

RECOMMENDATIONS FOR THE 2024 DUCK SEASON ARRANGEMENTS

Core message

- The GMA provides these recommendations in the context of the existing policy and legislative setting.
- Information on game duck population status and environmental variables has been considered by the Game Management Authority Board to determine whether any modification to the prescribed duck season arrangements is required to ensure sustainability.
- Habitat conditions for game ducks improved throughout eastern Australia in 2022 and led to large-scale breeding. This resulted in an increase in game duck abundance in 2023 to levels above average. Birds are widely dispersed across eastern Australia. El Niño conditions have returned to Australia which resulted in dry conditions in late-winter-early spring 2023. As a result, habitat extent declined across eastern Australia. Drier winter and spring conditions in 2023 also saw a reduction in breeding from waterbirds from the highs of 2022, including game ducks, but was about average in 2023.
- November, December and early-January have recorded above average rainfall across large parts of eastern Australia, with conditions likely to remain favourable into Autumn 2024.
- The interim harvest model developed by respected scientists recommends a reduced daily bag limit of nine ducks. After considering all available information, the GMA does not consider there is substantive evidence that contra-indicates that recommendation.
- The GMA also recommends that the season should open at a later date mid-week with later start times for the remainder of the week to improve safety, compliance and sustainability outcomes, and that two game duck species should be prohibited from hunting due to their threatened status.
- The GMA is available to brief you on this recommendation in person should you wish.

Due	As soon as possible
Explanation	To allow the broader community, industry, the hunting community and government agencies to make arrangements.

Recommendation

That you:

1. approve the GMA recommendation to modify the 2024 duck season by:

Recommendation 2 ☐ Endorsed ☐ Not endorsed ☐ Noted ☐ Returned for review

- i. adopting a daily bag limit of nine (9) ducks per day
- ii. adopting a slightly reduced season length to accommodate a mid-week opening, commencing on Wednesday 20 March and ending on Monday 10 June 2023, inclusive
- iii. delaying hunting start times to 08:00 from Wednesday 20 March to Sunday 24 March, inclusive
- iv. prohibiting the Blue-winged Shoveler and Hardhead from being hunted for the 2024 duck season due to their threatened status.

Recom	mendation 1 ☐ Endorsed ☐ Not endorsed ☐ Noted ☐ Returned for review
2.	note that the GMA will inform the community on the final seasonal arrangements and conduct compliance operations together with its partner agencies.

To: Minister for Outdoor Recreation



	advise whether you would like an in-person briefing from staff and Chair of the Board on the above recommendations.				
Recommenda	ation 3 Endorsed Not endorsed Noted	□ Returned for revi	ew		
Minister's Co	mments				
Signed	Hon Steve Dimopoulos MP Minister for Outdoor Recreation	Date			
Approved by		Date	16 January 2024		
Chris Rose, Ch	nairperson Game Management Authority 🖀 <	removed>			
Endorsed by: G	raeme Ford, CEO Game Management Authority 🕿	<removed></removed>			
Prepared by: Si	mon Toop, Director Strategy and Research, Game N	Management Authorit	y 🕿 <removed></removed>		



From	GAME MANAGEMENT AUTHORITY	Ref	
Title	RECOMMENDATIONS FOR THE 2024 DUCK SEASON	File	
	ARRANGEMENTS	Due	As soon as possible

1. Key Information

Parliamentary inquiry

The Game Management Authority (GMA) recognises that government is currently considering recommendations from the Parliamentary Select Committee on Victoria's recreational native bird hunting arrangements. Until the government responds to the inquiry findings, current government policy allowing recreational duck hunting prevails and this brief is provided to you for consideration on that basis. The focus of this brief is specifically on duck hunting arrangements as they relate to bag limits, season length, hunting times and game species if a season is to be held in 2024.

Should government decide to continue recreational native bird hunting in Victoria, the GMA will work closely with partner agencies to implement government policy decisions. Depending on the nature of any reforms the government may decide to implement, and the timing of an announcement of the decision, additional time may be required to implement them prior to the commencement of a hunting season.

