

**Submission
No 1606**

INQUIRY INTO VICTORIA'S RECREATIONAL NATIVE BIRD HUNTING ARRANGEMENTS

Organisation: BirdLife Australia

Date Received: 8 May 2023

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To:

Select Committee on Victoria's Recreational Native Bird Hunting Arrangements

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East Melbourne, VIC 3002

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Dear Select Committee Members,

BirdLife Australia submission to the Select Committee's Inquiry into Victoria's Recreational Native Bird Hunting Arrangements (the Inquiry)

Thank you for the opportunity to provide input to the Inquiry. BirdLife Australia does not support the recreational hunting of native birds in Australia and its Territories and therefore opposes any arrangements for future native bird hunting seasons in Victoria.

BirdLife Australia is an independent science-based bird conservation charity with over 330,000 supporters throughout Australia. We support research, conduct monitoring and run citizen science programs to inform and guide conservation of native birds and their habitat.

Unfortunately, Eastern Australia's waterbird population, including game species, has declined as much as 90% over the last four decades. Water resource development in the Murray-Darling Basin and climate change has been identified as a significant driver of long-term declines in the abundances of ~50 waterbird species, indicating ecosystem-level change.

BirdLife Australia believes that a precautionary approach should be adopted and ultimately the recreational hunting of native birds should be abolished. We have provided further commentary on our position in the following amendment.

If you have any queries on the submission please contact BirdLife Australia's Campaigns Manager, Andrew Hunter [REDACTED]

Kind regards,

[REDACTED]

Paul Sullivan, Chief Executive Officer

Comments to the Inquiry

Waterbirds are declining

The *Eastern Australian Waterbird Survey* (EAWS), one of the longest running annual waterbird surveys in Australia, has documented significant declines in waterbird populations over the last 40 years.

The 2022 EAWSⁱ report documented that while total waterbird abundance in 2022 had increased it still remained well below long term averages. Furthermore, the report stated that “despite two successive La Nina years three major indices for waterbirds (total abundance, number of species breeding and wetland area index) continued to show significant declines over time.” The study has identified long and medium-term declines in over 50% of Australian waterbirds.

Specifically, duck species identified as “game” continue to show significant long-term declines in their population abundances. Not only is overall game duck abundance low and continuing a trend of decline, but each game duck species has independently undergone decline over the decades of monitoring Figure 1. Long-term trends evident from East Australian Waterbird Survey data, the y-axis is roughly equivalent to

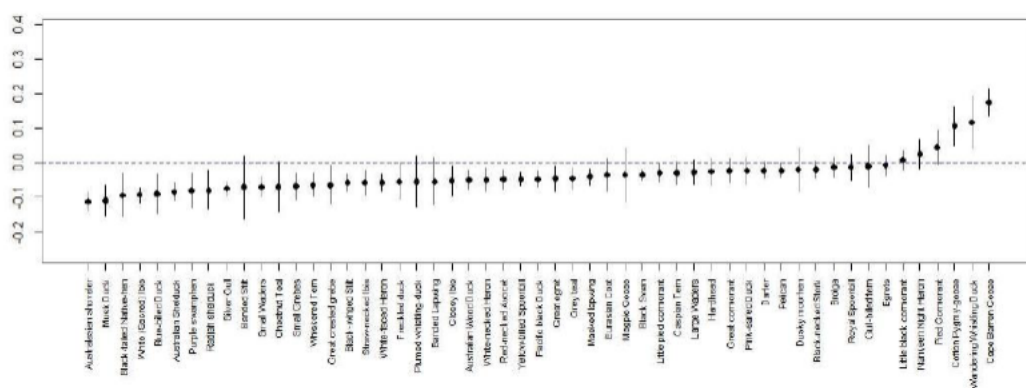


Figure 1. Long-term trends evident from East Australian Waterbird Survey data, the y-axis is roughly equivalent to percentage change per year.ⁱⁱ

percentage change per year.ⁱⁱ

Furthermore, BirdLife's *Waterbird Index* analysed over two million¹ waterbird records from 25 databases (including the EAWS and waterfowl and wetland databases from six state and territory departments) spanning as far back as 1971. The report illustrated that persistent decline is not unique to eastern Australia but may be more pronounced in certain species and/or regions.

¹ Birdlife's reporting selected two million records from over four million utilising only data with sufficient timescales and methods for robust analysis.

The study demonstrated six of the eight game duck species have undergone significant long-term population declines (Table). Although declines were more prevalent across the longer term, trends were also detected continuing over the medium-term for three species and short-term trajectories were trending downwards for seven (Table ,

Table). No game species have shown population recovery.

