Inquiry into Victoria's Recreational Native Bird Hunting Arrangements

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AUSTRALIA'S MOST SURPRISING CONSERVATIONISTS

EXECUTIVE SUMMARY

In preparation of Field & Game Australia's submission to the Select Committee for the Inquiry into Victoria's Recreational Native (Game) Bird Hunting Arrangements, we strongly advocate for a consistent, balanced, and permanent native game bird hunting season where a robust and defendable scientific model is used to set the season.

In this submission, compelling, independent evidence has been provided to confirm that hunting and conservation can and does co-exist, not only in Victoria, but in the majority of OECD countries across the world. Hunting is embraced by progressive societies and not vilified as an outdated activity or pastime but a necessary practice.

The hunting of native game birds has taken place in Australia for at least 35,000 years, and akin to the indigenous custodians, Field & Game Australia values the philosophy of 'active' involvement over the 'lock it and leave it' approach, which would see great expanses of unprotected wetlands disappear forever.

The Victorian native game bird hunting season is heavily regulated by the domestic and international laws and conventions currently in place. Victorian hunters are amongst the most compliant and regulated members of our public, and Field & Game Australia is proud to make this submission on behalf of its approximately 16,000 members, hunter conservationists, volunteers, and collaborators.

Staunch opponents of recreational native game bird hunting would have the public believe that game duck hunting is not permissible and does not occur in most Australian states and territories, but this information is incorrect and misleading. In reality, ducks can be legally hunted or controlled in every state of Australia under appropriate permits or exceptions.

Field & Game Australia maintains that recreational hunting does not threaten native bird abundance and that, overall, regulated duck hunting is good for populations. It promotes engaged, pro-active hunters who take ownership of the resources and ultimately improve animal welfare and management.

Hunter-led conservation practices benefits all species, flora and fauna, not only native game birds. This is why the Ramsar Convention 1975 recognises hunting as a 'wise use' of natural environments. Victoria's wetlands are so important that they are internationally recognised under the Ramsar Convention in relation to wetlands. Victoria's Ramsar sites are home to as many as 1,300 species of native plants and 450 species of native animals, including more than 100 species of waterbirds of which hunters hunt only eight game species.

Whilst wounding may occur, all wounding is unintentional and over many decades hunters have sought to enhance their knowledge, skill, and practices to reduce the instances of wounding. This will continue to evolve as part of hunters' continuous improvement commitment.

Independent government-commissioned reports indicate that native game bird hunting in Victoria contributes approximately $87 million through direct and indirect means, and at a national level hunting and shooting contributes 2 per cent of our GDP.

National surveys have interviewed hunters and identified that they exhibit some of the highest levels of physical activity - higher than 65% of the population - plus high levels of self-efficacy, and benefit from higher social interaction and nutrition, with ultimate benefit to wellbeing.

To this end, we offer the following recommendations to our native game bird hunting season:

1. Remove the political subjectivity of native game bird seasons by developing and implementing a scientific season setting process.

    - This process needs to be robust and defendable – but should ultimately set the season (including years when science suggests no season) NOT "inform" a season setting process.

    - The season start and finish date and time should also be set in legislation, and only modified if science demands it.

2. End the farce of "wildlife rescue" in Victorian wetlands.

    - Protestors can exercise their right to protest from the shore – but should not be able to directly enter active hunting areas and put themselves and hunters at risk.

    - "Rescuers" can enter water – but must remain at least 100m from any hunter.

3. Creation or modification of the Game Management Authority in the model of Victorian Fisheries Authority. This authority should:

    - Proactively grow hunting in Victoria and the associated economic and social impact benefits;

    - Recognise and endorse that shooting and recreational hunting has a positive impact on the community's social and economic outcomes;

    - Actively remove barriers that new hunters face by rewarding compliance and engagement;

    - Acknowledge and respect hunting as a valuable lifestyle and that the majority of hunters are compliant and mindful of their impact;

    - Recognise that hunting and hunting groups plays a significant role in improving the mental health and wellbeing of all Victorians.

4. Recognition and promotion of hunting as a sustainable nutrition source.

    - Promoting use of sustainable, free range, ethically sourced, low carbon milage, low fat, high protein game meat(s) as a nutritional food source.

    - Advocate for and remove the stigma of game meats through education and awareness campaigns.

    - Consider the utilisation of wild food to provide healthy sustenance to those disadvantaged in our communities such as the homeless through food banks, shelters, and community support groups.

Field & Game Australia welcomes the opportunity to address the Select Committee and any questions its members may have arising from this submission.

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INTRODUCTION

INTRODUCTION

This document has been prepared by the office of Field & Game Australia in response to the Victorian Parliamentary Inquiry into Recreational Native (Game) Bird Hunting Arrangements, and a call for submissions to assist the Select Committee to understand and report on the operation of the annual (game) bird hunting season, arrangements in other jurisdictions, the environmental sustainability impacts, and the social and economic impacts.

The Chair of the Select Committee, Ryan Batchelor, has seen fit to extend the submission closing date from Monday 8 May to Monday 15 May 2023 for organisations upon request. Field & Game Australia is pleased to advise that this document represents the completed submission which was successfully lodged by email prior to the close of business Monday 15 May 2023.

Field & Game Australia est. 1958 has a long and credible history of wildlife and habitat management. In this submission we strongly advocate for a ***consistent, balanced, and permanent native game bird hunting season*** where science and reliable data inform the season. Managing seasons in this manner is consistent with the accord that emerged from the 2018-19 Expert Panel, which had its foundations in 2010 where a number of leading scientists highlighted the importance of an AHM (Adaptive Harvest Model) and advocated for the introduction of an IHM (Interim Harvest Model) whilst the AHM was being developed. There is no place for subjective or unduly biased ministerial modifications in responsible wildlife and/or land management.

We are encouraged by the Select Committee's willingness, as state-appointed representatives, to learn and understand the full complexities and nuances of hunting, and more importantly native game bird hunting.

For the uninitiated, the practice of hunting may seem a little confronting and we certainly appreciate this. However, we trust you will take the time to understand the tangible and immediate benefit our members, and more importantly our actions, contribute to protecting and conserving the environments we value so dearly, and the immeasurable benefit our community delivers to the health and wellbeing of tens of thousands of Victorians each and every year.

In this document we refer to evidence drawn from Victorian, national, and international resources to demonstrate the holistic benefit our pastime delivers. We firmly believe that hunting and native game bird hunting not only has a place in our community but is integral to the survival of hundreds of species, not just native game ducks or stubble quail.

TERMS OF REFERENCE # 1

OPERATION OF ANNUAL NATIVE GAME BIRD HUNTING SEASON

1. TERMS OF REFERENCE # 1 – OPERATION OF ANNUAL NATIVE GAME BIRD HUNTING SEASON

1.1 Governing Legislation and Controls in Victoria

When it comes to hunting Victoria is one of the most highly regulated states or territories in Australia, particularly in relation to firearm ownership and accountability. Subsequently, hunters are subjected to a host of licensing and regulatory scrutiny to which they freely submit, so they may enjoy a wholesome, healthy lifestyle with those they love.

1.1.1 Wildlife Act 1975

The Wildlife Act sets the rules around how we protect, conserve, sustainably manage and use wildlife in Victoria. The Act outlines the objectives and scope for wildlife in Victoria, a best-practice regulatory framework for achieving its objectives, recognising, and protecting the rights and interests of Traditional Owners and Aboriginal Victorians around wildlife and their role in decision-making, the best way to encourage compliance with the Act and appropriate deterrence and punishments. In May 2020, the Minister for Energy, Environment and Climate Change announced a comprehensive review of the Wildlife Act.

1.1.2 Wildlife (Game) Regulations 2012

In Victoria, native game bird hunting, such as sanctioned duck species and stubble quail, is legal and is controlled by the Wildlife (Game) Regulations 2012 which sets out the basis for a legislated season and daily limits on harvest. This legislation also stipulates that birds shot in Victoria MUST be collected, and at least the breast meat taken for human consumption. So not only do hunters eat what they harvest – they are REQUIRED to do so by law! Field & Game Australia firmly refutes any reference to hunting as "sport." This is incorrect and misleading. Sporting shooting occurs when firing at targets for scores, not ducks for food. Legislation.vic.gov.au/

1.1.3 The Ramsar Convention 1975

This defines WISE USE as *'the sustainable use of wetland resources in such a way as to benefit the human community while maintaining their potential to meet the needs and aspirations of future generations.'* Field & Game Australia and its members understand and comply unquestionably with the intent of the Ramsar Convention 1975 and dedicate significant resources (physical and intellectual) towards its full compliance. UNESCO Ramsar Convention 1975

1.1.4 Game Management Authority (GMA)

The Victorian Game Management Authority (GMA) is currently responsible for educating game hunters about the relevant laws in place to ensure all activity remains legal, to monitor compliance and take disciplinary action where breeches occur. https://www.gma.vic.gov.au/

1.1.5 Rigorous Hunter Regulation

Hunters in general, but in particular those who hunt native game birds, are highly regulated and especially aware of their obligations, and willingly subject themselves to a rigorous process that includes:

- Basic firearms licence training course and test which includes a thorough police check and takes a minimum of three months to complete;
- Completion of a 'permit to acquire' in order to purchase and own a firearm which comes with yet another round of validation and an additional 28-day approval period;
- Duck hunters must specifically undergo a Waterfowl Identification Test (WIT) that requires considerable financial cost. The time commitment - in excess of 100 hours to prepare - requires a significant investment by hunters;
- Game licence application and the associated costs; and
- Once successful, becoming beholden to numerous agencies including VICPOL, GMA, Parks Victoria and DEECA.

The regulation in place ensures new and existing hunters are prepared and aware of their responsibilities because there is a significant upfront commitment prior to being able to partake in a live field hunting experience.

1.2 The Role of Field & Game Australia

Field & Game Australia is the nation's most progressive firearms hunting and conservation organisation, established in 1958, with 65 years of dedicated service to the hunting fraternity, nature enthusiasts, and the community at large. Mobilising a dedicated team of volunteers, they go to great lengths to protect and rejuvenate Australia's highly coveted State Game Reserves and wetlands.

Today, the organisation boasts almost 16,000 members as licensed hunters and target shooters, conservationists, and a number of strategic partners.

1.2.1 Field & Game Australia's Conservation Commitment

Field & Game Australia is a legitimate and verified steward in the conservation of wetland and other related habitats for the sustainable use by its communities which include but are not limited to hunters, naturists, and recreationalists who seek an authentic connection with nature. Through our own acquired wetland reserves and in collaboration with authorities in the preservation of State Game Reserves, Field & Game Australia's legacy has endured since 1958.

1.2.2 Honouring the Past – Embracing the Future

Field & Game Australia acknowledges the Traditional Owners of the lands, and their Elders past, present, and emerging who over many millennia have upheld the principle of respect for the lands, waters, animals, and plants. In doing so they have preserved a bountiful, totally renewable resource, and continue to teach us the importance and power of **CARING FOR COUNTRY**.

Field & Game Australia freely accepts its custodial responsibility over these resources, because current and future generations benefit when we do our job well.

1.2.3 Field & Game Australia's Pledge

Field & Game Australia has, and always will be:

- The voice of reason for the continued practice of game hunting and environmental management, devoid of personal agendas, philosophies and opinions that often lead to failed strategies;
- A contributor of factual, science-based, balanced, and well-considered information;
- A champion in the harmonious preservation of Australian flora and fauna and the complex ecosystems in which they exist;
- A diligent pest controller because we understand the impact on our native wildlife, farmed animals, and crops;
- A prolific educator, especially of our highly intelligent member base, who want to know they are doing their part to protect and preserve these invaluable assets; and
- A global best practice innovator and adaptor, because progress means finding and creating more efficient and effective ways to do worthwhile work.

1.2.4 Why Field & Game Australia Membership Engagement Matters

Field & Game Australia's loyal team of full-time employees, volunteers, members, and collaborators are a valuable resource contributing to the effective management of native game bird hunting in Victoria, delivering:

- Timely and relevant field-based reporting on the condition of game birds and their habitats as witnessed across State Game Reserves and private land;
- Continued collaboration with independent researchers and relevant subject matter experts (domestic and international);
- Scrutiny of third-party data and the initiation of independent investigations where necessary; and
- Development, implementation and communication of best practice hunting and land conservation initiatives.

1.3 Operating Model for Native Game Bird Hunting in Victoria

In Victoria the operating model for determining arrangements for the forthcoming native game bird hunting season from year to year is administered through the GMA. As a key stakeholder and highly informed data-driven organisation, Field & Game Australia believe its input in the decision-making process is extremely restrictive, and the process itself is generally complex and convoluted as shown below:

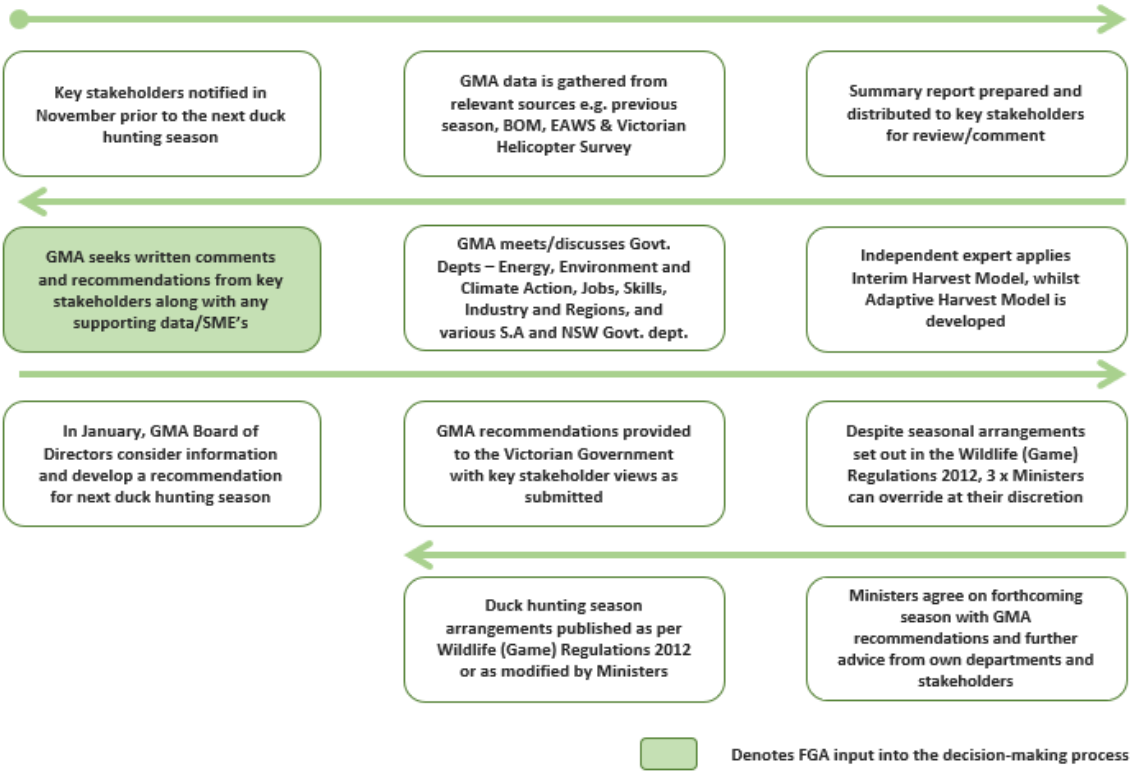


Figure 1. Operating Model for Native Bird Hunting in Victoria – Visualised by Field & Game Australia. GMA_Duck Season Considerations

1.4 Fast Facts - Native Game Bird Hunting in Victoria

FAST FACT	STATEMENT
1. How long does the Victorian game duck and stubble quail season run?	Wildlife (Game) Regulations 2012 set out: **Part 2 – Indigenous game birds (quail)** Starts 30 minutes before sunrise on the first Saturday in April until 30 minutes after sunset on 30 June in each year (in 2023 – 90 days). **Part 3 – Indigenous game birds (waterfowl)** From the beginning of the third Saturday in March in each year until 30 minutes after sunset on the second Monday in June in each year (in 2023 – 88 days). The regulations also stipulate bag size of: **Stubble quail** - A maximum of twenty on any day during an open season. **Ducks:** A maximum of ten ducks, which may include no more than two Australasian (Blue- winged) Shovelers, on any day during an open season. **Section 86** of the Wildlife Act 1975 allows the appropriate Minister to make modifications to the above season conditions and bag size.