Sustainable duck hunting in Victoria

Arrangements for the annual duck season (bag limits, season length, game species, hunting methods and times) are prescribed in the Wildlife (Game) Interim Regulations 2023. However, to ensure that duck hunting remains sustainable from a population perspective, a number of environmental and game duck population variables are monitored and reviewed annually to determine whether any modification to these arrangements is required. These include the abundance, distribution and extent of breeding of game ducks, the distribution and extent of waterfowl habitat and the current and forecast climatic conditions affecting waterfowl populations. All of eastern Australia, and not just Victoria, is considered in recognition of the highly mobile nature of many game duck species and their ability to move large distances in short periods of time.

Information considered

In forming recommendations on the seasonal arrangements, the GMA considered the best available data and science, including Bureau of Meteorology (BOM) published climate data, the Eastern Australian Waterbird Survey (EAWS), Victorian game duck abundance estimates, the New South Wales (NSW) Department of Primary Industries annual Riverina waterfowl abundance survey, South Australian Department of Environment and Water game duck abundance indices and previous Victorian harvest data. The GMA was also guided by the Interim Harvest Model (IHM) output report which considers abundance indices and surface water estimates over four drainage basins of eastern Australia over different time periods to assess game duck population status and recommend a daily bag limit.

The IHM is an important input into the GMA Board's consideration. It was developed by two members (Professors Richard Kingsford and Marcel Klaassen) of an independent government expert panel created to provide advice to government on the approach to setting sustainable duck hunting arrangements. Professor Klaassen updates and runs the model each year with contemporary data (including major inputs from the EAWS) and produces the output report. The IHM adds scientific rigour to the decision-making process.

BOM, EAWS, Victorian game duck abundance estimates and IHM information was shared with hunting, environmental and animal welfare stakeholders who were invited to provide any additional data relevant to decision-making. Some chose to make submissions to the GMA for consideration (see Attachments 3 and 4).

To: Minister for Outdoor Recreation



Summary of conditions

The document *Considerations for the 2024 Duck Season as at 19 December 2023* (see Attachment 1) provides a range of information relating to the status of game duck populations and their habitats across eastern Australia. A summary of this information is provided below.

Habitat availability

For the previous three years (2020-2022), La Niña and other drivers have influenced Australia's climate resulting in significant rainfall and flooding throughout parts of eastern Australia. Water storages, wetlands and waterways benefitted from record 2022 spring rainfall. The EAWS wetland area index was above the long-term average and multi-year rainfall deficiencies experienced during the 2017 – 2019 drought were almost entirely removed from the eastern states.

However, in 2023, El Niño conditions returned to Australia, as well as a positive Indian Ocean Dipole. The result was drier conditions across much of eastern Australia in 2023 up until the end of October. For Australia as a whole, October rainfall was 65% below the 1961–1990 average, the fifth driest October on record (since 1900) and the driest since 2002. Much of south-eastern Queensland had very low August–October rainfall and large areas of three-monthly rainfall deficiencies developed in South Australia and eastern Australia.

In response to the drier conditions, waterbird habitat throughout eastern Australia as at October 2023 declined from the previous year. Despite this, Australian water storages fell only marginally from the previous year (2%) and the important Murray-Darling Basin was at 88% of capacity. The Lake Eyre Basin benefitted from the sixth wettest wet season in 2022-23 in the first part of 2023 but has since experienced drier conditions following. The EAWS wetland area index for 2023 decreased from the previous flood year and was at 78% of the long-term average, ranking 22nd from the 41 years of survey.

Widespread storms in November resulted in above to very much above average rainfall across most of eastern Australia, lifting the total 2023 spring rainfall to average levels. November rainfall throughout most of eastern Australia was in the highest 10% registered since records began. December 2023 also recorded above average rainfall in large parts of eastern Australia, including over most of Victoria.

Rain fell across much of eastern, central and northern Australia during the first week of January 2024, with heavy to locally intense rainfall in some areas of eastern and northern Australia. Heavy rainfall resulted in flood warnings for south-east and central Queensland extending into north-east New South Wales and central, northern and south-east Victoria. Many sites across central and eastern Victoria had the highest January or annual daily rainfall on record. Weekly rainfall totals greater than 100 mm across isolated pockets of central Victoria and New South Wales, south-east coast of Queensland and southern and central pockets of Queensland. Weekly rainfall totals between 50 to 100 mm across areas of central and northern Victoria extending into central and northern New South Wales, and parts of southern, north-western and central Queensland were recorded.

