate for more support and opportunities for hunters”;⁸
- Pre-survey research included sending pilot surveys to hunting groups including the Australian Deer Association, Field and Game Australia, Sporting Shooters

⁶ RM Consulting Group (2020) *Economic contribution of recreational hunting in Victoria*, <https://www.gma.vic.gov.au/research/hunting-research>

⁷ GMA (2022) *2022 harvest estimates*, https://www.gma.vic.gov.au/__data/assets/pdf_file/0003/907410/2023-Duck-season-considerations-Final.pdf

⁸ Australian Deer Association (2019) *The economic impact of hunting*, <https://www.austdeer.com.au/2019/11/27/1378474/the-economic-impact-of-hunting>

Association, Victorian Hound Hunters, Victorian Game and Deer Stalking, Victorian Deer Association, Blond Bay Hog Deer Advisory Committee, and the Game Management Authority.⁹ This gave pro-hunting stakeholders input into the survey without input from local residents, tourism operators, and civil society groups.

INPUT-OUTPUT MODEL

The expenditure figures collected from hunters were used by the RMCG report in an input-output model to estimate flow-on impacts of hunters' spending. Input-output models have characteristics that result in exaggerated economic impacts. This is well-known within the economics profession.

Use of input-output multipliers has been criticised as “biased” by the Australian Bureau of Statistics (ABS), on the basis that it produces inflated estimates of “the size and impact of a particular project [or activity] to support bids for industry assistance of various forms.”¹⁰ The ABS highlights several flaws with input-output models relevant to the RMCG 2020 study:

- Lack of supply-side constraints: this effectively assumes unlimited resources such as labour and capital, not to mention ducks;
- Fixed prices: sudden changes in activity such as a duck season of particular size have no impact on price or availability of goods and services; and
- Not being applicable for small regions: estimates of regional economic impact are particularly problematic, with the linkages between industries and sectors usually derived from national or state-level estimates.

Another key problem of input-output models for the purpose of examining hunting impacts is that they make no consideration of external costs such as environmental impacts and animal welfare.

EMPHASIS ON “GROSS CONTRIBUTION”

The RMCG 2020 input-output model estimates the economic “footprint” or “gross economic contribution” of hunters, estimating it at \$356 million in 2019—a figure made up of \$160 million in “direct” economic activity and \$196 million in “flow on” activity. This figure is confusingly similar to the \$351 million estimate of total spending. While unclear from the

⁹ RM Consulting (2020) *Economic contribution of recreational hunting in Victoria*, p. 6

https://djpr.vic.gov.au/__data/assets/pdf_file/0008/1948706/v.4Economic-contribution-of-recreational-hunting-in-Victoria-accessible.pdf

¹⁰ ABS (2010) *Input output multipliers*,

<https://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/5209.0.55.001Main%20Features4Final%20release%202006-07%20tables>

RMCG report, it appears that the \$351 million of hunter spending results in \$160 million worth of activity in Victoria—explained by the fact that a large portion of hunting trip expenditure is spent on fuel, firearms and other goods and services produced outside the state. The \$196 million impact on businesses and industries within Victoria in turn demand inputs from other sectors in Victoria, estimated by RMCG’s input-output model at \$196 million.

The terms “footprint” and “gross contribution” are highlighted in the last paragraph as they are not well-defined terms in economics. The \$356 million figure would only be relevant if all recreational hunting was to cease immediately *and* hunters somehow destroyed this amount of money—perhaps by withdrawing it in cash and shredding the banknotes. This is clearly nonsensical. In reality, hunters would not destroy the cash, but spend it on other activities. The RMCG 2020 report acknowledges the limited usefulness of the “gross contribution” measure on page 33:

The gross economic contribution detailed above measures the current footprint of hunting. It is not an estimate of the impact on the Victorian economy if hunting ceased.

The gross contribution estimate also provides no insight into the impact of other changes to hunting policy, such as an end to native bird hunting. Given its lack of relevance, the prominent placement of the \$356 million figure suggests that RMCG or their clients GMA intended to provide a headline figure more suited to hunting advocacy than to policy development. The \$356 million figure is routinely quoted by hunting advocates and reported in the media with no clarification of what it does and does not represent.¹¹

RMCG’s researchers are aware of the problems with the gross figure, as they explain further on page 33:

If recreational game hunting did not occur, it is assumed that recreational game hunters would divert their hunting-related expenditure to either other outdoor activities or to general household expenditure. The impact of this shift is estimated by the net economic contribution.