	This availability for Ministerial interference is possibly the most contentious point (beyond the decision to have a season) and is vehemently opposed by Field & Game Australia.
2. What is the average lifespan of a native Australian duck?	The average lifespan of a native Australian duck in the wild can be as low as 2 years but is generally considered to be 3-5 years. These birds live a challenging life where permanent and cyclical habitat reduction, competition for food, predator activity, and diseases play a compounding role on population abundance. In fact, studies have shown that as many as 50% of ducks will not survive beyond 12 months, and as few as 20% will reach 2 years old. Hunting mortality plays little part in this, with survival rates being similar in both heavily hunted and sparsely hunted areas.
3. How should we consider the welfare of ducks?	Associate Professor David Beggs - University of Melbourne informs that "animal welfare is a precise science," and not a fluffy concept. We must qualify animal welfare based on the "sum of life experiences" of an animal, not simply when or how it came to its end-of-life moment. Our goal should therefore be to help them "live a life worth living". The vast majority of anti-hunting rhetoric is based on ethics of hunting, namely "how humans feel about what they do to and with animals." The Professor adamantly states this has nothing to do with the animal's actual welfare and everything to do with the personal beliefs and opinions of individuals. Whilst beliefs and opinions are important, they do little to ensure the welfare of native game birds.
4. What is the leading cause of declining duck abundance?	It is important to note that whilst the GMA and other bodies refer to native game bird longitudinal studies as a source of truth, Field & Game Australia disputes their application to native game bird abundance. The data collection method includes the repeated observations of consistent variables in the same locations over consecutive years. This ignores the instinctive and reactive behavioural nature of these animals when challenged by climate, predation, competition, and water quality. When conditions are unfavourable, native game bird abundance is not necessarily less, but rather, less in the geographies where they historically reside. Native game birds are highly reactive and instinctive animals and as such will unequivocally seek alternative waterways, including manmade sources, when traditional water sources are unavailable. Brian Hiller - Associate Professor of Biology and Wildlife at Bemidji State University, Minnesota - and numerous other renowned scientists, know emphatically that loss of habitat is the single greatest driver of declining native animal abundance anywhere in the world, and native game birds are no exception. The most significant cause of habitat loss is the pervasiveness of agricultural activity and human urbanisation. Paired with seasonal boom-bust climatic cycles, wetland conditions will vary dramatically, affecting the land's capacity to sustain birdlife.

5. What is the definition of wounding?	Not all birds counted as 'wounded' suffer and die. The definition of a 'wounded' game bird is the subject of great debate and will be addressed further in this document.
6. What impact does rainfall have on duck abundance?	Annual rainfall, and subsequent streamflow and water catchment within wetlands are the key drivers of thriving native game bird populations. The Bureau of Meteorology (BOM) data is heavily relied upon as one of the lead indicators of forecast duck abundance. In periods when rainfall is high and increasing, such as from 2020 to 2023, the inference is that native game bird abundance will also increase, and harvestable percentages should also increase accordingly.
7. What data is/is not collected to determine native game bird abundance and inform seasonal arrangements for hunting?	In periods when native wetlands experience greater annual rainfall, the volume of water is generally more widely spread across a larger landmass. The prevalence of greater bodies of water encourages game birds to disperse more sparsely than when living in drier periods. In nature, every wild animal is driven to find a healthy and abundant water source, and a safe environment in which to feed, breed and roost. When rainfall is high, native game birds particularly do not need nor want to congregate in highly congested wetlands. Instead, they settle where there is the least competition for resources. It's common sense. When the GMA commissions its annual research to determine abundance levels, it follows a routine methodology that surveys the same geographic locations at the same time each year. This approach is largely ineffective at calculating and estimating accurate native game bird abundance and presumptions are made that abundance levels are declining. Consequently, season length, game species restrictions and bag size are inappropriately set. In turn, this can become a primary driver of over-population and disease when climatic conditions become less favourable.
8. **How many ducks and stubble quail are harvested each year?**	Current practice aims to ensure less than 10 per cent of the native game bird abundance is harvested. Current abundance levels in 2023 estimate approximately 2.5 million native game ducks, and 7.1 million stubble quail. In any given year, native game bird bag sizes vary. In accordance with the Wildlife (Game) Regulations 2012, full entitlement includes a 10 native game bird bag size per person per day. Each year, proceeding hunting seasons' conclusion, the GMA commissions research and publish data on the recent seasons harvest numbers. Field & Game Australia is highly sceptical of this data, citing the collection method, sample size and inferences made as unsubstantiated, biased, non-representational of the surveyed audience and therefore totally invalid.
9. How many native game duck species are there?	In normal years eight species of game duck may be hunted: Blue-winged Shoveler, Grey Teal, Chestnut Teal, Hardhead, Mountain Duck, Pink-eared Duck, Pacific Black Duck and Wood Duck.

10. What other native game birds can be hunted in Victoria?	Stubble quail are small, incredibly hardy native game birds that dwells on the ground and feeds on the stubble from cereal crops. They are extremely evasive and challenging to hunt and are prolific breeders. Stubble quail are in abundance in Victoria at the moment with an estimated population of 7 million. By comparison, the 2021 season estimate was 3 million.
11. When does breeding occur?	Australian native ducks will commence breeding when conditions are suitable, ordinarily late July-early August and will continue breeding whilst conditions are suitable, having 2-3 clutches, and conclude breeding by March the following year. Duck hunting season is determined to align with the breeding season and encourage this resource responsibly and sustainably.
12. How many permitted members does Field & Game Australia have and why does this matter?	Field & Game Australia represents approximately 16,000 permitted members. Our native wetlands, game and non-game animals, and the community at large benefit greatly when Field & Game Australia's member base grows because more members equates to more active volunteers and funding. More volunteers mean more resources to monitor and manage our remarkable resources. Fees generated from members help Field & Game Australia to better organise and manage its vital work in scientific research, conservation, and recreation at a world's best practice level.
13. How do animals, including native game birds, react to hunting season?	Native Australian animals, in this case native game birds, are astoundingly resilient. When hunting season commences, ducks and other non-game wetland species intuitively adjust by temporarily locating to adjacent areas where hunting pressure is less prevalent, only to return without long-term impact. Ultimately, native game birds react the same as they would to any predator; take flight, seek out alternative sanctuary, land and settle once again.
14. Don't wetland environments take care of themselves?	Left unattended, many of our most treasured wetlands, on State Game Reserves or otherwise, would become overgrown, overpopulated (in optimal conditions), inaccessible, unattractive, and unused by the community. Professor Richard Kingsford stated on Feb 1st in an interview on ABC Country Hour radio, that he identified widespread breeding and expected a 'bounce back' in duck numbers, and raised concerns a ban would remove the public focus on data collection and the sustainability of ducks. People value what they can use. If not for the tireless work of Field & Game Australia and countless volunteers since 1958, many would have been lost through commercial development or total abandonment. Our vision of the future is one where everyone can enjoy the splendour of abundant, flourishing wetland ecosystems. Our role as an ***environmental advocate and champion*** of wetland preservation is demonstrable through more than 20 wetland environments we care for. This is our contribution to ***Caring for Country*** in the way that our ***Traditional Owners practised so prudently.***
15. Other than preserving game	Field & Game Australia's conservation effort is vital for non-game fauna and flora.

duck hunting, what benefits does Field & Game Australia deliver?	Victoria has lost more than 37% of its wetland areas to activities such as land clearing and draining since European settlement; 90% of this loss has occurred on private land. We need to work very hard to protect our remaining wetlands before they are lost forever. Eleven of Victoria's wetlands are so important that they are internationally recognised under the Ramsar Convention on Wetlands. Victoria's Ramsar sites are home to as many as 1,300 species of native plants and 450 species of native animals, including more than 100 species of waterbirds. A wide range of threatened plants and animals depend on healthy wetlands for their survival. They provide refuge and critical habitat for a range of species - for example, tens of thousands of migratory birds (some weighing less than 30 grams) travel from the Northern Hemisphere to our coastal wetlands each year. Field & Game Australia continues to contribute to an extensive body of knowledge that is contributing to many vital global scientific research projects such as Avian Flu research and others. https://www.exploreunderwatervictoria.org.au/glossary/habitat/ -:~:text=Eleven%20of%20Victoria%27s%20wetlands%20are,than%20100%20species%20of%20waterbirds.
16. What's wrong with the data used in consideration of the 2023 native game bird hunting season?	Under the authority of the IHM (Interim Harvest Model) it would seem that the three appointed Ministers have ignored Field & Game Australia and associated scientific advice and in doing so have unwittingly done more harm than good to the future abundance of native game birds, their environments and the mental health and wellbeing of approximately 26,000 Victorian native game bird hunters. Field & Game Australia believes the 2023 hunting season decisions were made recklessly and without scientific foundation, using unfit EAWS data and ignoring: biology, characteristics, habitual behaviour, climatic variations and other factors that drive constructive native game bird management.
17. How competent are hunters at determining game birds from non-game birds?	Australia's native (game and non-game) bird species are all uniquely different. The rigorous education and permitting process hunters must undergo through the Wildlife Identification Test (WIT) furnishes hunters with the ability to instantly distinguish their quarry in all hunting conditions. Distinguishing features include appearance (size, shape, colour, markings), sound/ voicing, flight characteristics, speed of flight, locations they inhabit and more. Hunters hone their identification and marksmanship skills in the off-season through regular Field & Game Australia communication, shooting range participation and personal research.
18. Why hunt native game birds i.e. ducks?	Native game birds, or ducks in this instance, are a highly coveted game species for many reasons. Certainly as a source of nourishment they provide an abundant, healthy, free range food source that humankind has relied upon in famines, wars, and affluent times alike. But game ducks are no pushover. They are highly respected and desired for their evasive and survival capabilities, and challenge hunters to be on top of their game

	before earning their reward. For this reason hunters are ever respectful and grateful for access to such a resource. Australia is blessed with a natural abundance of ducks and Field & Game Australia is ensuring this natural resource is there to enjoy for generations to come.
19. Debunking shotgun ballistics.	Two of the false and most popular statements that ignorant anti-hunting protesters assert are: 1. that shotguns are somehow 'high-powered' firearms and can fire at great distances; and 2. shotguns fire a spray of uncontrollable and indiscriminate pellets that destroy everything in their path. Both are absolute nonsense, and a detailed explanation has been provided in this report.

1.5 Understanding the Wounding Argument

Wounding is an unintentional consequence of hunting. All hunters aim to dispatch their quarry as quickly as possible. Ideally, every bird shot at would be immediately dispatched. However, the fact is that despite best efforts wounding may occur.

Hunters would argue that whilst wounding could occur as a result of infrequent behaviour, it is never "intentional." The intent is always to dispatch the bird.

Field & Game Australia has a long and proud history of educating and engaging hunters to reduce the occurrences of unintentional wounding. Specialists in the fields of ecology and wildlife management agree that this as the most effective way to drive improvements in hunting outcomes.

1.5.1 Cruelty and Welfare Considerations

According to the Collins Dictionary the definition of cruelty is:

"Behaviour that deliberately causes pain or distress to people or animals".

Hunters are required to dispatch birds as quickly as possible to alleviate any suffering as legislation dictates. This should also be true of protestors. When protestors 'steal' birds, often severely wounded, from hunters, and choose not to dispatch them but instead to parade them before press, and/or be photographed and filmed for social media purposes and the like, they are in fact contributing to the pain and suffering of that animal. This behaviour is cruel and illegal, and protestors must be charged in accordance with Victorian and associated laws.

Controlled native game bird management, where a bird is shot, recovered, and immediately dispatched, results in very little pain as compared to some of the hardships that animal would face in the wild.

David Begg, Associate Professor Veterinary Clinical Sciences – University of Melbourne, proports that 'animal welfare' is not about length of life but rather quality of life. Animals in the wild will undoubtedly suffer many risks and fates, such as but not limited to predation, disease, infection, starvation/dehydration, that will significantly and abruptly reduce lifespan. Professor Begg believes what's more important is helping them live a life worth living.

Acknowledging the conservation work that Field & Game Australia and its partners and volunteers do every year, and the best practice approach to ethical and humane native game bird harvest, the continuance of a legislated native game bird hunting season by far delivers the optimal animal welfare outcome!

1.5.2 Definition of Wounding

Wounding by its literal meaning is defined as:

"the act of injuring" or ***"to inflict an injury".***

Current definitions of wounding are ambiguous and serve to either over-simplify or over-complicate the discussion.

1.5.3 Degrees of wounding

The underlining issue here is the complete absence of any objective and reliable method of measuring the extent of bird wounding where shot, but not recovered. If we cannot trust the measurement tool, how can we trust the data?

The result of unreliable data is an untenable presumption, in this case, that every bird not recovered should be counted as wounded. This presumption serves to rationalise the ethical concerns of anti-hunting groups and their issue with the likelihood of survival of wounded birds. It does little to capture actual wounding occurrences with any great certainty.

To outline the ambiguous nature of the current definition, consider this:

- "A bird struck by shotgun pellets" could encompass anything from pellets striking but failing to penetrate the bird's plumage – thus causing no injury at all, to
- An instantly dispatched bird, that is deceased before it even hits the ground, but due to a myriad of reasons is not recovered by the hunter.