The widespread rainfall from November until present means that a meaningful reduction in habitat availability is unlikely in the short-term.

Distribution of habitat

EAWS results showed 64% of wetland area was found between northern Victoria to central New South Wales. Surface water availability in Victoria declined slightly from 2022 for both wetlands and dams but was still higher than in either 2020 or 2021.

To: Minister for Outdoor Recreation



Game duck abundance

In response to habitat conditions from the previous year, widespread breeding increased abundance for all but one (Mountain Duck, EAWS only) game duck species.

Eastern Australia Waterbird Survey

• The EAWS game duck abundance index for all of eastern Australia increased by almost seven-times from 2022 to the seventh highest recorded in 41 years and 60% above the long-term average. All game duck abundance indices increased except for Mountain Duck. The EAWS Victorian game duck population index increased by almost 25-times from 2022.

Victorian game duck abundance

The total state-wide absolute abundance of game ducks increased from the previous year. The total
estimated abundance of game ducks in Victoria in 2023 was 7.1 million birds, an almost three-fold
increase on the previous year (2.41 million) and almost double the four-year average (3.7 million).
Abundances for all game duck species increased from the previous year.

NSW Riverina game duck abundances

Game duck numbers increased from the previous year by almost 4.5 times from 963,902 to 4.295 million birds. 2023 abundance was 3.5 times greater than the long-term average of 1.21 million.
 Abundances for all game duck species increased from the previous year.

South Australian waterfowl surveys (provided in confidence)

• The South Australian Department of Environment and Water reported in confidence that surveys of 90 wetlands in late-October / early-November 2023 covering 79,951 ha detected 72,395 game ducks, or 15% above the long-term average. Aerial surveys also showed an 18-fold increase in game duck abundance from the previous year, from 9,975 to 182,893 in 2023.

Waterbird distribution

EAWS showed that waterbirds were more widely dispersed across the eastern Australian landscape than last year, however, the majority of birds were found in northern Victoria and central Queensland. Two central Queensland wetlands supported more than 180,000 waterbirds representing 31% of the total abundance. Around 40% of surveyed wetlands supported no waterbirds and included wetlands that were dry.

Waterbird abundance increased in the Lake Eyre Basin from the previous year and declined in the Murray-Darling Basin. Abundance also increased on the north-east and south-east coasts.

Waterbird breeding

Drier conditions in the second half of 2023 saw waterbird breeding species' richness and breeding abundance decrease compared to the very high levels of the previous year, with breeding abundance falling to slightly below the long-term average. Breeding was concentrated in one wetland (73% of total) in central Queensland. Five species comprised 97% of the total breeding recorded. Colonial breeding species (birds that congregate to breed and are easily observed) can provide a proxy measure of game duck breeding.

Little widespread game duck breeding was recorded during the EAWS, although localised breeding was known to occur. The EAWS provides unreliable information on game duck breeding due to their cryptic nature and the habitats they utilise which creates difficulty in detecting nesting adults (game ducks nest in tree hollows, shrubs and on the ground) or broods in dense vegetation.



Long-term trends

Three major indices for waterbirds (total abundance, number of species breeding and wetland area index) continue to show significant declines over the last four decades. Five out of the eight game duck species show long-term declines in abundance. These declines have largely been attributed to water resource developments (e.g. building of dams, floodplain developments, extraction of water) which have caused widespread degradation and loss of freshwater habitats. A drying climate is also thought to be having an impact.

While not the driver of population decline, hunting during periods when there is low recruitment (e.g. dry periods) removes breeding stock which can negatively affect future recruitment and drive further decline. This is why conditions are regularly monitored and hunting arrangements are modified when required. Similarly, climate change impacts are considered through annual monitoring and review of environmental conditions and population status.

Climate outlook

The influence of drivers such as El Niño and the Indian Ocean Dipole tend to be weaker over the summer months. The long-range forecast for Australia for January indicates an increased chance of above median rainfall for parts of Queensland, New South Wales and Victoria, and more neutral rainfall chances across much of the country. Chances favour drier than average conditions for western parts of Western Australia and the Top End of the Northern Territory. Significant rainfall has already been recorded for most of Victoria and other parts of eastern Australia for January, with some areas subject to varying levels of flooding.