The RMCG 2020 study makes two estimates of the net economic impact of hunting—a “low substitutability” scenario and a “high substitutability” scenario, both of which are explained below, and which represent just 5% and 16% respectively of the much more prominent and

¹¹ See for example Rak (2020) *New report shows economic contribution of recreational hunting in Victoria*, <https://www.sheppnews.com.au/rural-news/2020/11/26/2284883/new-report-shows-economic-contribution-of-recreational-hunting-in-victoria/>; ABC (2021) *Shortened Victorian duck hunt set to go ahead in May, angering animal activists and the Opposition*, <https://www.abc.net.au/news/2021-02-07/victorian-duck-hunt-set-to-go-ahead-anger-ban/13129256>; Sporting Shooter (2021) *The Victorian Government Fails Duck Hunters – The Agenda Is Clear*, <https://sportingshooter.com.au/news/the-victorian-government-fails-duck-hunters-the-agenda-is-clear/>

widely-reported “gross contribution” figures. The gross and net results are summarised in Table 1 below:

Table 1: Summary of key results from RMCG 2020

	All hunting (\$m)	Ducks (\$m)	Quail (\$m)	Native birds (ducks + quail) (\$m)
Gross	356.0	65.0	22.0	87.0
Net (low substitutability)	57.0	10.4	0.6	11.1
Net (high substitutability)	19.0	3.5	0.2	3.7

Source: RMCG (2020)

Table 1 shows that while RMCG estimates the total economic “footprint” of recreational hunting in Victoria at \$356 million, if all hunting were to be banned the reduction in Victoria’s economic activity would be between \$19 million and \$57 million. For context, Victoria’s gross state product was \$501 billion in 2021–22.¹²

Table 1 shows that duck and quail hunting represent a smaller fraction again, between \$3.7 million and \$11.1 million in total. The reason for this difference is that if opportunities to go hunting were to end or be limited, hunters would spend their \$351 million on substitute activities.

For the purposes of this inquiry, there are obvious substitute activities for duck and quail hunters—other game and pest species hunting, fishing, camping, etc. Our 2012 *Out for a duck* study asked existing and potential duck hunters what substitute activities they would undertake; 70% answered fishing, while 60% cited another form of hunting. Ending native bird hunting would have effectively zero economic impact in Victoria unless duck hunters redirected their spending towards activities with vastly higher import components. Our 2012 survey and RMCG’s 2020 survey show that this is unlikely.

Returning to the RMCG 2020 study, the range between “net low substitutability” and “net high substitutability” shown in Table 1 reflects the degree to which RMCG’s economists assumed that hunters would substitute hunting for either similar outdoor activities or for increased general household expenditure following a hypothetical ban. This affects the net figures because, according to RMCG, general household discretionary expenditure involves a higher portion of import consumption than hunting and similar activities do. This causes the decline in Victorian economic activity under the low substitutability scenario.

¹² ABS (2023) *Australian National Accounts: State Accounts*, <https://www.abs.gov.au/statistics/economy/national-accounts/australian-national-accounts-state-accounts/latest-release#data-downloads>

Under the low substitutability scenario, only 5% of hunting expenditure is redirected to similar outdoor activities, with an implausibly high 95% redirected to “general household expenditure”. The high substitutability scenario sees 65% of spending redirected to outdoor activities, and the remainder to general household discretionary expenditure. These assumptions are explained on page 96, the second last page of RMCG’s 2020 report.

RMCG write that it was necessary to use such a range because “it is difficult to predict where hunters would spend their money, without hunting.” This is a surprising claim, given that the bulk of the report is based on a survey of hunters’ preferences. On page 18, RMCG write:

In total, 96% of hunters indicated that they participate in other outdoor recreation activities, with only 4% of hunters reporting that they took part in none of the suggested activities listed.

On page 19 RMCG write:

The majority of game hunters value another [outdoor] activity as highly, or more highly, than hunting. Figure 5-9 shows that 68% indicated that there were one or more [outdoor] activities they would find it hard to choose between or would prefer to be hunting.