When considering the possible outcomes of each shot it is prudent and appropriate to consider the full spectrum of variables rather than just 'killed' or 'injured'. Some idea of a spectrum of wounding would be:

1. **Killed outright** – The bird is dispatched on impact.

2. **Mortally wounded/downed** – The bird loses the ability to fly immediately but may need to be dispatched on the ground/water by a second shot or manual process. This bird would not survive more than a minute or two regardless.

3. **Mortally wounded – crippled.** The bird is completely motionless/unconscious, but when checked is identified as having vital signs – required dispatching by manual method. NB: bird would not survive longer than a few minutes.

4. **Non-mortal wounding –** the bird may not die of its injuries but its prospects of long-term survival are reduced due to reduced mobility. Importantly, birds in this category can still be VERY agile, and hard to recover.

5. **Superficial wound –** Bird suffers only a minor wound and will survive with some hardship.

6. **Minor wound –** inconsequential physical injury that causes nothing more than I minor inconvenience.

7. **Struck but not wounded –** The bird suffers the shock of being struck but does not sustain any physical injury.

8. **Clean miss –** the bird is fired at but not struck at all.

   NB: *none of these outcomes are affected by whether a bird is recovered or not!*

1.5.4 Reasons Birds May Not Be Recovered

For disclosure purposes, there are several genuine reasons why a game bird may not be recovered:

- **Evasive Ground Behaviour**
  When a game bird is *brought to* or *chooses to go to* ground or water they will instinctively take cover, hiding away deep in grasses and reeds, making further detection extremely difficult, even with the assistance of a gun dog. The surrounding terrain will contribute to this, as does the nature of the bird e.g. in the case of stubble quail, whether shot and wounded or not, they will instinctively scurry away then stay put to avoid detection.
- **Evasive Airborne Behaviour**
  Whilst it is undesirable and unintentional to wound and not kill a native game bird, and acknowledging that hunters go to painstaking effort to minimise this occurring, wounded game birds may descend initially then take flight once again to further distance themselves from a threat.
- **Auto Motor-Neuron Response**
  Mortally wounded birds have an ability to exhibit uncharacteristic behaviour such as to 'kite'. This is where a bird's wings lock in an extended position and the bird may glide long distances despite being deceased. This can make tracking and recovery difficult even with a gun dog, and/or
- **Terrain Challenges**
  The terrain in which hunters operate is physically challenging, be it water-abundant wetlands where game ducks inhabit or dry flats where stubble quail exist. Visibility, accessibility, and other factors can make retrieval difficult to execute.

On the subject of wounding, the definition is ambiguous and unreasonable because:

- **A Life Worth Living**
  It implies that wounded birds do not go on to live a good or long life. Native game birds can absolutely live a normal life post-wounding and no data exists to substantiate otherwise.
- **Body Mass**
  Furthermore, the current definition does not take into consideration that a larger species of game bird, such as a Pacific black duck rather than a grey teal, is more likely to survive as a result of taking a shot due to their greater body mass and related ability to carry shot.
- **Double Counting**
  It is not an accurate indicator of actual wounding rates. What if a bird is struck and downed by Hunter (A) and it then swims downstream where it is shot by Hunter (B) who claims the bird? Hunter (A) calls the game bird unrecovered, and according to the definition it is counted as 'wounded' which is inaccurate. Then, if Hunter (B) also fails to recover the bird this again counts as a 'wounding' and therefore contributes to a 'double count' of wounding.

Field & Game Australia is a core member working in the **Wounding Reduction Action Plan Committee,** which consists of a cohort of invested stakeholders (Sporting Shooters Association Australia, Beretta Australia, RSPCA and more) and have established an agreed **Wounding Reduction Action Plan** which was presented to the Minister for Agriculture in September 2022, and the Minister for Outdoor Recreation in December 2022, for approval and implementation.

1.5.5 Putting a Number on Wounding

It is fundamentally impossible to objectively put a number on wounding rates for wild hunted game. Attempts to do so have returned conflicting variances from as low as 2 per cent to as high as 40 per cent. As outlined in sections 1.5.3 and 1.5.4 herein, efforts to identify a specific wounding rate are ambiguous at best, due to the nature of wounding, and the absence of a clear definition of wounding.

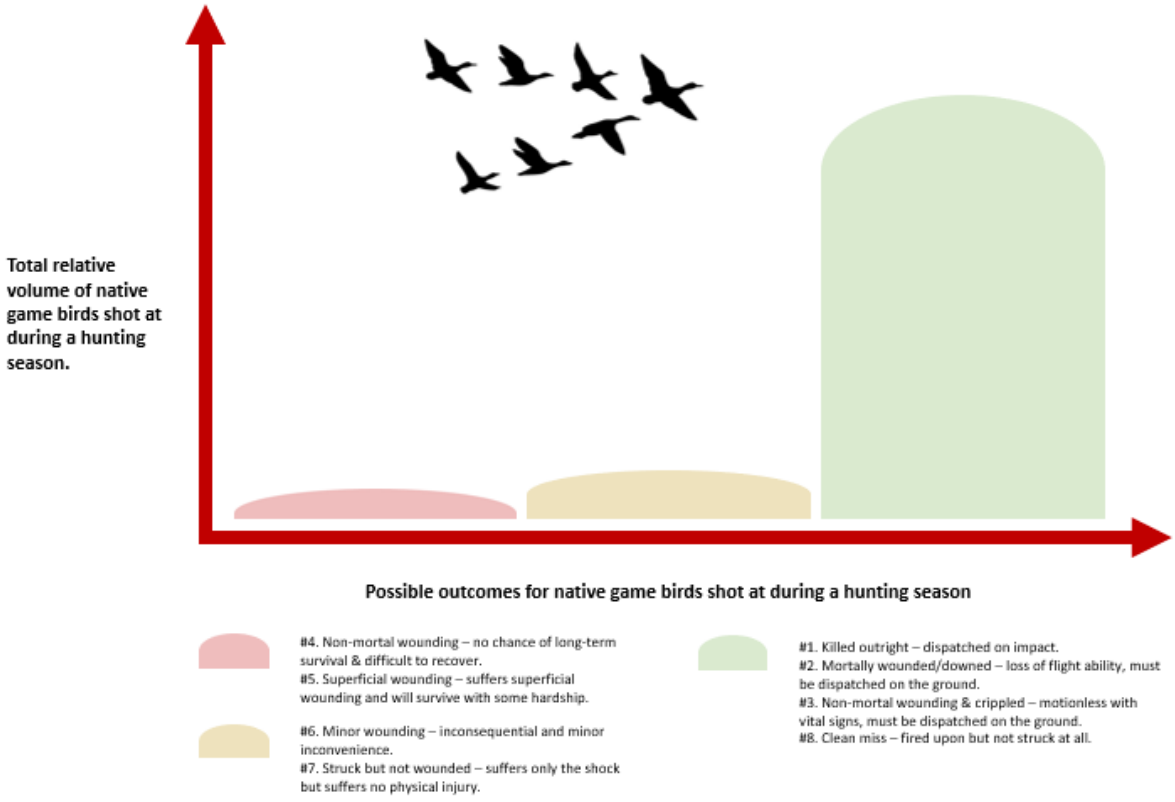


Figure 2 Reported Instances of Native Game Bird Wounding

The GMA's study into wounding identified that:

> ***"Only a very small percentage of birds had been wounded = 3.4%***
>
> ***and still carried shot or showed "signs of having been wounded."***

This data is highly subjective and could be interpreted in a number of ways, and here are only two:

- Only a small number of birds had been wounded and survived; or
- Very few wounded birds survived.

Rather than focus on vilifying a number, Field & Game Australia genuinely believes the answer is to ***continue to educate and engage the hunting community***, ensuring they are employing best practice behaviours and continuously improving their own efficiency in the field.

1.5.6 Is Recovery of a Harvested Bird Indicative of Dispatch Rates?

Field & Game Australia's position is that whilst we encourage and support the recovery of all birds harvested, we do not believe recovery should play any part in discussions of survival rates. There are many previously articulated reasons for this, as also birds that are immediately dispatched in the air may not be recoverable. Birds landing in thick cover or deep water where they can't be readily recovered is the most common.

1.5.7 What Happens to Wounded Birds?

No equivocal data exists to prove or disprove the fate of wounded birds. Those opposed to hunting conveniently paint a gruesome picture where all birds counted as "wounded" suffer a slow and painful death over days or even months. This rhetoric is scientifically unfounded, biologically inaccurate, and purposely misleading, designed to evoke an emotional reaction with empathetic individuals, authorities, and decision makers in an effort to persuade them to take up the anti-hunting cause.

The truth is almost all birds "rescued" by duck protestors are deceased before they even leave the water.

Anti-hunting protestors themselves will attest that almost 'zero' wounded birds they recover will survive.

On the other hand, many wounded birds recover to full health and go on to thrive. This is a strong indicator that even if wounded, the likelihood of a recovered bird surviving more than an hour is extremely low. Native game birds are 'wild' and by nature will avoid contact with humans at all costs. If a native game bird was wounded badly enough to allow it to be caught by a human, then its life expectancy is in imminent doubt. Consequently, there is no benefit to the bird in being recovered by a 'rescuer.' Consequentially, if a wounded bird cannot be recovered then it is most likely not mortally wounded and will go on to live its life.

1.5.8 The Practice of "Rescuing" Wounded Birds.

Field & Game Australia sees the practise of 'rescuing' a bird as dangerous and irresponsible, and we call for all so-called 'duck rescuers' and activists to be barred from entering the water when hunting is in progress. Instead, they should observe from the bank, and enter water only once hunters depart.

One thing is for certain; if the outlandish claims of 100,000+ game bird woundings is to be believed, our wetlands would literally be covered in dead game birds, and this is simply not the case.

Equally, if the wounding and mortality rates of native game birds were even close to the levels claimed by anti-hunting proponents they would have all the evidence they need to gain the sensational and polarising media headlines they so desperately seek, and not need to fabricate statistics as they so often do.

The practice of entering a hunting zone with the intent to recover a native game bird, deceased or presumed wounded, is dangerously irresponsible. It impacts the hunter's ability to perform their dutiful role as a compliant, responsible, and ethical hunter, and in the case of a wounded bird, is an act of cruelty when failing to immediately euthanase a bird. This practice must be abolished.

Field & Game Australia continues to work with government departments and regulatory authorities to make hunting safe for everyone. Other Australian jurisdictions, such as South Australia, have a complete ban on illegal animal activist behaviour and Victoria must have meaningful input into future discussion.

1.5.9 Debunking Shotgun Ballistics and Instances of Wounding

One of the leading arguments anti-hunting protesters regularly assert is that hunters cannot control the instances of wounding because their instruments i.e. shotguns are either:

- Somehow so 'high-powered' that their pellets can travel great distances and speeds; and
- Uncontrollably inaccurate and indiscriminately spray pellets far and wide, destroying every bird in a flock, not only the targeted bird.

Here is a detailed explanation as to why these perceptions are inaccurate.

Duck and quail hunting is undertaken with shotguns in various gauges:

- Duck or waterfowl hunters traditionally use a 12-gauge shotgun with anywhere from 28-40g of steel shot; whereas,
- Quail hunters use 12-gauge shotgun with 24-30g of lead shot or a 20-gauge shotgun with 24g of lead shot.

Every shotgun cartridge contains propellant (gun powder), a wad, and shot. Shot is spherical and is projected out of the shotgun's barrels when fired through what's called the 'choke area,' situated at the most forward end of the muzzles. Once fired, the pellets are channelled through the choke at which point a cluster or cloud of pellets propel forward to form what's called a pattern. The type of choke used will determine the degree of pellet control and is measured in diameter at specific distances to meet what's called choking parameters.

The typical chokes used for waterfowl produce a cylindrical pattern diameter of approximately 500mm-600mm wide at 40 metres, though the most common distance for waterfowl hunting is 30 metres, where a pattern is 400-500mm wide.

Native game bird hunters understand implicitly that matching cartridges and chokes to each hunting situation is key to a safe and successful harvest. This is well emphasised to hunters in various forms of educational material and technology through Field & Game Australia, other hunting associations, reputable suppliers, and is shared through social media channels in community groups.

Extensive training is encouraged at shotgun shooting ranges so hunters can practise during and outside of hunting season to improve target acquisition accuracy and efficiency, in field-simulated situations.

There is no component of a shotgun that makes it 'high powered'. The term high powered was coined by certain firearm manufacturers when seeking to differentiate their line of calibres in rifles and pistols. This strategy has never referred to shotguns. At the pending Select Committee hearing, Field & Game Australia will be happy to elaborate on the interior and exterior ballistics to support its position.

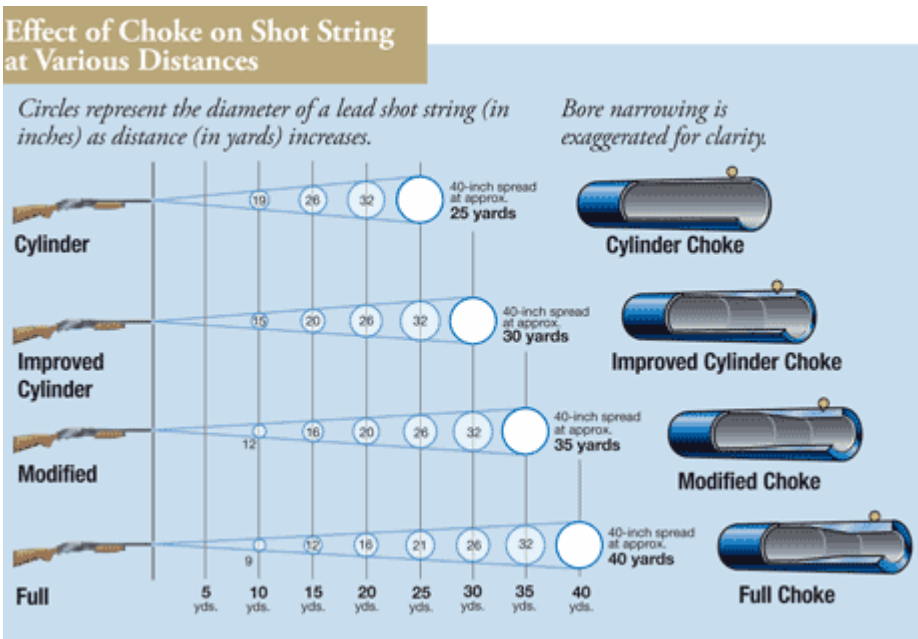


Figure 3 How Chokes Work

NB: Due to its hardness**,** steel 'patterns' much tighter than lead and so you can reduce (widen) your choke. Typically, steel through a half choke performs much the same as lead through a full choke.