The long-range forecasts increase the chances of drier conditions across the west and north of the country for February and March, but chances are more neutral across the three months for most of southern Queensland, New South Wales, Victoria and south-eastern South Australia (see Figure 1 below).

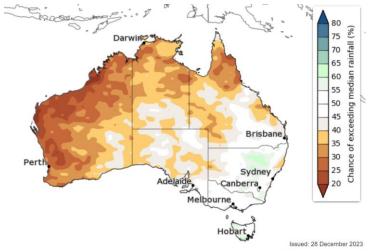


Figure 1: Chances of exceeding median rainfall (%) January – March 2024.

Warmer days and nights are very likely for almost all of Australia with unusually warm daytime and night-time temperatures at least two times more likely than usual.

The El Niño event continues in the tropical Pacific – the typical drying influence of El Niño on Australia's climate usually reduces during summer, especially in the east.

A positive Indian Ocean Dipole (IOD) event remains active but is weakening steadily. Model forecasts suggest the positive IOD is likely to continue to ease.

To: Minister for Outdoor Recreation



Interim harvest model and due diligence assessment

Government established an independent expert panel in 2019 to review the proposed approach to implementing adaptive harvest management (government election and Sustainable Hunting Action Plan commitments). The 2019 expert panel completed its review of the proposal and found that the proposed population model was theoretically sound and appropriate, and it made several other recommendations.

Recommendation 3 was that "a simple harvest management framework be adopted initially, to clearly translate waterfowl monitoring and data on rainfall/wetland availability into harvest recommendations" while ongoing development of the adaptive harvest population model for waterfowl is developed simultaneously as a longer-term goal to assist management. The "interim harvest model" was developed by two members of the government's expert panel (Professor Marcel Klaassen, Deakin University, and Professor Richard Kingsford, University of New South Wales) to inform and improve transparency, objectivity, and defensibility in decision-making over duck season arrangements while adaptive harvest management (AHM) is being developed.

The model uses information from long-running population data to explore the relationship between game duck abundance (sourced from EAWS and Victorian ground counts), habitat availability (i.e. water surface area, estimated from LANDSAT satellite imagery by the University of New South Wales) and time (1-3 years) for Victoria and a large part of eastern Australia. To counter the inherent uncertainties in the different data sources used and reduce the influence of any one line of evidence, the model uses multiple indices to inform duck hunting arrangements (a multiple lines of evidence approach, in this case, five). It favours adjusting bag limits over season length as the preferred way to regulate seasonal harvest.

Professor Klaassen was engaged to run the model using recent data and produced a report (see Attachment 2). Based on game duck abundance data collected during 2023 in Victoria and throughout a large part of eastern Australia (New South Wales, Victoria and eastern South Australia) and estimates of water surface area in the Murray Darling Basin, Lake Eyre Basin and south-eastern drainage basin, the influence of time (out to three years), and the relationship between the total indices point score and historic seasonal arrangements, the model recommends a bag limit of nine birds per day.

Creators of the IHM recommended that due diligence should be applied when using the model output to inform decisions on duck season arrangements and that other data sources should be considered to provide context and checks and balances to decision-making. The Board found that the data sources and outcomes from consultation from interested parties when considered in the full context of environmental conditions does not contraindicate the model output.

Harvest impact

As part of implementing adaptive harvest management, the Sustainable Hunting Action Plan (SHAP) included an action to determine a sustainable level of offtake and a population threshold below which hunting should be prohibited. An independent review was undertaken by Dr Thomas Prowse, University of Adelaide, and former Chair of the government's 2019 expert panel, who recommended that a precautionary annual proportional harvest quota of 10 to 20% of the total Victorian game duck population sizes estimated from surveys of each species in spring.

Since 2009 when telephone harvest surveys of hunters began, the long-term average seasonal harvest of game ducks in Victoria is 320,000 birds. In this period, the highest seasonal harvest was 600,739 in 2011.

Based on the current Victorian population of 7.1 million game ducks, a sustainable harvest "quota" of 10% would equate to 710,000 birds. A 20% quota would equate to 1.42 million birds. Such harvest levels have not been achieved in Victoria since telephone harvest surveys began.