Page 20 of the RMCG report shows that only a very small portion of hunters preferred clothes shopping and playing video games to hunting and other outdoor activities, so the substitution rates that RMCG use in their low and high scenarios seem certain to underestimate the substitution effect.

To put it simply, hunters who cannot hunt will go spend the almost the same amount of time they once devoted to hunting to fishing, camping and four wheel driving, and in doing so, they will spend the same amount of money on very similar things. A ban on native bird hunting in Victoria would thus have effectively zero economic impact. If hunting expenditure was diverted to activities with a lower degree of imported goods and services than hunting, the impact of the ban would in fact be positive. If consideration was given to environmental impacts and the economic aspects of animal welfare it is likely that a native bird hunting ban would deliver a net economic benefit.

GMA as advocate and regulator

As discussed above, GMA's commissioned research by RMCG contains obvious flaws that overstate the economic case for recreational hunting. As such, the research seems intended for hunting advocacy rather than policy development. Other materials by GMA strengthen the impression that it is an advocate for hunting rather than an independent regulator. GMA's hunting web page opens by stating:

Victoria has some of the best game hunting opportunities in Australia. There are generous open seasons and bag limits for game deer, duck and quail and about 4 million hectares of public land available for hunting. When you are out enjoying Victoria's great hunting opportunities it is important to remember your obligations to not only comply with the law, but to behave responsibly to protect our valuable resources and the reputation of hunting.¹³

Other GMA materials urge hunters to "share the harvest with a non-hunter and promote the culinary/sustainability benefits of hunting".¹⁴ This quote comes from a GMA program run in conjunction with hunting organisations and arms manufacturers.

These materials undermine GMA's ability to act as an impartial regulator. GMA's responsibilities include managing open and closed seasons for game species; enforcing game hunting laws; providing information and education on legal hunting; and providing advice on sustainable harvest, humane treatment of animals, how to minimise hunting's impact on non-target species, and conservation of habitat. The materials encountered in researching this submission do not give the impression of a regulator that places equal weight on the concerns of hunters and other stakeholders with animal welfare, environmental impact, and tourism priorities.

These perceptions follow an independent review of GMA in 2017 conducted by Pegasus Economics. The review found that GMA was "failing to adequately fulfil its statutory obligations" around compliance and enforcement of hunting regulations.¹⁵ This includes failing to maintain measures of hunters' understanding of hunting laws or the ethical requirements of hunting, or compliance. The review found that while the regulatory infrastructure was in place, parallel efforts to enforce compliance were missing.

The review of GMA's performance made 27 recommendations, of which the GMA accepted 26. The only one rejected by GMA's board was the recommendation to relocate GMA's regulatory functions into a different body. Our observation is the case for this relocation remains strong.

¹³ GMA (n.d.) *Hunting*, <https://www.gma.vic.gov.au/hunting>

¹⁴ GMA (2022) *RESPECT – hunt responsibly*, <https://www.gma.vic.gov.au/hunting/respect-hunt-responsibly>

¹⁵ Pegasus Economics (2017) *Assessment of the GMA's compliance and enforcement function*, <https://www.gma.vic.gov.au/about-us/gma-reporting-and-governance>

Conclusion

Claims that changes to hunting regulations would have a significant economic impact are not supported by either evidence (other states have banned native bird hunting with no apparent economic impact) or logic (hunters substitute hunting with very similar activities).

Native bird hunting provides a benefit to very few Victorians, but imposes costs on many of them—not to mention the cost it imposes on Victorian birds. On this basis, it should be obvious that ending recreational native bird hunting would be economically beneficial.

An exception may be exemptions for Traditional Owners.¹⁶ Hunting by Traditional Owner groups is important for indigenous cultural reasons and should continue if appropriately managed within the sustainability frameworks set out in the Traditional Owner Game Management Strategy.¹⁷

¹⁶ GMA (n.d.) *Traditional Owners*, <https://www.gma.vic.gov.au/hunting/traditional-owners>

¹⁷ Federation of Victorian Traditional Owner Corporations et al. (2021) *Traditional Owner Game Management Strategy*, https://www.gma.vic.gov.au/__data/assets/pdf_file/0011/655616/Traditional-Owner-Game-Management-Strategy.pdf