1.6 Reasonable Harvest Limits and Associated Models

Australian duck species are resilient and respond to heavy rainfalls with immediate and rapid breeding. The subsequent result is an undeniable increase in abundance of native game birds. In the Australian 'boom and bust' landscape, ducks can struggle to find enough habitat to survive, either because bird abundance levels exceed that which a given wetland is capable of sustaining in wet conditions, or because water surface levels will not support the existing abundance levels in drier years.

Current legislation allows season bag size to be lowered to ensure the number of ducks harvested in any year does not exceed sustainable levels in extreme years. Conversely, harvest levels can be increased to the maximum allowable level of 10 native game ducks per day per hunter or 20 stubble quail per day per hunter.

The current model relied upon for guiding the native game bird hunting seasons is the ***IHM (Interim Harvest Model).*** The intended use of this model was as an ***interim only*** method of establishing a sustainable season length and bag size, until the preferred ***AHM (Adaptive Harvest Model)***, initiated in 2010 and superseded in 2018-19, was completed and ratified.

Characteristics of an AHM are expected to include:

- Transparency in how the annual harvest regulations (i.e. season length and bag size for each species) are recommended to the Minister, leading to reduced conflict among stakeholders;

- Assurance that harvesting in Victoria is unlikely to adversely affect the sustainability of waterfowl populations in eastern Australia;
- Increased understanding of the key drivers of waterfowl dynamics in Eastern Australia, particularly the relative importance of wetland area and harvesting;
- Development and maintenance of waterfowl research, management, and monitoring expertise in Victoria.

Today's IHM is expected to furnish regulators and Victorian Government Ministers with reliable scientific data, such as annual rainfall, water catchment flows and the like, so objective and season- appropriate regulatory decisions could be made about the forthcoming hunting seasons.

A key requirement of the proposed approach is that stakeholders (including Ministers) must have confidence in the approach and its recommendations about season lengths and bag sizes; accept that the process is adaptive such that uncertainties should reduce with time; provide sufficient resources to operate the WCHM; and recognise its reliance on the skills of a small number of scientific staff that may not be able to be quickly replaced if they cease their current employment.

Considerable improvement has continued since the 1990s and today the prevalence of native non-target species being shot has significantly reduced through the practical and successful implementation of education programs.

1.6.1 Conditions for Setting Harvest Limits

The lead indicator of duck abundance is habitat, followed closely by rainfall, provided streamflows reach wetland catchments as intended. Stubble quail prefer flat, dry land and are mostly found on agricultural land, making them less susceptible to both indicators than their duck counterparts.

The ready availability of suitable habitat is key to establishing encouraging breeding behaviour and may include but is not limited to a quality water source, abundance of nutrition, absence or minimal predator activity and moderate game bird density.

Once prime habitat is full, excess duck populations are pushed into secondary habitat where they are more vulnerable to predators (largely foxes, feral cats, and hawks). Secondary habitats also include roadsides (where birds can be struck by cars), and wetlands with sub-standard water quality (water treatment plants) where they contract diseases, become ill and die.

Experts calculate that, in the wild, native game birds can have a mortality rate of 20-60%, and there is no evidence available that suggests hunting reduces the survival rate of the species any further. In fact, many birds do not live beyond juvenile stage i.e. 12 months. This may be due to the inexperience of the bird to navigate climate, predators, disease and perhaps hunters.
https://www.jstor.org/stable/3808998

Victorian helicopter surveys taken in preparation for the native game bird hunting 2023 season estimate:

There are currently an estimated 2.5 million game ducks across 5 species, and 7.1 million stubble quail in Victoria.

These figures represent a healthy abundance of game birds in existence, and it is intensely disappointing that the 2023 native game bird hunting season regulations seem to have completely ignored these facts.

Dr. Brian J. Hiller, Professor Wildlife Biologist, adds:

"Harvesting through hunting provides effective control of native game birds, reducing abundance to sustainable levels and, in many ways, creating a more humane end to the often-cruel natural attrition that occurs when populations exceed habitat limits".

The mortality resulting from "recreational" hunting is largely considered to be compensatory (Baldassarre and Bolen 2006). This means that those individuals removed from the population via hunter harvest would likely die anyway from one of the other means. Therefore, the loss of those individuals has little or no impact on overall population health. This would be especially true of most (game) duck populations found in Australia since they operate on a water-driven boom-bust system (Frith 1982, Lavery 1971).

Indeed Professor Richard Kingsford, Director of the Centre for Ecosystem Science, UNSW, stated in an ABC Science article 2000 The Lab – ABC News when he was with New South Wales National Parks and Wildlife Service that "There's not a lot of information from Australia but obviously some ducks are injured" however, on the question of the impact of shooting on wetland ecology, he was more certain…

"Duck hunting is not a major conservation issue," he told The Lab. "It may have an impact on a local area, but overall, migration dilutes out any of these effects."

"The real culprit is things like habitat loss due to diversion of rivers," he said.

Professor Richard Kingsford - UNSW

1.6.2 Compliance 2022

Complete data from the 2022 duck hunting season 16 March – 13 June identified and collected from attendance at 216 wetlands with multiple attendances provides strong evidence of **hunter compliance at 99%.**

Where hunter infractions were noted, the vast majority were unrelated to their direct engagement with ducks but rather, associated activities with little or no consequences on duck mortality such as:

- No game licences
- Firearm related offences
- Unsecured ammunition
- Unattended campfire
- Littering
- Cut or take firewood from a State Forest, or
- Damage vegetation in a State Forest.

1.6.3 Protestor Behaviour 2022

Complete data from the 2022 duck hunting 16 March – 13 June identified that 38 per cent of the infractions were incurred by protestors and anti-hunting protesters themselves, including major incursions such as:

- S58C of Wildlife Act 1975 – Banning Notices and
- Breach of S86 Notice.

1.7 Native Game Bird Season 2023 - Commentary

Conflicting rhetoric around the scientific data used to inform the 2023 season essentially boils down to the suitability of the data at hand vs true fit-for-purpose data. The EAWS data has key shortcomings when it comes to using this data to estimate abundance. Helicopter counts and other methods are being developed – which we believe will be more fit for purpose. In future we would like to see these better data sources have a heavier weighting in the season considerations.

Field & Game Australia has amassed more than 60 years of knowledge on the biological nature of native game birds and their habitats and developed rigorous processes for managing this invaluable resource for its longevity. Recommendations from scientific subject matter experts, and our own observational field data, determines the regulations put in place for the 2023 native game bird hunting season to be counter-intuitive, ignorant and irresponsible, and we call for a formal explanation from the GMA and determining Ministers on how this decision was justified.

1.7.2 Compliance – First Five Days of Season 2023

Data obtained from the GMA website, which was recently removed at the behest of the Minister for Outdoor Recreation and presented in figure 4, clearly showed that the vast majority of hunters were complying and practising responsible hunting behaviour in accordance with season regulations on the first five days of season 2023.

Enter/ Remain in specified hunting area	2*
Exceed bag limit	1
Expired game licence	1
Fail to immediately kill game which is alive when recovered	2 (1*)
Fail to leave wing attached	7
Fail to retrieve	1
Littering	1
No game licence	2
Possess game when unlicensed	1*
Unattended campfire	2
Use/possess toxic shot	4
Total Offences	35

*Protestor related

Figure 4 Number of incidents, major and minor detected in first 5 days of 2023 hunting season. Screen capture from GMA website before removal www.gma.vic.gov/envorcement/compliance-statistics

Furthermore, of the GMA reported 35 individual infractions:

- Less than half were considered significant e.g. fail to immediately kill game that was alive when recovered (2), fail to leave wing attached (7), fail to retrieve (1) and no game licence (2), possess game when unlicensed (1) etc.; and
- More than half were considered minor e.g. littering (1), unattended campfire (2), use/possess toxic shot (4) etc.

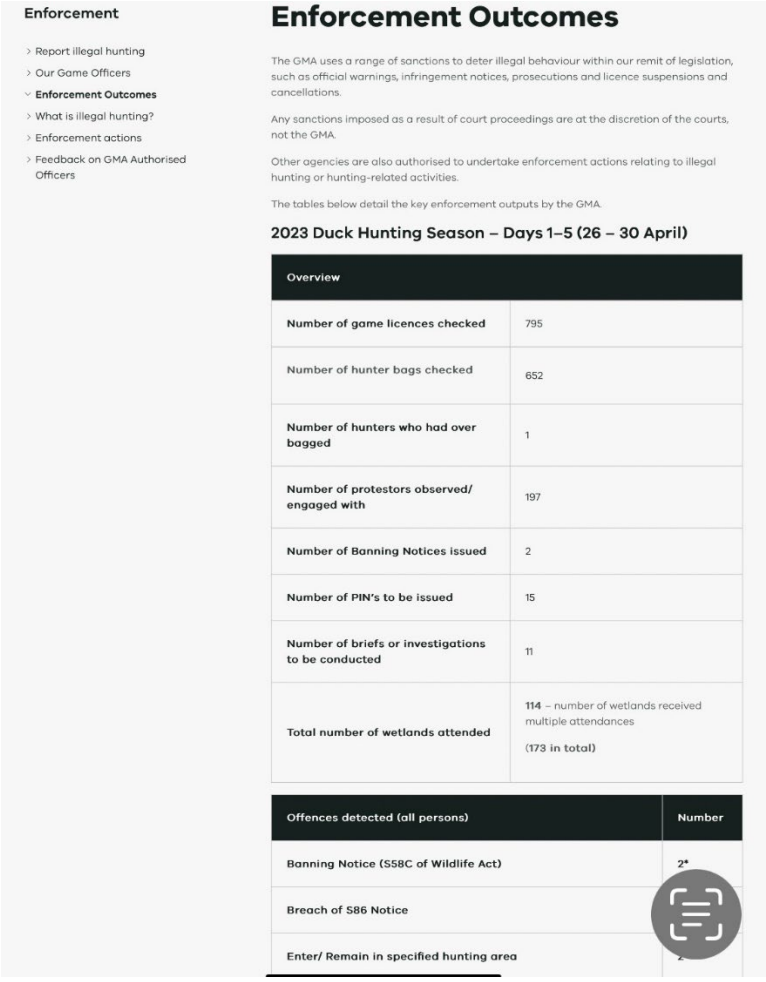
Given the estimated number of hunters participating during this period, a compliance rate of around 99% was observed across the 173 wetlands visited by the GMA, of which 114 received multiple attendances by regulators. Number of game licences checked: 795. Bags checked: 652. PINs issued: 15.

1.7.3 Protestor Behaviour 2023

As a matter of particular significance figure 4 above identifies with an * where there were incidents of protestor infractions in regard to failing to immediately kill game which was alive when recovered and possessing game when unlicensed.

Subsequently, the following offences were identified, and notices issued to protesters:

- 2 Banning Notices (S58C of Wildlife Act);
- 2 Enter/Remain in specified hunting area; and
- 1 Fail to immediately kill game which is alive when recovered.



Enforcement

- Report illegal hunting
- Our Game Officers
- Enforcement Outcomes
- What is illegal hunting?
- Enforcement actions
- Feedback on GMA Authorised Officers

Enforcement Outcomes

The GMA uses a range of sanctions to deter illegal behaviour within our remit of legislation, such as official warnings, infringement notices, prosecutions and licence suspensions and cancellations.

Any sanctions imposed as a result of court proceedings are at the discretion of the courts, not the GMA.

Other agencies are also authorised to undertake enforcement actions relating to illegal hunting or hunting-related activities.

The tables below detail the key enforcement outputs by the GMA.

2023 Duck Hunting Season – Days 1–5 (26 – 30 April)

Overview	
Number of game licences checked	795
Number of hunter bags checked	652
Number of hunters who had over bagged	1
Number of protestors observed/ engaged with	197
Number of Banning Notices issued	2
Number of PIN's to be issued	15
Number of briefs or investigations to be conducted	11
Total number of wetlands attended	114 – number of wetlands received multiple attendances (173 in total)

Offences detected (all persons)	Number
Banning Notice (S58C of Wildlife Act)	2*
Breach of S86 Notice	
Enter/ Remain in specified hunting area	

Figure 5 Offences detected (all persons) in the first 5 days of hunting season 2023. Screen capture from GMA website before removal www.gma.vic.gov/envorcement/compliance-statistics

1.7.4 Investigation into Causes of Waterbird Death 2023 – Testing and Initial Reports

Field & Game Australia is aware of a GMA internal analysis of duck deaths currently in progress to ascertain the causes of death of approximately 80 ducks dumped on the steps of the Victorian Premier's office. We believe the GMA has taken possession of those ducks.

Anti-hunting groups have made unsubstantiated claims in the media that these ducks had been illegally shot during the early stages of the 2023 hunting season and not recovered by hunters.

Field & Game Australia welcomes a full analysis and verification of causes of death of these birds and an investigation into the legitimacy of the claims made at the time they were displayed. It would be in the public's interest to establish the equivocal truth surrounding the death of these birds to prevent harmful discourse, misinformation, and vilification of the hunting community.

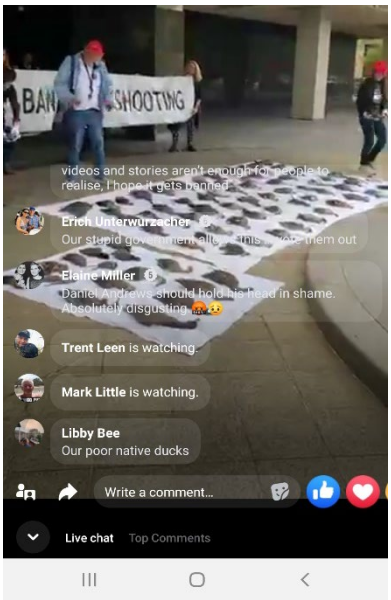


Figure 6 Facebook live feed of ducks dumped by protestors and anti-hunting groups (2023)

Summary of Main Issues and Concerns

Issue / Concern	Problem and Impact
Historical and forecast annual rainfall 2019-23	Bureau of Meteorology data demonstrates that eastern Australia received exceptional rainfall in the 2021 - 2022 calendar years with very high to the highest average rainfall detected on record. EAWS also identified waterbird breeding activity at near record highs.
Ministerial directive for an 8am start every day of hunting season	The misconception is that a later start gives the native game birds a greater chance of survival and reduces wounding. This is absolutely not the case. A late start makes hunters more visible and therefore dramatically inhibits their ability to get within an ethical distance of their target. In reality, this can result in a far greater chance of wounding, less likelihood of dispatching the quarry humanely, and could possibly inhibit retrieval. Best practice hunting must start at dawn whilst native game birds are moving from overnight roosting areas to daytime feeding areas, or in reverse during the evening. During this time, the birds travel lower to the ground and are more easily identifiable and acquired. Hunters are highly proficient in differentiating between approved game and non-game species in lower light situations.