To: Minister for Outdoor Recreation



Reported harvested birds form only part of the total losses caused by duck hunting. Wounded birds that perish and are not recovered by hunters must be added to the reported harvest to understand the full extent of birds removed from the population by recreational hunting. Evidence shows that death as either a direct or indirect consequence of wounding has been estimated to occur in 73-97% of individuals.

Dr Prowse in his modelling used a 23% wounding rate based on data collected from Australian hunters between 1972 and 1977. For comparison, the United Stated Fish and Wildlife Service uses a wounding loss figure of 20% in its adaptive management framework. Applying 23% wounding losses to the long-term average seasonal harvest of 320,000 ducks would amount to 95,584 birds being additionally removed from the population, assuming for the purposes of numerical analysis, all wounded birds die. Wounding at 23% and applied to the seasonal harvest high of 600,739 would equate to 179,442 birds.

If wounding losses were added to the long-term average seasonal harvest and the season high harvest, total birds removed by duck hunting would be as follows:

- 320,000 (long-term average seasonal harvest) + 95,584 (23% wounding loss) = 415,584 birds
- 600,739 (highest recorded seasonal harvest since 2009) + 179,442 (23% wounding loss) = 780,181 hirds

Harvesting at the long-term average plus 23% wounding (415,584 birds in total) would be 59% of a 10% quota (710,000) of the estimated Victorian game duck population (7.1 million birds). Harvesting at the highest recorded seasonal harvest since 2009 plus 23% wounding (780,181 birds in total) would exceed the 10% quota (710,000) of the estimated Victorian game duck population (7.1 million birds) by approximately 10% (70,181).

The long-term average harvest plus 23% wounding (415,584) would equate to 29% of a 20% harvest quota (1.42 million) of the total Victorian population. The highest recorded harvest plus 20% wounding losses (780,181) would achieve 55% of a 20% sustainable harvest (1.42 million) of the total Victorian population.

These figures show that when using the long-term average harvest or the highest recorded seasonal harvest plus 23% wounding losses, total losses caused by hunting would fall below or slightly above the 10% quota respectively and are well below a 20% quota of the current Victorian total population.

Other management considerations

Mid-week opening with later start times

The GMA Board has previously recommended government implement a mid-week (Wednesday) season opening to reduce the focus on opening weekend to achieve better compliance, safety, sustainability and responsibility outcomes. To support a mid-week opening, it was also recommended to apply a later start time of 08:00 hours from the Wednesday – Sunday, inclusive, during the first week of the season. The GMA again recommends that this be adopted for the 2024 duck season. It is recommended that the season opening day should be Wednesday 20 March, which is four days after when the season would normally open under the regulations (i.e. Saturday 16 March), meaning a slight reduction in season length.

Prohibiting hunting of the Blue-winged Shoveler and Hardhead

In 2021, the Blue-winged Shoveler and Hardhead were both listed as threatened species (vulnerable) under the Victorian *Flora and Fauna Guarantee Act 1988*. Given the listing of these species in Victoria, the GMA Board considers it responsible to prohibit hunting of them in 2024.

The GMA is aware that a Notice of Preliminary Recommendation of the Scientific Advisory Committee to delist the Hardhead as a threatened species under the *Flora and Fauna Guarantee Act 1988* was published in the Government Gazette on 22 December 2023.

To: Minister for Outdoor Recreation



Social and economic impact

The GMA uses the current policy settings, ie. a season as prescribed in the Wildlife (Game) Interim Regulations 2023, as the base line for assessing the social and economic impacts of the recommendations.

The recommendation for a mid-week opening commencing on 20 March reduces the season length by four days from the prescribed season length. The GMA does not believe that these arrangements, nor the later start times for the first five days, will materially change hunter participation rates throughout the entire regulated season. Therefore, it is not considered to create any potential social or economic gains or losses, except in an anticipated improved compliance, safety, and sustainability outcomes.

The IHM recommended a reduced daily bag limit of nine birds per day. This is one less than the prescribed 10 birds per day. This reduction will affect few hunters as most cannot achieve such a daily limit. Therefore, it is unlikely that a nine-bird bag limit will act as a disincentive for the majority of hunters to go hunting.

Hardhead and Blue-winged Shoveler make up a very small percentage of the annual harvest, so precluding these species from hunting in 2024 will have little impact on hunting opportunity.