Table 1. Waterfowl showing wide-spread long-term population declines in Australia, with medium term trends (last 21 years), and short-term trajectories (last 5 years) also reported: Declining = 95% confidence intervals of slope were negative and did not span zero, no trend = insignificant results, increasing = 95% confidence intervals of slope were positive and did not span zero, trajectory in last 5 years was judged visually from 13 year smoothed averaged.

Species	Long-term trend	Medium-term trend	Short-term trajectory
Australian Shoveler	Declining	Declining	Flat
Musk Duck	Declining	Declining	Flat
Blue-billed Duck	Declining	No-trend	Flat
Australian Shelduck	Declining	Declining	Down
Radjah Shelduck	Declining	Declining	Down
Chestnut Teal	Declining	Declining	Down
Freckled Duck	Declining	No-trend	Down
Australian Wood Duck	Declining	No-trend	Down
Pacific Black Duck	Declining	No-trend	Down
Grey Teal	Declining	No-trend	Down

Table 2. Waterfowl, showing no evidence of long-term population declines in Australia, with medium term trends (last 21 years), and short-term trajectories (last 5 years) also reported: Declining = 95% confidence intervals of slope were negative and did not span zero, no trend = insignificant results, Increasing = 95% confidence intervals of slope were positive and did not span zero, trajectory in last 5 years was judged visually from 13 year smoothed averaged.

Species	Long-term trend	Medium-term trend	Short-term trajectory
Pink-eared Duck	No-trend	No-trend	Down

Hardhead	No-trend	No-trend	Down
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The Waterbird Index demonstrated large decreases in waterbird abundance since the 1980s. Furthermore, the boom many populations experienced following the 2010/11 floods in eastern Australia was short-lived and abundance and breeding returned to drought levels, negating hopes of recovery. These large scale-declines point towards a need to review the conservation targets of waterbird species in order to ensure large flocks of waterbirds persist in Australiaⁱⁱ.

Traditionally conservation and monitoring efforts have been focused on species with small populations and/or geographic ranges however, as we are witnessing with waterfowl, seemingly common species are also susceptible to decline.

Such declines in large waterbird populations are perhaps most evident and well documented in migratory shorebird populations. Long-term monitoring projects have allowed us to detect these declines and implement management interventions and policy changes leading to national and international threatened species listings for several species including the Critically Endangered (Commonwealth) Eastern Curlew (Figure 2). A complacency towards the status of common species like Australian game ducks poses a real threat to their long-term conservation especially in species that may be:

- Eruptive or cyclical and hence periodically common.
- Generalists capable of exploiting a wide range of environmental conditions.
- Specialized on widespread environmental conditionsⁱⁱ.

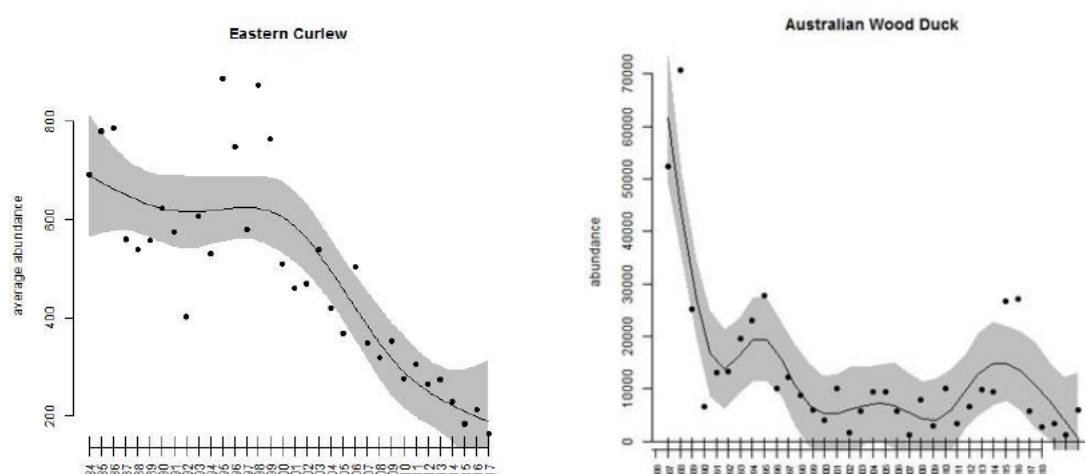


Figure 2. Trends for two declining Australian waterbirds. Eastern Curlew (left) has met criteria for threatened species listing and is recognised as Critically Endangered federally, attracting high conservation priority. Australian Wood Duck (right) has undergone similar declines historically however does not satisfy current threatened species listing criteria and remains unlisted.