Reducing the length of a Native Game Bird hunting season	When seasons are shortened or modified, hunting pressure intensifies as hunters head out more often. This has a more significant impact on the native game bird populations and in particular, adds additional pressure to specific species.
Mid-week and delayed scheduled season opening	Many hunters, their families and friends look forward to hunting season with great anticipation. It's a time for them to reconnect, teach, learn and enjoy healthy (mental and physical) traditions and practices. In Victoria, the normal season coincides with school holidays enabling families to participate together. By postponing the 2023 opening date to the start of the school term (26 April, 2023), families were robbed of these opportunities, adding unnecessary pressure on their mental health and wellbeing.
Reduction in bag size from 10 to 4 per person/per day:	Despite compelling data in support of a full bag size, where conditions have been exceptional and conducive to optimal native game bird abundance, authorities have sought to set a bag size 60% below that of a normal season.

1.8 Recommendations – Operation of Annual Native Game Bird Hunting Season

On behalf of thousands of members and associated hunting, shooting and conservation stakeholders Field & Game Australia rightfully expects that the regulator and three appointed supervising Ministers of this integral and traditional way of life must act in a fair, collaborative, transparent, and science-led manner. All decisions governing native game bird hunting must base on facts only, not any emotional, politically motivated, single-dimensioned, and often ill-informed arguments of the anti-hunting movement.

There is much more to managing native game bird abundance and sustainability than the ethical arguments most commonly presented. As with our indigenous Traditional Landowners, it's a complex, interconnected cycle of care and management where respectful, mindful, and appropriate hunting plays an instrumental role.

To this end, the following represents four (4) key recommendations which Field & Game Australia believes will achieve the ecological, ethical, and unbiased management outcomes needed:

1. **A season setting process that is based on science, not Ministerial interference with no knowledge or sound basis.**

   - The initial IHM is in dire need of revision as its initial intention and purpose was to deliver a sustainable and realistic bag size recommendation in the short term. However, from the 2023 hunting season we see it has absolutely failed to achieve this simple outcome whilst conditions conducive to abundance have been exceptional.
   - The covert change in terminology governing the IHM where we saw a shift away from the model 'setting' the season, to now 'informing' the season, has allowed for potentially unconscionable and uneducated Ministerial veto and interference. A return to the IHM model as it was originally intended will deliver a more balanced approach to the next hunting season, with renewed commitment to implement an AHM in the following hunting season.
   - Bolster and add to existing EAWA data with additional science-led data such as helicopter counts and other methods of effective research.
   - Consider the introduction of a voluntary system whereby hunters would be encouraged to register their harvest by numbers and species to enhance other collected data.

2. **Identify and facilitate operational efficiencies and cost savings.**

   - The current IHM and the lengthy and adversarial approach to managing a native game bird hunting season consumes unnecessary resources for all stakeholders, government, regulators, and associations alike. We call for a fresh, collaborative approach where exhaustive resources are not expanded protecting a position, but instead channel those resources into proactive behaviours and initiatives that will better serve our environments and their inhabitants.

3. **Reassign management responsibility and ownership for all State Game Reserves to Field & Game Australia with appropriate funding.**

   - Field & Game Australia has a proven track record of wetland and State Game Reserve stewardship with dedicated resources, and a committed volunteer base available for immediate deployment. The vested interest they have serves all stakeholders, not only hunters.

4. **Duck rescue must be abolished.**

   - Ban protestors entering the water in a hunting area with an exclusion zone of no less than 100m.

TERMS OF REFERENCE # 2

ARRANGEMENTS IN OTHER JURISDICTIONS

2. TERMS OF REFERENCE # 2– ARRANGEMENTS IN OTHER AUSTRALIAN JURISDICTIONS

2.1 National Regulatory Environment

2.1.1 The Practice of Game Hunting in OECD Countries

Across the globe, there are far more democratic countries where duck hunting is permitted than not. In his March blog entitled 'The Occurrence of Recreational Hunting of Ducks and Geese Around the World' Fisheriesandwetlands.com.au/blog Paul Brown, former Associate Professor of Wetland Ecology at La Trobe University elaborates:

- Out of the six countries with the highest "Animal Protection Index" in the world; The United Kingdom, Sweden, Denmark, The Netherlands, Switzerland, and Austria, ALL presently permit duck hunting and have a long and strong culture of duck hunting along with hunting for many other endemic and introduced fauna;
- 52% of the world's nations allow their citizens to hunt ducks and only 23% do not;
- 100% of nations in North America and Australasia presently allow duck hunting with 94% of European nations, 64% of Central American and 54% of South American nations;
- Duck hunting is permitted in all the top-22 countries in the world ranked for their political rights and all of the top-17 countries ranked for their civil liberties;
- Wild duck is a highly valued food source by world standards. A simple "Google" search of the term wild duck recipe produces 23.5 million hits, almost one-per person for the entire Australian population (26 million).

Whilst this may be a surprise to anti-hunting proponents, this is something hunters innately understand, that our reputation for upholding "animal rights" and maintaining a sustainable hunting culture can co-exist.

As Mr. Brown points out, "it is plain to see for those who look, all around the world duck hunting is still very much a normal part of the human relationship with nature—even in countries with the highest animal-protection index. Duck hunters are some of the most passionate advocates for wetlands and waterbirds anywhere in the world, and Australian duck hunters are no exception."

ike their international counterparts, Australian duck hunters harvest a relatively small proportion of the abundant duck resources, and their passion and advocacy must be upheld because in their absence no-one will take up the cause to steward and protect water resources and biodiversity around wetlands. This takes hundreds of thousands of volunteer hours and no-one is invested in this like the hunting community.

2.1.2 Australian Jurisdictions

Staunch opponents of recreational native game bird hunting would have the public believe that duck hunting is not permissible and does not occur in most Australian states and territories, but this information is incorrect and misleading.

In 2023, the ACT is the only jurisdiction where ducks cannot be hunted, due to lack of habitat.

- There is an annually regulated and legislated recreational hunting season in **Victoria, South Australia**, **Tasmania,** and the **Northern Territory**
- There is an (arguably less well-regulated) agricultural pest-control system in **NSW** where ducks are legally shot by recreational hunters, on private property, under licence; and
- There are also provisions for ducks to be hunted in south-west **Western Australia** and in **Queensland** on private property as part of crop mitigation schemes.

Until recently, Victoria was progressing towards world-best wildlife management practice by making steps to implement an 'Adaptive Harvest Model,' a science-led information model that informs responsible harvesting of this entirely renewable resource.

THe South Australian hunting season generally opens on the same weekend as Victoria. However, the 2023 Victorian season was postponed to midweek five weeks later, and this motivated many hunters to take advantage of the neighbouring state's earlier start. See the table below for an outline of the regulations in each state and territory.

STATE / TERRITORY	REGULATIONS – LEGISLATED/CONTROLLED/ GAZETTED	LOCATION DETAILS
Victoria	Legislated recreational native game bird hunting season	https://www.gma.vic.gov.au/media-releases/2023/2023-duck-hunting-season-arrangements
SA	Gazetted recreational native game bird hunting season	https://www.environment.sa.gov.au/topics/plants-and-animals/sustainable-use-of-animals-and-plants/hunting-information/open-season/duck-hunting
Tasmania	Legislated recreational native game bird hunting season	https://nre.tas.gov.au/wildlife-management/management-of-wildlife/game-management/species-of-game
NSW	Controlled	https://www.dpi.nsw.gov.au/hunting/game-and-pests/native-game-birds
QLD	Controlled	https://environment.des.qld.gov.au/licences-permits/plants-animals/damage-mitigation-permits
W.A	Controlled	https://www.dpaw.wa.gov.au/plants-and-animals/licences-and-authorities?showall=&start=4
N.T	Legislated recreational native game bird hunting season	https://nt.gov.au/leisure/hunting-and-shooting/magpie-geese-and-waterfowl/magpie-geese-and-waterfowl-season-dates

TABLE 1 Australian State and Territory Jurisdiction Legislation

2.1.3 Regulations Pertaining to Protestor Behaviour and Safety Risks

In Victoria, protestors are not prevented from entering the water during a sanctioned hunting season to 'rescue' downed game birds. This is in stark contrast to the regulations in South Australia where protestors are prohibited from doing so.

2.2 Recommendations – Jurisdiction Arrangements

1. Develop a world's best practice native game bird hunting season in Victoria.

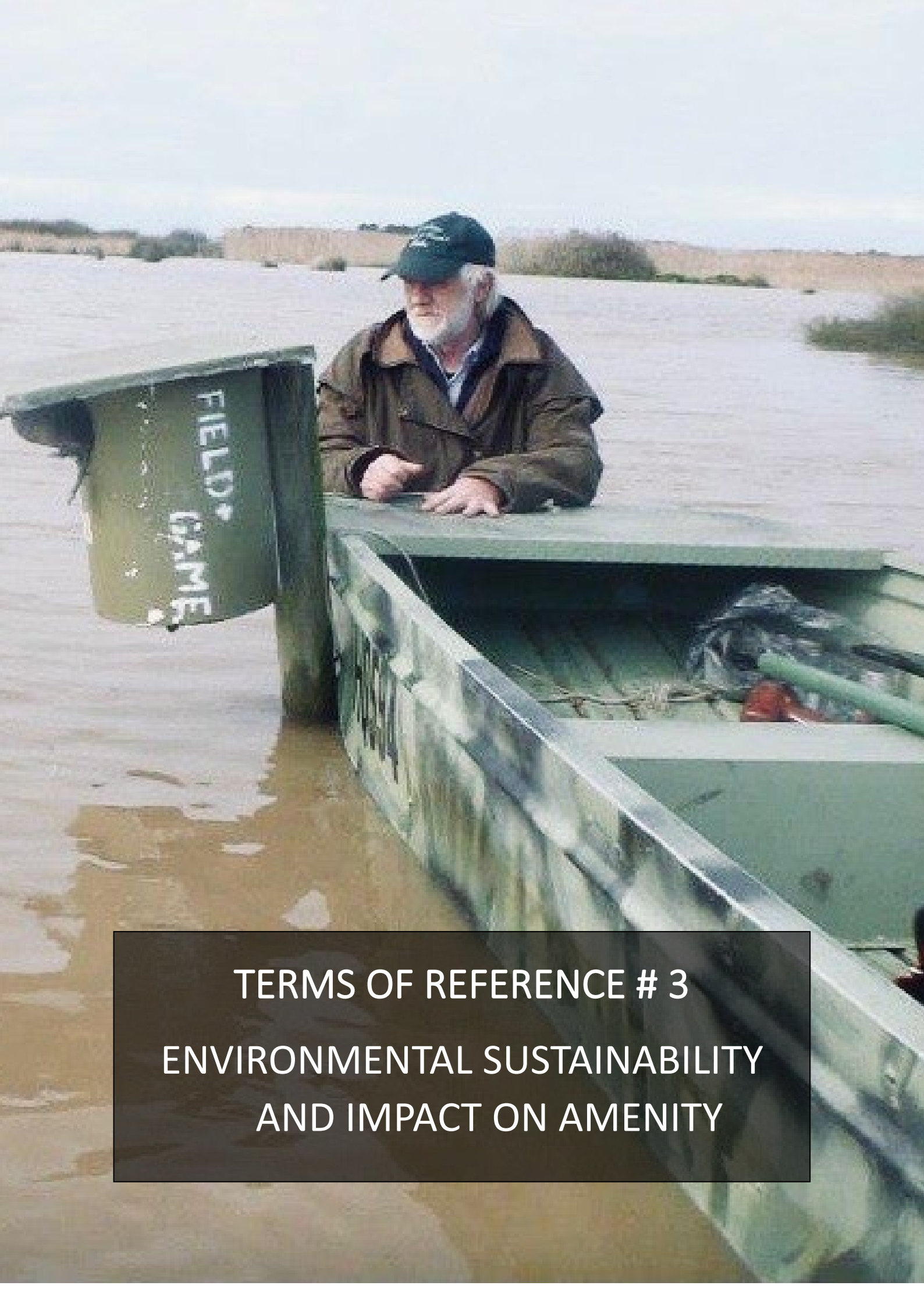
- Victoria can lead the way in Australia by further developing a regulated native game bird hunting season in consultation and collaboration with regulatory authorities and stakeholders, one that works for everyone and protects and preserves this valuable and renewable asset.
- Only a reliable and regulated native game bird hunting season will deliver the ***compliance*** necessary to best manage native game bird abundance. As the old adage goes "we protect what we love." If hunters know their season is safe they will do what is required to protect it.
- Season certainty is the missing element and the AHM will facilitate unprecedented support from the hunting community, motivating volunteer resources who will continue to champion Field & Game Australia's invaluable conservation work.

2. Education is the answer, not restriction or over-regulation.

- Victoria can lead the way in native game bird management by sharing responsibility for designing, gathering, and analysing data in a non-adversarial manner. Field & Game Australia has amassed a wealth of knowledge and would be keen to share this if the sentiment was more collaborative.
- Further government funding would enhance Field & Game Australia's communication efforts, providing valuable resources for marketing communications, training, events, and campaigns in a timely manner across multiple channels to foster positive interaction and knowledge-sharing.

3. Prohibit protestors 'rescuing' native game birds consistently across Australia.

- Whilst Victoria cannot legislate in other states, it can certainly advocate for aligned regulation by aligning with South Australia in prohibiting bird rescue.



TERMS OF REFERENCE # 3

ENVIRONMENTAL SUSTAINABILITY AND IMPACT ON AMENITY

3. TERMS OF REFERENCE # 3 – ENVIRONMENTAL SUSTAINABILITY AND IMPACT ON AMENITY

3.1 Environmental Sustainability

3.1.1 Defining Environmental Sustainability

For the purposes of this paper Environmental Sustainability has been formally defined as:

"The responsibility to preserve and protect natural resources and delicate ecosystems with a harmonious human health and wellbeing outcome, now and in the future".

Simultaneously, the hunting fraternity holds sacred the following statement as it embodies the respect and gratitude they have for the bounty they take, and underpins the principles that drive hunter behaviour:

"The wildlife of today is not ours to dispose of as we please. We have it in trust. We must account for it to those who come after." *King George VI*

3.1.2 Native Game Birds – A Sustainable Resource

In OECD countries, where animal welfare is considered of the utmost importance, hunting co-exists in harmony. This mature and responsible approach has proven to be sustainable.

Back in Australia, a compelling and growing body of evidence continues to mount against repealing the Victorian native game bird hunting season, confirming that doing so will deliver absolutely no benefit to our natural environments.

For decades, the EAWS (Eastern Australia Waterbird Survey 1983-2020) has been acknowledged as the go-to source of data that authorities have used to help determine annual native game bird abundance and set corresponding season controls.