For those people, businesses or sections of the community who oppose or who are negatively impacted by duck hunting, adoption of the recommended daily bag limit, season length, hunting times and hunted species does not provide further impacts over the current prescribed arrangements.

Animal welfare

The current extent of wounding in duck hunting is unknown, although historic levels have been estimated. Through its RESPECT Hunt Responsibly and REDUCE wounding programs, the GMA works with hunting organisations to raise hunter awareness and encourage responsible hunting behaviours to reduce wounding and improve animal welfare outcomes. A draft Waterfowl Wounding Reduction Action Plan (WWRAP) has been developed as a key action under the government's Sustainable Hunting Action Plan. The WWRAP is currently before government for consideration.

Reducing impacts on non-game wildlife

All duck hunters are required to pass the Waterfowl Identification Test before being allowed to hunt duck in Victoria. The test strives to ensure that hunters have the necessary skills to distinguish between game and non-game waterbirds when hunting. The requirements for passing the test have been increased in recent years. The GMA works with hunting organisations to raise hunters' awareness and the community is encouraged to report illegal hunting to the GMA.

To further minimise the risk of non-game species being illegally destroyed or unduly disturbed, the GMA can recommend that wetlands be closed to duck hunting or additionally regulated (e.g. prohibiting hunting from boats) where significant concentrations of threatened or breeding waterbirds are detected. In conjunction with DEECA, wetlands are surveyed in late-February and where numbers of birds exceed trigger-levels established in report prepared by the Arthur Rylah Institute for Environmental Research (DEECA), a recommendation will be made to you after consultation with key stakeholders. The GMA and DEECA also respond to community reports which are verified and considered for recommendation for closure or further regulation. Fifteen wetlands were closed to hunting last year based on GMA recommendations. Closed or further regulated wetlands are advertised, promoted by GMA, signposted and enforced to maximise compliance.



2. Context

Duck hunting in Victoria

Duck hunting is permitted under the *Wildlife Act 1975*. The season length, species composition, bag limits and hunting methods are prescribed under the Wildlife (Game) Interim Regulations 2023. Under these regulations, a duck hunting season occurs annually, commencing on the third Saturday in March and concluding on the second Monday in June each year. Eight duck species may be hunted, and the daily bag limit is set at ten game ducks per day, which includes a maximum of two Blue-winged Shoveler. Land classification determines whether hunting is allowed or not.

There are approximately 22,000 licensed duck hunters who, on average, harvest 320,000 game ducks annually.

Modifying a duck hunting season

Under section 86 of the *Wildlife Act 1975*, the Minister, by notice in the Government Gazette, may further regulate the duck hunting season where there is a need to alter the prescribed seasonal arrangements.

Under a Supplement to the General Order for the Administration of Acts dated 1 December 2023, section 86 of the *Wildlife Act 1975* is jointly administered by you, as Minister for Outdoor Recreation and as the Minister for Environment.

Role of the Game Management Authority in setting duck season arrangements

Under section 5(a) of the *Game Management Authority Act 2014* (GMA Act), an objective of the Game Management Authority (GMA) is to 'promote sustainability and responsibility in game hunting in Victoria.'

Under section 6(h), the GMA is to 'monitor, conduct research and analyse the environmental, social and economic impacts of game hunting and game management' and under section 6(i), the GMA may make recommendations to relevant Ministers in relation to:

- (i) game hunting and game management, and
- (iii) open and closed seasons and bag limits.

Also, section 8A 'Guiding principles' requires the GMA to have regard to the following relevant principles when exercising its powers or performing its functions:

- (b) the principle of triple bottom-line assessment, which means an assessment of all the economic, social and environmental costs and benefits, taking into account externalities;
- (d) the principle of an evidence-based approach, which means considering the best available information when making decisions.

The advice provided by the GMA on the annual duck season relates only to season settings for the forthcoming year. It does not relate to the broader policy of allowing duck hunting per se.

Enforcement of the hunting season

The GMA works closely with its regulatory partners to ensure hunting is conducted lawfully and responsibly. Authorised officers from Department of Energy, Environment and Climate Action, Parks Victoria and the Victorian Fisheries Authority, together with Victoria Police, support the GMA during periods of greatest hunting activity and at other times during the hunting season. Enforcement operations are targeted according to a risk-based, intelligence-led approach with a focus on public safety, sustainability and compliance with the law. Random patrols are also conducted throughout the season on both public and private waters.