Recreational hunting creates an unnecessary additional pressure on declining populations

Despite, the overwhelming evidence of decline the recreational hunting of native birds continues in half of the State/Territory jurisdictions (Table 3) creating an unnecessary additional pressure on both declining waterbirds.

Table 3. Recreational hunting regulations of native birds (ducks and quail) by jurisdiction.

State/Territory	Duck hunting	Quail hunting
Victoria	Yes	Yes
New South Wales	No	No
South Australia ²	Yes	Yes
Tasmania	Yes	Yes
Queensland	No	No
Western Australia	No	No
Northern Territory	Yes	No
ACT	No	No

Recent climate change modeling has illustrated projected scenarios of more frequent and prolonged drought result in reduced wetland resilience and suggest widespread degradation during drought and limited recovery after floods. Prolonged dry periods, low habitat extent and poor recruitment magnify effects of any external threat including huntingⁱⁱⁱ. A population bottleneck may also act to concentrate birds in remaining wetlands making a larger proportion susceptible to hunting and disease (e.g. highly pathogenic avian influenza) pressure further impacting population recruitment.

² A South Australian Parliamentary Inquiry is underway to investigate the hunting of native birds in South Australia with submissions closing on 19 May.
<https://www.parliament.sa.gov.au/en/News/2023/04/19/05/32/SUBMISSIONS-OPEN-Select-Committee-on-Hunting-Native-Birds>

The impacts of climate change and the attendant interventions taken to mitigate impacts on communities – including increased extraction and damming for flood mitigation - disturb the natural wetting and drying processes required for even common waterbird species to maintain their populations let alone recover from periods of extended drought. Australia should be focussed on reducing unnecessary anthropocentric impacts on biodiversity rather than layering them up for the sake of recreation. The science is reflected in accumulating threatened species listings and illustrates that we cannot be complacent when it comes to population decline simply because of outdated perceptions of “abundance”.

Impacts to threatened and non-target species

Furthermore, non-target and threatened species risk impacts from recreational hunting. With wetlands in better condition than previous years, conditions are ripe for breeding and aggregation of higher numbers of threatened wetlands birds and non-game species, increasing the likelihood that they will be adversely impacted by hunting activities. The potential impacts include direct mortality and injury from shotgun pellets and increased disturbance which can in turn cause nesting failures, reduced feeding opportunities, and reduced habitat availability^{iv}.

Notable threatened or non-game species at risk include Australasian Bittern, Australian Painted Snipe, Brolga, Great and Intermediate Egrets, Blue-billed, Freckled and Musk Ducks as well as flocks of migratory shorebirds feeding in wetlands to fuel up for their departure for the northern hemisphere in late March/early April.

Even if these birds are not directly shot, the disturbance to them in their habitat can have drastic and detrimental effects. Nests may be abandoned, courtship rituals for flocking Brolgas can be disrupted, shy and cryptic species that rely on dense fringing vegetation will be spooked into breaking cover.

The two duck species that have come off the game list (Hardhead and Australasian Shoveler) often occur in the same wetlands as targeted game species such as Pacific Black Ducks and Grey and Chestnut Teals. Even if they are not specifically shot at, the disturbance to these birds will be extreme. Shovelers in particular are not easy to identify from Pacific Black Ducks, especially in flight and the risk of accidental deaths to this species is high.

The potential impacts to non-target species are not limited to waterbirds. In Victoria, Stubble Quail, a common small ground dwelling bird, are classified as a “game” species however their range overlaps with several other non-target species with similar appearances. These include several other quail and button-quail species as well as the Critically Endangered Plains-wanderer. The National Recovery Plan for the Plains-wanderer^v states:

Plains-wanderers can occasionally be killed during the quail hunting season as they look superficially similar and are found in the same habitat. Stubble quail (*Coturnix pectoralis*) are a native quail species that can be legally hunted in Victoria. The majority of hunting occurs on private property. There are also 16 State Game Reserves in which hunting is permitted (GMA, 2014). The degree to which quail hunting is impacting upon plains-wanderer survival is largely unknown; however hunting has the potential to have adverse impacts upon the species due to both incidental shooting and interactions between birds and dogs.

Precautionary approach is key

The extinction process begins with a species' decline, perhaps gradually, and perhaps only towards the edge of its geographic range. Often, incipient extinction processes are driven by several threatening processes occurring in concert or over time.