However, Brian Hiller Assoc. Professor Biology and Wildlife, Bemidji State University, Minnesota states:

> ***"Whist the data provided by EAWS has captured native bird abundance well, it was not originally developed to measure specific native game bird abundance and therefore all inferences gained to inform native game bird hunting activities must be deemed inaccurate and invalid."***
>
> Brian Hiller – Assoc. Professor Biology and Wildlife, Bemidji State University, Minnesota

Unfortunatley, the data sets most commonly referred to, and conclusions drawn, included "pooled groups" of native game and non-game bird species. What is clearly missing is an exclusive segmented native game bird data set, devoid of all other species.

This misuse of EAWS data in this manner has resulted in a dramatically lower representation of native game bird abundance, in turn informing and influencing inappropriate regulatory controls which have been misguided and counter-productive to the wise management of native game bird environmental impact.

Mr Brown ardently believes that "whilst there is evidence in the EAWS data of a highly significant downward trends in waterbird counts from 1983 – 2020 in Victorian and NSW survey bands, most of this effect is due to a significant decline of 66 species of non-game waterbirds."

In an attempt to make better use of the EAWS data Mr. Brown re-consolidated the findings into more appropriate segments to arrive at the following compelling findings:

1. Following the repeal of a legislated native game bird hunting season in NSW, the downward trend in *abundance levels of native game birds was shown to be insignificant* however, *general native water bird* abundance certainly experienced a significantly decrease; and
2. Moreover, in NSW specifically, *no significant recovery of game and non-game birds has occurred in the absence of hunting;* yet in stark contrast,
3. In Victoria where a legislated native game bird hunting season continues to exist, revised EAWS data showed *no statistical negative or positive trend in the 1983 – 2020 period*.

These results suggests that despite the existence of a legislated native game bird hunting season, such as that in Victoria, the long-term abundance of native game birds is in no way impacted. In fact, Field & Game Australia confidently argue that it is the presence of this hunting season that facilitates the protection and preservation of native game birds.

The evidence is compelling and a suggestion that Victoria's native game bird hunting season should be banned is incredibly counter-productive to the long-term sustainability of our natural environments.

The knowledge Field & Game Australia has contributed, and the work its dedicated members, volunteers and partners have done to rehabilitate entire wetlands over many decades cannot be understated. These environments are complex, biodiverse, interconnected ecosystems that rely on human intervention to maintain the optimal conditions to survive.

Without a licensed native game bird hunting season, such as in NSW, QLD, and WA, the focus switches from 'conservation' to 'control' of populations, and so too does the impetus away from protecting and preserving.

The net result is a greater number of native game birds taken from single ecosystems, such as hunting on the rice. This can have dire consequences on an entire species genomic biodiversity and overall sustainability.

The following is diagrammatical depiction of what most likely actions and implications have been proven to follow:

Figure 7 Flow-On Effect of Repealed Native Game Bird Hunting.

3.1.3 Land Conservation, Rehabilitation and Transformation Initiatives

For more than 60 years Field & Game Australia has worked tirelessly to preserve, restore, and develop native game bird habitat across Australia. Hunters are acutely aware of the importance of our wetlands and the biodiversity they support. Field & Game Australia members are often the first to notice changes in waterfowl habitat, abundance and behaviour and are diligent in reporting them.

If we are going to be serious about protecting and preserving our natural environments then we must turn our attention to the impact of human encroachment and the loss of habitat. Wildlife scientists say the loss of habitat is the single greatest threat to all native birds, because without adequate habitats they will not breed.

Several species of native game birds including the Hardhead, Blue-wing Shoveler, Blue-billed Duck, and the Musk Duck have been considerably affected through the alteration or loss of habitat, reflecting a continuing need for Field & Game Australia's wetland restoration and conservation programs.

Unbeknown to many, Field & Game Australia has been at the forefront of many enduring and challenging efforts to save wetlands across Victoria. Hundreds of species of flora and fauna depend upon these wetland habitats for their very survival. More specifically, the benefits extend far beyond native game birds to at least 66 native non-game bird such as the Glossy Ibis (*Plegadis falcinellus*) and the Brolga (*Grus rubicundus*).

Ongoing programs Field & Game Australia and its avid volunteers and conservationists participate in include but are not limited to:

- The Victorian Environment and Water Advisory Committee;
- Regular parks monitoring and first line of awareness and alert to flood gate condition, water management and general provision of real-time field data and the like;
- Live fauna counts and reporting;
- Research assistance to Australian and international universities and government authorities;
- Collaboration with other conservation groups and educators; and
- Identification of significant breeding events.

Field & Game is proud to be in partnership with Parks Victoria through a recent *Letter of Collaboration*.

This will ensure a mutually beneficial and effective relationship for both organisations as we develop projects that protect and preserve our flora and fauna for decades to come.

As outlined in Field & Game Australia's **Towards 2030 Strategic Plan**, our conservation promise is imbedded in the following commitments:

- Developing a National Wetlands & Conservation Strategy
- Relaunching the WET Trust
- Ongoing development of the Nest Box Programs
- Expanding and defending habitat conservation
- Developing waterfowl banding programs
- Developing a water management plan for wetlands (climate change)
- Developing strategic alliances and partnerships
- Media campaigns to promote our conservation activities
- Co-ordinating the activities of wetland conservation volunteers, and
- Broadening the existing relationships with appropriate local, state and federal government departments.

Countless wetlands have benefitted from hunter-led conservation since 1958 through Field & Game Australia, including but not limited to:

WETLAND	DETAILS	WETLAND	DETAILS
Hird Swamp	Ramsar-listed, Kerang Wetlands	**Gaynors Swamp**	Near Rochester
Johnson Swamp	Ramsar-listed, part of Kerang Wetlands	**Lake Buloke**	Near Donald
Dowd Morass	Ramsar-listed, part of Gippsland Lakes	**Lake Wellington**	Sale

Reedy Lake	Nagambie	**Jack Smith Lake**	Sale
Kanyapella Basin	near Echuca	**Heart Morass and Sale Common**	Sale
Lake Borrie	Ramsar-listed, part of Port Phillip Bay Western Shoreline & Bellarine Peninsula	**Emu Plains Reserve**	Balnarring
Reedy Lake	Geelong – Ramsar-listed, part of Port Phillip Bay Western Shoreline, and Bellarine Peninsula	**Pyramid Creek Swamp**	
Macleod Morass	near Bairnsdale	**Murtnaghurt Lagoon**	Near Geelong
Hospital Swamp	Geelong	**Hawkstowe Park**	Epping
Tower Hill	Warrnambool	**Plenty Gorge Park**	Epping
Lake Eppalock	Near Bendigo		
Loveday Wetlands Complex	South Australia		
Gunbower Island and Gunbower Forest	Ramsar-listed, near Kerang		

Table.2 Victorian Wetland Managed by Field & Game Australia

Field & Game Australia has an active member base of approximately 16,000 paid subscribers, and together with paid Field & Game Australia employees they:

- Regularly monitor and report, in real time, topography, infrastructure and access conditions all year round to ensure the effective operations of wetlands and surrounds;
- Contribute to the quality and quantity of data collected by scientific researchers including biological samples, observations, and the general welfare of wetlands;
- Provide immediate and accurate response and feedback;
- Provide input from a body of expertise and knowledge preserved in the Australian National Hunting Archives, entrusted to hunting organisations, and the collective wisdom that members have acquired and share adding immense value;
- Are involved with catchment management authorities and Victorian organisations with a similar remit for conservation across the state;
- Work with government authorities in the management of pests, and habitat replenishment;
- Advocate on behalf of the environment and wildlife; and

- Desire to preserve what we have for future generations thanks to a collective connection to country gained over a long history.

Many of our wetlands require long-term, ongoing conservation effort; effort performed by dedicated hunters and conservationists. These are significant environments in our communities and this work must continue if they are to endure.

3.1.4 Ramsar Convention and Principles

In 1975, the Convention on wetlands was of international importance, especially as awareness grew of waterfowl habitat. This international treaty, commonly known as the Ramsar Convention, centred on the conservation and sustainable use of wetlands, and recognises the role that wetlands play in our economies, culture, science, and recreation.

Initially, the 1971 Convention did not include a definition of 'wise use' of wetlands however, it is clear that the term was being employed in the same sense and called for the "wise use of migratory stocks of waterfowl". In modern terms this meant 'sustainable exploitation'.

This controversial yet progressive provision to include 'habitat' in the Convention was well ahead of its time, when the order of the day (since the 1950s) was one of negative protectionism i.e. to safeguard a natural environment all human activity must be removed.

As humankind progressed and increasingly became more and more pervasive it was obvious that removing our influence was impossible and the focus shifted to proactive, well-informed intervention through preservation, conservation, and the maintenance of an area (or a species).

A definition of wise use was adopted by the Parties in 1987 and was updated in 2005.
This definition states that:

> **'*Wise use* of wetlands is the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development.'**
>
> Ramsar Convention 1975

There are three key elements of the definition of 'wise use':

- **Ecological character**, which is the combination of the ecosystem components, processes and benefits/services that characterise the wetland at a given point in time;
- **Ecosystem approaches**, which consider the complex relationships between every element of an ecosystem, and promote the integrated management of land, water and living resources (including humans);
- **Sustainable development**, which is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come.

Sustainable and recreational hunting was always imbedded in the "wise use" ethos. It is a complementary and constructive element that underpins the Ramsar principles.

Australia is a signatory to the Ramsar Convention and boasts over 8.3 million hectares of Ramsar-listed wetlands. It has been argued that hunting goes against the Ramsar principles, however, amongst Australia's wetlands of importance are areas which are (wholly, or partly) declared Victorian State Game Reserves: the Kerang Wetlands, Gunbower Forest, and the greater Gippsland Lakes wetland system.

Recognition of these areas, where hunting takes place during the legislated seasons, is important, as the Ramsar Convention defines *wise use as 'the sustainable use of wetland resources in such a way as to benefit the human community while maintaining their potential to meet the needs and aspirations of future generations.'*

3.1.5 The Delusion of Ecotourism

Touted as a viable alternative to hunting, and used to counter the significant economic benefit hunting generates for Victoria and the nation, the suggestion that ecotourism can compensate for hunting in either a sustainability or economic sense is delusional and groundless on two levels.

Firstly on the grounds of environmental sustainability, no one group, association or government department will provide the micro-management commitment required that the hunting community contributes. Hunters as volunteers, and their associates, have a vested interest in protecting and preserving wetlands and in many cases State Game Reserves, because doing so ensures an optimal habitat and abundance of diverse wildlife. Organisations such as Field & Game Australia dedicate fulltime, part-time and volunteer resources, invest countless hours into developing strategies and plans, and collaborate with numerous trusts such as WET, and government departments to ensure wetlands are in pristine condition.

The Winton Wetlands is perhaps the greatest example of a failed Eco Tourism experiment. A once extremely popular fishing and hunting destination, the site was impounded and decommissioned in the late 2000s and hunting was banned. A visitor centre and café and was then constructed in an attempt to attract eco-tourists, however it failed to attract any significant tourist patronage.

In an effort to keep the doors of the visitor centre and café open the government contributed to several funding injections to no avail. Eventually the project was deemed unviable, and the facilities were abandoned for a considerable time.

Secondly, hunter memberships, licences and permits contribute to conservation revenue; revenue that is wisely ploughed back into maintaining and using wetlands. Without the dedication and care that the hunting community brings, the sustainable future for our wetlands and every species that inhabit them are doomed.

3.1.6 Blue Carbon Credits and Sequestration Benefits

Wetlands that benefit from the contribution of Field & Game Australia branches and volunteers, owned or in collaboration with other parties , have the unique ability to sequester higher carbon volumes, mitigating climate risk, improving livelihoods, and safeguarding biodiversity.

At a conceptual level, opportunity exists for Field & Game Australia to develop world class carbon sequestration projects, integrating with existing projects and activities. By working with likeminded organisations, domestically and internationally, it would be possible to support these initiatives and significantly enhance the conservation benefit. In doing so, we could dramatically improve water quality, and elevate the global reputation of our already renowned natural wetlands.

3.2 Impact on Amenity

When considering amenity it is important to remember that hunters are also Victorian homeowners and occupiers, workers, family and community members who, like their non-hunting counterparts, value their amenity.

3.2.1 Noise

Every Victorian has a right to enjoy peace and tranquillity at their place of residence, and sound is one of a number of commonly identified variables impacting amenity. Every day, humans will encounter a plethora of loud and intrusive sounds which can be quite disturbing and annoying e.g. road traffic. Connewarree Wetlands is one of the largest estuaries in the state. This has been a well-established State Game Reserve for decades and it would seem that select, possibly newly arrived, residents are complaining about the noise that legal, seasonal hunting activity generates. Respectfully, onus to be aware of the surroundings of a proposed dwelling should be borne by the incoming buyer/occupier/developer.

At Connewarre, the closest residents are situated approximately 800m from the edge of this SGR. According to data collected from an authorised acoustic engineer, the sound transfer is well within EPA (Environmental Protection Authority) guidelines, as referenced in the following report.

In mid-late 2009 the Geelong Clay Target Club Inc. and Field & Game Australia Inc. commissioned Burton Acoustic Group – South Melbourne to conduct an acoustic test to measure the impact of sound from the then proposed shotgun ranges at Old Boundary Road, Anakie.

In this case, the nearest residential structure to the proposed range was 1,170 metres away: not too dissimilar to Connewarre. The survey was conducted under ideal conditions as stipulated in the EPA guidelines for proposed ranges.

The results are presented in the following table.

PARTY	DAYTIME / MON – SUN, 3-5 DAYS P/WK	EVENING / MON – SUN, 3-5 DAYS P/WK
EPA Guidelines for Planned Ranges	45 to 60 dB(A)	35 to 55 dB(A)
Burton Acoustic Measurements	43.6 dB(A)	43.6 dB(A)

Table 3 Burton Acoustic Group Test Results of Proposed Shotgun Ranges at Old Boundary Road, Anakie.

The results demonstrated that the logarithmic average maximum sound recorded across both proposed ranges was well within the permitted EPA ranges. In terms of noise levels, a decibel reading of 43.6 is only marginally louder than a soft whisper at 30 dB(A) and less than rainfall at 50 dB(A) and normal conversation at 60 dB(A). noiseawareness.org

Adding to this is the fact that noise generated by hunters in the field is by no way as intense as that generated at a shooting range. In the field during a licensed native game bird hunting season, the majority of the day is without gunshots because peak hunting generally occurs 30 minutes prior to sunrise for a few hours and then again for a few hours up to 30 minutes after sunset.

3.2.2 Access and Utility

Victoria's 199 State Game Reserves are public land reserves, purchased either wholly or partially with funds raised by hunters (from game licences) and tend to be "low value" land. Many are only "shallow temporary wetlands" – that is, land that floods periodically, but is often dry. This land is not suitable for agricultural and in the 1950s and 1960s land of this nature was being cleared and drained at a rapid rate.