Communication plan to support the hunting season

The GMA will implement a targeted communication plan using appropriate social and traditional platforms to inform the community on the arrangements for the 2024 duck season once decided by government. If there is



to be a hunting season, communications will also promote safe and responsible behaviour by all involved in duck hunting. The REDUCE wounding campaign will also be promoted to improve animal welfare outcomes.

In recognition of the Parliamentary Inquiry and through continuing to improve sustainable outcomes, the GMA will raise hunter awareness of Aboriginal cultural heritage sites and cultural artefacts and arrangements for reporting damage or destruction to these. If duck hunting continues, the GMA will work closely with Traditional Owners over time to develop more substantial educational resources for hunters than is currently available.

3. Consultation

On 12 December 2023, the GMA provided key stakeholders with the EAWS summary report. On 19 December 2023, the GMA provided the same stakeholders with the IHM output report, the Victorian game duck abundance 2023 preliminary report and the GMA's summary Considerations document. These documents were made available to the public on the GMA website.

The following stakeholders were invited to provide any additional information or data they considered relevant to decision-making:

- Animals Australia
- BirdLife Australia
- Coalition Against Duck Shooting
- Field and Game Australia
- Regional Victorians Opposed to Duck Shooting
- RSPCA
- Shooting Sports Council of Victoria
- Sporting Shooters' Association of Australia (Vic)
- Victorian Duck Hunters Association
- Wildlife Victoria

Eight submissions (seven solicited, one unsolicited) were received and considered. Stakeholders provided their interpretation of the data and recommendations for the season. Additional information on relevant conditions was limited. Those groups that support duck hunting recommended a full or extended season. Those who oppose duck hunting recommended to cancel the season, and duck hunting generally. Several issues outside the scope of the matter under consideration were also raised.

A high-level summary of stakeholders' positions regarding possible hunting arrangements for the 2024 duck season is included below. A more detailed summary is included at Attachment 3 and the full submissions are included at Attachment 4. While not making a formal submission, the RSPCA did provide the GMA with a copy of its submission to the Parliamentary inquiry into Victoria's native bird hunting arrangements. A copy of this is also included.

Organisation	Position
Animals Australia	Implement the Select Committee recommendation and cancel duck
	hunting including the 2024 season
BirdLife Australia	No submission received
Coalition Against Duck Shooting	Cancel the 2024 duck season and implement the ban on duck hunting as
	per the Parliamentary Inquiry report
*Duck and Quail Hunting Australia	Full 12-week season commencing at 7am on the traditional third
	Saturday in March, all eight game species to be hunted throughout the
	season, a 10-bird daily bag limit, including two Blue-winged Shoveler as
	per the regulations, plus an additional five game ducks per day
Field and Game Australia	Supports the interim harvest model, prefers a traditional Saturday
	opening, return to the prescribed start times for each day of hunting

To: Minister for Outdoor Recreation



Regional Victorians Opposed to Duck Shooting	The GMA should, in line with its functions and obligations under the GMA Act, recommend closure of the 2024 duck season until all of the adverse impacts outlined in its submission are removed
RSPCA	No submission received
Shooting Sports Council of Victoria	No submission received
Sporting Shooters' Association of Australia (Vic)	Supports the interim harvest model recommendation of nine ducks per day and a full-length season
Victorian Duck Hunters' Association	Full prescribed season, 10 bird daily bag limit including two Blue-winged Shoveler, season to commence on the third Saturday in March or the Friday before, opening two days to have a bag limit of 15 birds and one additional Wood Duck per day for the whole of the season, first three days of the season to start hunting at 7:30am and close at 7:30pm.
Wildlife Victoria	Prohibit duck hunting on public and private land

^{*}Unsolicited submission

4. Attachments

- Attachment 1 Considerations for the 2024 duck season
- Attachment 2 Interim Harvest Model output report Relationships among duck population indices and abiotic drivers to guide annual duck harvest management. Professor Marcel Klaassen, Deakin University
- Attachment 3 Summary of stakeholder submissions on the 2024 duck season arrangements
- Attachment 4 Stakeholder submissions on the 2024 duck season arrangements