Recognising the early warning signs is crucial to effective and efficient species conservation as the further the decline of a species is allowed to progress, the more difficult and expensive the recovery effort. .

Average "harvest" of game ducks in Victoria is around 325,000. In 2021 it was 1/6 of this (52,000). Yet waterfowl numbers have still not recovered to the levels they were in 2016.

With clear signs of long-term decline and with multiple pressures on waterbirds, including hunting of game species, BirdLife Australia holds that the precautionary principle inherent in international, national and State conservation agreements and legislation must be adhered to.

Australasian (Blue-winged) Shoveler and Hardhead have now been taken off the game list. That it had been permissible to shoot both species until now when evidence showed there was a decline shows that failure to adhere to a precautionary principle has failed these birds which are now listed under Victorian threatened species legislation. In particular, the reduced bag limit for Shovelers that applied over the past couple of seasons did not halt their decline.

Victoria's changing climate adds greatly to the pressure on the ecological condition of Victoria's wetlands and waterbird habitats, affecting things like water availability and breeding conditions.

Furthermore, the accumulation of lead-based shot in wetlands has a long-term detrimental impact on the health of our wetlands and waterbirds. While it is being phased out over 10 years, it will still be used in this year's duck season, accumulating a poison in wetlands that will have an impact for decades to come.

Social and economic impacts

The majority of Victorians do not support the recreational hunting of native birds^{vi} and a 2022 report^{vii} by researcher Rochelle Steven for BirdLife Australia demonstrates the economic value of bird watching and nature-based tourism, a fast-growing niche tourism market in Australia^{viii}. Incorporating data from Tourism Australia and a survey of bird watchers, key findings for the report include:

- According to Tourism Australia data (collected in 2019 prior to the global pandemic), birdwatching day trips were incorporated in the tourism activities of 516 thousand people and 316 thousand overnight stays, generating \$283 million altogether
- Birdwatchers were a particularly lucrative overnight market, spending an average of \$181 per night, more than any other nature based tourism sector.
- Further research indicates both hidden value and future potential for the market. A survey of over 2500 BirdLife Australia supporters showed that 45% always incorporated birding into their holidays, and 35% usually did so. These figures are despite only 14% of respondents classifying themselves as 'keen' birders.
- Birdwatching tourists are keen to contribute to conservation, with the vast majority of respondents indicating they were willing to capture data to contribute to citizen science, and to pay entry fees to key birding sites.

References

- ⁱ Porter, J.L.m Kingsford, R.T., R. Francis, K. Brandis, and A. Ahern (2022). Eastern Australian Waterbird Aerial Survey – October 2022. <https://www.unsw.edu.au/content/dam/pdfs/unsw-adobe-websites/science/bees/ces/Eastern-Australia-waterbird-aerial-survey-2022-Final.pdf>
- ⁱⁱ Lindenmayer, D. B., Wood, J. T., McBurney, L., MacGregor, C., Youngentob, K., & Banks, S. C. (2011). How to make a common species rare: a case against conservation complacency. *Biological Conservation*, 144(5), 1663-1672.
- ⁱⁱⁱ Kingsford, R. T., Bino, G., & Porter, J. L. (2017). Continental impacts of water development on waterbirds, contrasting two Australian river basins: Global implications for sustainable water use. *Global change biology*, 23(11), 4958-4969.
- ^{iv} Menkhorst, P.W. and Thompson, L. (2022). Assessing waterbird susceptibility to disturbance by duck hunters in Victoria (2022 update). Arthur Rylah Institute for Environmental Research Technical Report Series No. 338. Department of Environment, Land, Water and Planning, Heidelberg, Victoria.
- ^v National Recovery Plan for the Plains-wanderer (*Pedionomus torquatus*), Commonwealth of Australia 2016' <https://www.dcceew.gov.au/sites/default/files/documents/national-recovery-plan-plains-wanderer.pdf>
- ^{vi} <https://rspcavic.org/not-all-its-quacked-up-to-be-the-truth-about-duck-hunting/>
- ^{vii} Steven, R. (2022) Bird and Nature Tourism in Australia. KBAs in Danger Case Study Report. Report prepared for *BirdLife Australia*. Carlton, Australia.
- ^{viii} Steven R, Morrison C & Castley JG (2015) Birdwatching and avitourism: a global review of research into its participant markets, distribution and impacts, highlighting future research priorities to inform sustainable avitourism management. *Journal of Sustainable Tourism* 23, 1257-1276