- **Connewarre Wetlands Educational Centre**

This is a great example of wetlands stewardship. It was purchased from private entities by Field & Game Australia through its WET Trust (Wetlands Environment Taskforce). It was acquired to ensure that native habitats of native game and non-game birds could survive and, indeed, thrive. Decades on, the general public is welcome to enjoy the peace and tranquility that these remarkable wetlands offer, with more than 200 recorded bird species and tens of thousands of ducks, swans, and other birds utilising it every year. Lake Connewarre Game Reserve

- **Heart Morass – Proximity to Sale in Gippsland**

Arguably one of Australia's largest and most demanding wetland rejuvenation success stories, Heart Morass is testament to the relentless effort and vision of a lineage of volunteer conservationists, hunters, and community champions that started in 2006 and continues today. Once again, the WET acquired and aggregated 25 parcels of barren, salinity-affected farmland to into 3,197 acres of pristine wetlands boasting in excess of 66,000 new trees planted, an uplift of bird life from 20 to 100 species frequented by Birdlife Australia members, maintained vegetation, recreational areas and high-quality water conditions.

They now control the management of the floodplain from the Sale Common to the State Game Reserve. This enables the West Gippsland Catchment Management Authority to manage an environmental water regime with the co-operation of adjacent landowners. Heart Morass Wetlands

- **Buloke Wetlands**

Situated on the West side of Lake Buloke, approximately 240km northwest of Melbourne, The WET Trust purchased an allotment of 350 acres which had been dry for many years. Grazing and cultivation had a noticeable impact on the native vegetation on the lake bed and the edge of the lake, and its

quality had gradually become worse over time. The lake featured a number of large red gums on the allotment, mainly distributed at the edge of the lake and a few dead red gums towards the middle of the allotment, however there was little nesting habitat for water birds.

Through the efforts of many volunteers and conservationists in the area, Field & Game Australia volunteers were able to restore the Buloke wetlands to their former glory. Today when the lake fills, members enjoy access to the property for camping, fishing, and other recreational activities.

The vision and commitment employed by Field & Game Australia and its members and volunteers cannot be understated. Together with other likeminded conservationists and government bodies they continue to provide a place for all Victorians and visitors to enjoy for at least eight months of the year, unless of course they are hunters who have the added utility benefit. The physical, mental, and educational benefits are well-stated, especially in an increasingly complex and demanding world.

3.2.3 Special Interest Group

If native game hunting was repealed, many if not all managed wetlands and some State Game Reserves would fall into disrepair and ultimately may well end up being sold and repurposed as dry land cropping or residential developments. Once these habitats are lost so too will be the native game and non-game birds and associated flora and fauna.

If this was to occur it would be disastrous for the diverse range of non-hunting visitors who regularly frequent our world class wetlands and State Game Reserves, some of whom include:

- Bird and nature enthusiasts and clubs;
- Hikers, bush walkers, and campers;
- Student groups participating in wetland educational excursions run by Field & Game Australia volunteers;
- Dog training clubs; and
- Scientists seeking access to land and biological (live and freshly harvested) samples for quantitative research purposes.

3.3 RECOMMENDATIONS

1. **The Victorian Government funds and develops the world's best practice abundance research tool.**
    - Design 'fit for purpose' research tool(s) that provide accurate and reliable data to determine native game bird abundance and other related qualitative and quantitative metrics. These tools may include aerial and ground counts and other measures on an annual basis.
    - Invite respected independent scientific researchers to form a working committee to help shape and develop this tool over time.
    - Ensure that no Minister, singularly or collectively, has veto rights to ignore the data and override the hunting seasons.
2. **Implement greater accountability on local councils and town planning third parties.**

- Better educate property developers, owners and occupiers to be aware when residences and/or workplaces are proposed/exist in the vicinity of shooting ranges and State Game Reserves.

3. **Foster greater community engagement in consultation with specific end-user groups and communities at large.**
   - Develop informed and intelligent communications strategies and tools (channels);
   - Continue to design engaging educational programs with primary and secondary schools, and special interest groups;
   - Embrace our Connection to Country and the health and wellbeing benefits of doing so; and
   - Encouraging awareness and benefits of free-range harvesting as a sustainable practice.

TERMS OF REFERENCE # 4

SOCIAL AND ECONOMIC IMPACT

4. TERMS OF REFERENCE # 4 – SOCIAL AND ECONOMIC IMPACT

4.1 Social Impact

4.1.1 Compelling Research – RMCG Economic and Social Impacts of Recreational Hunting and Shooting

The Australian Federal Government – Department of Health and Aged Care commissioned RMCG to design and administer a comprehensive research project to investigate the extent to which hunting and shooting contributed to social and economic impact in Australia.

Data was collected from March 2018 through to March 2019, by surveying 16,576 permitted recreational hunters and shooters with the results presented in a detailed report in June 2020. The findings were explicit and compelling.

> ***"Recreational hunting and shooting play a substantial role in substantiating an individual's wellbeing".***
>
> RMCG Report 2020 www.health.gov.au/resources/publications

RMCG found that from the respondents surveyed, Victorian hunters and shooters represented 25% of the sample size; well in excess of other states and territories.

Respondents indicated that the pursuit of these activities delivered a distinctive sense of 'wellbeing' and the research interpreted this as an important indicator of social impact. What also emerged were specific identified pathways as stated below:

- **Nature connection**

Spending time outdoors and spending time in nature are very important to more than three in four hunters and shooters, and it is likely that the connection to outdoor places and natural places achieved through hunting and shooting contributes positively to wellbeing.

- **Self-efficacy (challenge, skills)**

Learning new skills, feeling achievement, and experiencing challenge were very important aspects of the hunting or shooting experience. These are indicators that hunting and shooting may contribute to a greater sense of self-efficacy, defined as having confidence that you can achieve the things you wish to and will be successful when attempting specific tasks or actions (Bandura 1982). Self-efficacy is strongly predictive of wellbeing – people who feel more confident in their ability to achieve tasks and meet challenges typically have higher wellbeing and resilience.

Australian native game birds are highly intelligent and evasive creatures requiring hunters to possess highly tuned expertise if they are to return a successful harvest. They are a more than worthy and challenging pursuit.

- **Social networks**

Hunting and shooting provide important opportunities to maintain and strengthen social bonding with family and friends, which in turn is an important contributor to wellbeing. Each year in Victoria, thousands of groups gather to enjoy the companionship and sense of belonging that the annual native (bird) hunting season promises.

Hunters and shooters are community members just like everyone else and enjoy the unique and enriching cultural experience that comes with sharing stories around a campfire, preparing meals together, guiding younger generations to be respectful, responsible, and capable human beings and smile as they mature into the leaders of tomorrow. This is our tradition and it's worth working for.

- **Physical activity**

Hunters and shooters have been identified as more likely to be active than the general population. Australia's Physical Activity and Sedentary Behaviour Guidelines for Adults recommends adults should do a minimum of 150 minutes of moderate physical activity or 75 minutes of vigorous physical activity each week, ideally including five activity sessions (Department of Health 2017). Data shows that 65% of hunters and shooters achieve or exceed the minimum recommended weekly activity levels.

- **Nutrition**

Hunting contributes to helping households achieve some aspects of nutrition, such as protein-dense foods. In an era where we are subjected to overprocessed foods, untold additives and preservatives, and even harmful substances, game foods represent immense nutritional value.

Despite an abundance of scientific evidence, a stigma exists for game foods and does little to promote the outstanding nutritional benefits of free range, organic game meats, which hunters and their families regularly benefit from.

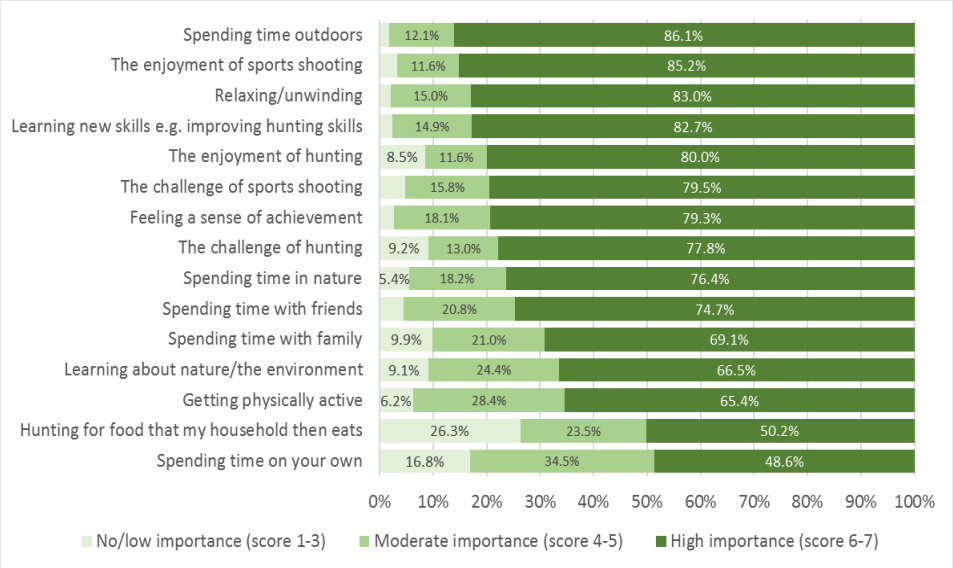


Figure 8 RMCG 2018-19 Survey 'How Important Are the Following Aspects of Hunting/Shooting to You? – Importance Rating.

Field & Game Australia concurs with the data presented in figure 4 and the stated contribution towards the physical, functional, and psychosocial wellbeing that hunting and shooting delivers for hundreds of thousands of Australians, directly and indirectly.

4.1.2 Mental Health and Wellbeing

According to the RMCG report, hunters and shooters are proven to have higher levels of well-being than the general population. This compelling insight strongly correlates with what we all understand to infer the presence of good 'mental health'.

The report goes on to state that "a person's 'wellbeing' refers to their overall quality of life" and that we are becoming ever mindful of the importance of a person's overall wellbeing to their life outcomes. A person with high subjective wellbeing according to Diener et al. 1998, Diener 2000 will:

- typically live longer;
- have fewer health problems;
- have reduced demand on health services; and
- will be better able to contribute to their community, work, and family.

'Subjective wellbeing' refers to a person's self-evaluation of their wellbeing using standardised validated measures from the field of wellbeing research. These subjective wellbeing measures are now widely used to measure overall quality of life and wellbeing, as important health and wellbeing measures in their own right, and form part of measures of societal progress used by organisations such as the United Nations and the Organisation for Economic Cooperation and Development (OECD) (OCED 2011, Sachs et al. 2018).

Multiple studies, meanwhile, have shown that gentle exercise that occurs in outdoor settings has greater overall benefits for health and wellbeing compared to exercise occurring in an indoor setting such as a gym (Fuegen and Breitenbecher 2018). More broadly, the psychological benefits of spending time in natural settings are now well established, with multiple studies demonstrating health and wellbeing benefits from spending time in natural outdoor places, particularly in relation to taking part in outdoor recreational activities (see for example Nisbet et al. 2011, Wolsko and Lindberg 2013, Capaldi et al. 2014, Ives et al. 2017).

Hunting and shooting can contribute to physical activity, to nature connection, and to maintaining and growing meaningful social networks that support wellbeing. It has potential to positively contribute to wellbeing, particularly given that many hunters are male - with men being at greater risk of health risks from social isolation compared to women - and older, with older people at greater risk of health problems related to physical inactivity compared to younger people.

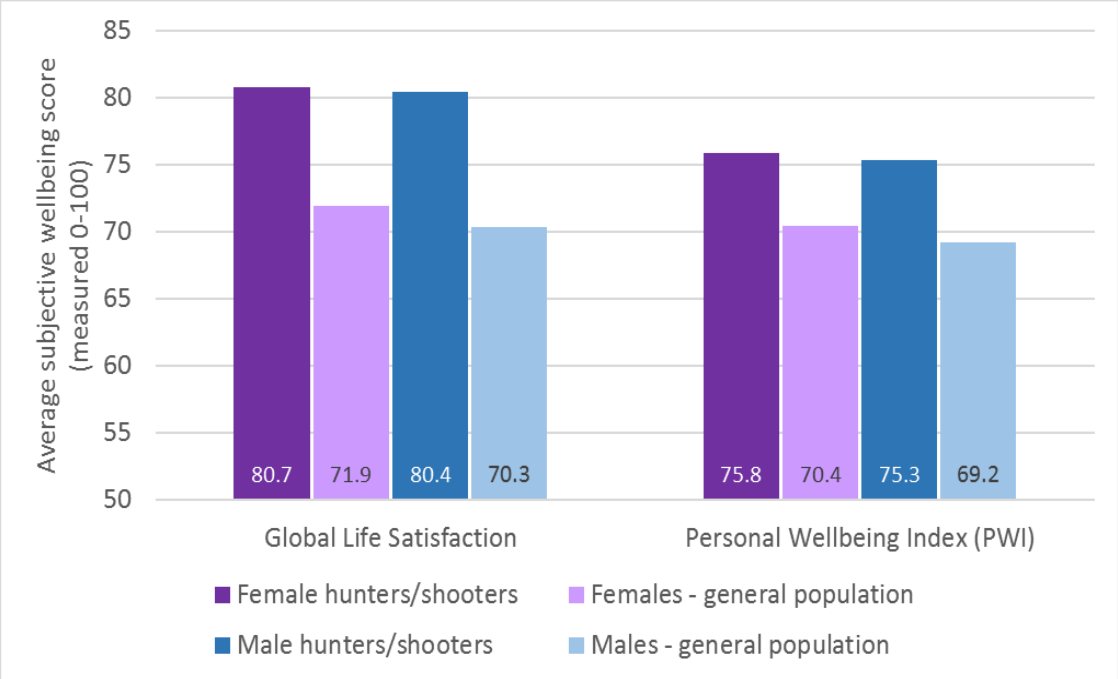


Figure 9 Average Wellbeing of Hunters/Shooters Compared to General Population - by Gender.

4.1.3 Connectedness

Have a conversation with almost any hunter and you will quickly understand the deep connection they have with this great land we live in, and the importance they place on preserving elements of traditional life as reminders of our custodial and ethical responsibilities to nature and future generations. This connection penetrates deeper than pride or entitlement. For many it represents an almost spiritual symbiosis between humankind and nature itself.

- **Indigenous Connection to Country**

For millennia, Australia's Traditional Owners have felt this connection even more so. They believe people's sense of belonging is derived from an ontological relationship or metaphysical existence to country derived from the Dreaming. www.abc.net.au/indigenous-sense-of-belonging

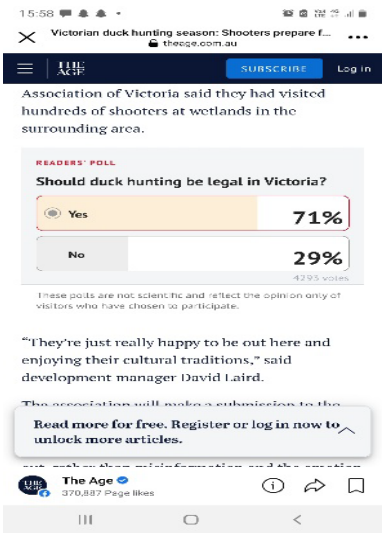
Field & Game Australia is inspired by positive alignment with the interests and goals of the Federation of Victorian Traditional Owner Corporations and is excited to learn, share and collaborate so we may together continue the great work we do through the development and ongoing implementation of the Traditional Owner Game Management Strategy and Traditional Owner Land Management Strategy whereby hunting, game and wildlife management is both a way of life and expression of identity for the Aboriginal people of Victoria.
https://www.fvtoc.com.au/game-management

The vision is consistent with that of Field & Game Australia.

> ***"A holistic approach to game management in Victoria incorporating Traditional Owner-led knowledge and practice to promote healthy populations of animals on healthy Country and improved cultural, social, ecological and economic benefits for all".***
>
> Traditional Owner Game Management Vision

- **Other Wider Interest Groups Who Share Our Values**
  This includes the Outdoor Recreation Advocacy Group which incorporates rock climbing, working dog groups, four-wheel drive groups, bush users' groups, VR Fish and recreational anglers, hikers and bushwalkers, horse, motorcycle and mountain bike trail riders, various boating/personal watercraft groups and many others.

4.1.4 Public Sentiment Towards Game Duck Hunting (April 2023)



The anti-hunting movement will have the Victorian public believe that virtually everyone who is not a hunter, vehemently opposes game duck hunting but this is simply untrue. Whilst there is certainly a great deal of misunderstanding and naivety amongst the non-hunting public, much of it driven by purposeful and manipulative anti-hunting rhetoric, the vast majority of Victorians believe game duck hunting should be legal, as clearly presented in the most recent Age newspaper opinion poll shown in figure 10.

Figure 10. **The Age Opinion Poll** – For or Against Duck Hunting.

4.2 Economic Impact

4.2.1 Significant Contribution **to** Australia's GDP

A national survey designed and administered by RMCG 2018-19 Dept Health Publications analysed the direct and indirect economic impact of hunting and shooting on a national scale and found it to be substantial.

The gross contribution to GDP = A$2.4 billion

Victoria contributes a min. = A$600 million
based on per centage of population

Economic activity contribution was measured as both direct and indirect inputs, indirect being as a result of flow-on from normal hunting activities. When dissected, direct contribution was A$0.8 billion, with a further A$1.6 billion in indirect contribution. Other considerations from the RMCG survey acknowledged economic contribution occurs through on and off-trip expenditure.

The estimated economic contribution to Victoria of recreational native game bird hunting prepared in June 2020 commissioned by the Department of Jobs, Precincts and Regions, excluding shooting follows:

- Duck = A$65 million
- Stubble quail = A$22 million

Total = **A$87 million to Victoria**

4.2.2 Contribution to Victoria

Extrapolating Victoria's population size as a proportion of the national contribution of hunting and shooting i.e. 25.5%, may be grossly underestimating the actual contribution since Victoria, along with NSW, far exceed the other states and territories in the level of active hunter participation. At a minimum the Victorian contribution would be well in excess of A$600,000,000.

If the native game bird hunting season was revoked most hunters would not drop hunting altogether and simply substitute it for other activities. Instead, they would seek alternative destinations and game animals to hunt, within Victoria, in other states or further abroad.

Any suggestion that ecotourism will fill the financial void is false. Hunter expenditure far exceeds that of ecotourists as they invest heavily in vehicles, technology, camping equipment, purpose-designed apparel, tools, targets, and the like, and they do this year-round.

The economy benefits from hunting and sports shooting through the creation of 3,300 FTE jobs as a result of the contribution of recreational hunting and sports shooting and expenditure on:

CATEGORY	Expenditure ($M)	PROPORTION OF TOTAL (%)
Fuel	173	9%
Groceries (including dog food), and drinks for self-catering/consumption at your accommodation	127	7%
Ammunition	76	4%
Takeaways and restaurant meals	75	4%
Hunting equipment (e.g. decoys, clothing)	60	3%
Accommodation	86	4%
Fees to landowners	32	2%
Vehicle/motorbike/boat repairs	45	2%
Other items	47	2%
Sub-total (on-trip)	**721**	**37%**
Firearms, bows, other firearm equipment and ammunition	664	34%
Hunting/target shooting club memberships	107	6%
Licenses/permits (e.g. firearm licences, game hunting licences/permits, etc.)	92	5%
Training to support your hunting/target shooting activities (e.g. target practice)	80	4%

Table Expenditure by Category

4.2.3 Economic Outflow to Other States and Territories

The postponement of Victoria's 2023 native game bird hunting season, from Saturday 18 March to Wednesday 26 April, had a dramatic and irrefutable economic impact on Victoria.

In line with its ordinary scheduled start to the hunting season, South Australia opened on the weekend Victoria's normal season would usually commence; however, due to the Victorian postponement, South Australia was provided a more than five-week head start.

According to data gathered from the South Australian Department for Environment and Water 34% of the 1,200 season permits were sold to Victorian hunters. Significant economic outflow occurs to other Australian states and international hunting locations of a similar scale to South Australia, further compounding the economic impact.

As indicated above, hunter expenses for such a trip would be approximately $1,000 per hunter, and where bag size limits exist and an unappealing anti-hunter sentiment, hunters are expected to conduct this trip two or three times during this season. Consequently, Victoria would forgo revenue in the vicinity of $1.0 – 1.5 million.

4.3 RECOMMENDATIONS

1. **Remove the political subjectivity of native game bird hunting seasons by developing and implementing a scientific season-setting process.**
   - This process needs to be robust and defendable – but should ultimately set the season (including years when science suggests no season), NOT "inform" a season setting process.
   - The season start and finish date and time should also be set in legislation, and only be modified if science demands it.

2. **End the farce of "wildlife rescue" in Victorian wetlands.**
   - Protestors can exercise their right to protest from the shore – but should not be able to directly enter active hunting areas and put themselves and hunters at risk.
   - "Rescuers" can enter water – but must remain at least 100m from any hunter.

3. **Proactively grow hunting in Victoria and the associated economic and social impact benefit.**
   - Creation or modification of the Game Management Authority in the model of Victorian Fisheries Authority. This authority should recognise and endorse that shooting and recreational hunting has a positive impact on the community's social and economic outcomes.
   - Actively remove barriers that new hunters face by rewarding compliance and engagement.
   - Acknowledge and respect hunting as a valuable lifestyle and that the majority of hunters are compliant and mindful of their impact.
   - Recognise that hunting and hunting groups play a significant role in improving the mental health and wellbeing of all Victorians.

4. **Recognition and promotion of hunting as a sustainable nutrition source.**
   - Promote use of sustainable, free range, ethically sourced, low carbon mileage, low fat, high protein game meat(s) as a nutritional food source.
   - Remove the stigma of game meats through education and awareness campaigns.
   - Consider the utilisation of wild food to provide healthy sustenance to those disadvantaged in our communities such as the homeless through food banks, shelters and community support groups.

5. **Further development of the Sustainable Hunting Action Plans.**
   - The Government to commit to further development of the SHAP 1 and SHAP 2 (Sustainable Hunting Action Plans) with wide and specific consultation with end users and produce SHAP 3 along with the Traditional Owner Game Management Strategy.
   - SHAP3 must include a commitment to further enhance existing State Game Reserves and add new assets to the network every year.

6. CONCLUSION

It is within the scope of the Select Committee to make recommendations for the continuation and enhancement of native game bird hunting in its report.

This submission has demonstrated that the greatest asset for native game birds is hunters; a symbiotic relationship that Field & Game Australia in particular has championed since the start of game bird licensing and wetland conservation from its inception in 1958.

Victoria has been exemplary in the early identification and securitisation of habitat and for this reason has enjoyed an unparalleled network of publicly owned land, available for active participation in hunting and other complementary activities.

Simply, without hunters the State Game Reserve system would not exist as it does today in Victoria, nor would there be such active portion of its populace engaged in environmental conservation. The founding members of Field & Game Australia had the foresight and the vision to create an asset that all Victorians can benefit from.

The relationship between native game birds and wetlands is important for all other species within the food chain and ecological systems. We have stable, sustainable, and constant populations of native game birds. Native game birds are resilient, they move great distances in this country to better available habitat and have adapted as such for thousands of years. Habitat is the driver for the sustainability of native game birds; the small amount that hunting takes ensures the provision of habitat retention to serve and maintain the base population. No habitat results in no base population. Once the ecology gets to this point, the ability of all waterbirds to recover and exist into the future will be compromised.

Hunters are compliant and well educated in the methods of sustainable and responsible hunting. Education programs in place ensure an adequate base line of training to begin participation and develop skills that are shaped in the field. Field & Game Australia encourages its members to retain these skills and competencies across 59 Victorian shooting ranges spread across Victoria. Hunter training, equipment and competency has shown continual improvement with advances in delivery and availability of equipment and technology. It will continue to do so. Hunters are prepared to invest a degree of 'sweat equity' - and if we ban hunting we effectively lose the impetus to contribute through participation.

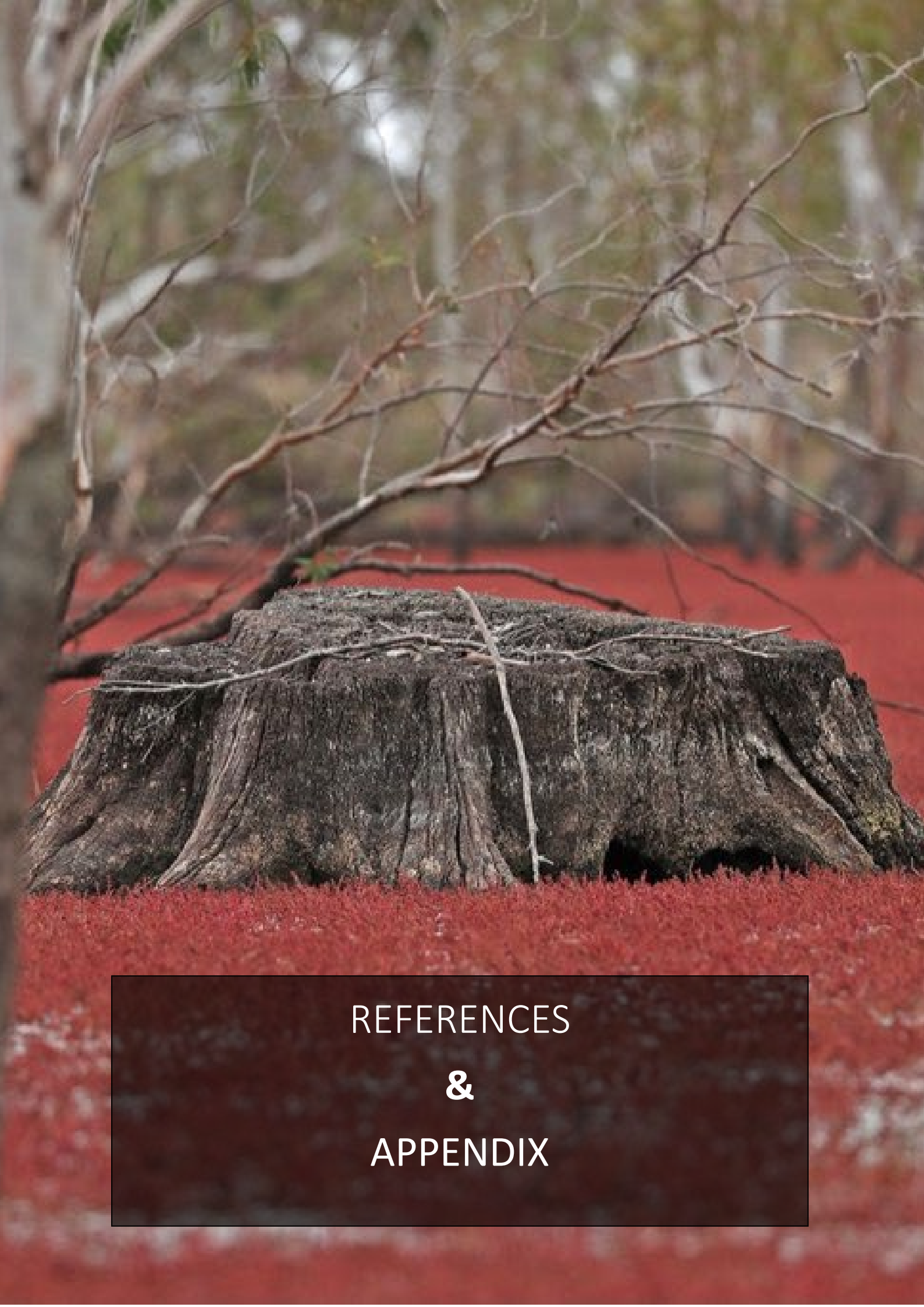
The social benefits for health, happiness and social connectedness are evident. Economic input and delivery of jobs and employment in regional areas is especially evident. Hunting has taken a hit in economic output from over-regulation and restrictive season conditions, but historical data enforces and shows that hunting is a major contributor to outdoor recreation and regional communities when properly managed. Hunting has the opportunity to continue to deliver and grow its economic contribution to Victoria.

Science, real data, history, and experience drive the argument for continued native game bird hunting. Ideology has no place in the process. Victorians in the very high majority (according to widely varying statistics, up to 95% of us) eat meat. Not everyone hunts; many have lost connection with the food chain and where their food comes from. If you have a meat protein on your dinner plate you simply have to support hunting. There is no rational argument against hunting or commercial farming for protein supply. If you eat meat or fish, an animal or fish of some description has been harvested and processed to provide that protein.

Field & Game Australia recognises the existence of the animal activism cohort in the state who challenge all things involving animals such as hunting, racing, ownership, breeding, fishing, farming

and a myriad of other animal causes. Animal activism is big and a busy space with multiple agencies and an ever-increasing need to be more 'present and visible' than others. We have seen the rise of what once was relatively calm protestor behaviour to what is now becoming highly confrontational, aggressive, and combative. This is a dangerous situation and must be addressed, as in the case of recent protections introduced for farming and bio security. Hunting deserves the same protections.

Field & Game Australia shares the view of Traditional Owner groups where active involvement with the environment is valued over the 'lock it and leave it' approach, and as such is committed to taking an 'active' role in repairing and preserving these resources for generations to come.



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