



# Select Committee on Victoria's Recreational Native Bird Hunting Arrangements

**Hearing Date:** 26 May 2023

**Question[s] taken on notice**

**Directed to:** BDO EconSearch, Heather Bailey

**Received Date:** 7 June 2023

## 1. The Chair p. 16

To provide: “there is a significant amount of data that goes into creating the input-output models of the different economies”.

### **Response:**

The data sources included in the RISE input-output models for Victoria and regions include:

Australian Bureau of Statistics (ABS) 2008, Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0), ABS Cat. No. 1292.0, Canberra.

ABS 2017, Household Expenditure Survey, Australia: Summary of Results, 2015-16, ABS Cat. No. 6530.0, Canberra.

ABS 2020, Jobs in Australia, 2011-12 to 2017-18, ABS Cat. No. 6160.0, Canberra.

ABS 2021a, Australian National Accounts: Tourism Satellite Account, 2020/21, ABS Cat. No. 5249.0, Canberra.

ABS 2021b, 2020/21 Australian National Accounts: State Accounts, ABS Cat. No. 5220.0, Canberra (and previous issues).

ABS 2021c, Labour Force, Australia, Detailed, Quarterly, ABS Cat No. 6291.0.55.003, Table 5, Canberra.

ABS 2021d, Consumer Price Index, Australia, Table 5 CPI: Groups, Index Numbers by Capital City, ABS Cat No. 6401.0, Canberra.

ABS 2021e, Australian Statistical Geography Standard (ASGS) Edition 3, ABS Cat No 1270.0, Canberra.

ABS 2022a, 2021 Census of Population and Housing, Canberra.

ABS 2022b, Regional Population Growth, Australia, ABS Cat. No. 3218.0, Canberra.

ABS 2022c, Value of Agricultural Commodities Produced, ABS Cat No. 7503.0, Canberra.

ABS 2022d, Australian National Accounts: Input-Output Tables - Electronic Publication 2019/20, ABS Cat. No. 5209.0.55.001, Canberra.

ABS 2022e, ABS Australian Industry, 2020-21, ABS Cat. No. 8155.0, Canberra.

Australian Taxation Office 2021, Taxation Statistics 2018/19, Table 6 Selected items, by taxable status, state/territory, postcode and taxable income range, 2018–19 income year.

Department of Foreign Affairs and Trade (DFAT) 2022, Trade statistical pivot tables, State by country and SITC pivot table 2012-13 to 2021-22, Canberra

Tourism Research Australia (TRA) 2019, Regional Tourism Profiles 2018/19, Canberra.

TRA 2021a, National Visitor Survey results for the year ending June 2021, Canberra.

TRA 2021b, International Visitor Survey results for the year ending June 2021, Canberra.

## **2. Melinda Bath p. 18**

### **Question asked:**

What the impact is on LGAs, Wellington shire, Latrobe Valley, of that spend? Could you delve a little bit more into that?

### **Response:**

The economic contribution of hunting activity expenditure on these economies in 2019 were estimated in the study to be:

Wellington LGA:

\$5.7 million (comprising \$3.4 million direct and \$2.1 million indirect) contribution to gross regional product (GRP)

66 fte jobs (comprising 48 fte jobs direct and 18 fte jobs indirect) contribution to regional employment

LaTrobe LGA:

\$8.1 million (comprising \$4.8 million direct and \$3.3 million indirect) contribution to gross regional product (GRP)

77 fte jobs (comprising 49 fte jobs direct and 28 fte jobs indirect) contribution to regional employment.

### **3. Georgie Purcell p. 19**

#### **Question asked:**

Can you just go into any steps at all that you did to verify spending? For example, were receipts checked, or was there crosschecking with local businesses that they mentioned?

Heather BAILEY: We have a process there to ensure that people could not submit more than one survey response. I think that is explained in the report, but I cannot be sure that it was. I would need to take that on notice.

#### **Response:**

*Any survey based on a sample of the population, where participation is voluntary, will include biases, unless it is a randomly selected population-wide survey requiring compulsory response.*

The survey was open to hunters with a current Victorian game licence and was not compulsory. There were a number of steps taken to address anticipated biases in the sample data collected.

In developing the survey questions consideration was given to recreational hunting methods, equipment, target animals, seasons and locations, all of which influence a hunter's expenditure. Respondents were asked to outline all of their expenses for one of their trips to inform the economic contribution modelling (to address recall bias).

All current Victorian game licence holders with an email address registered with the Game Licence database were sent an invitation, with a unique survey link. This approach removed the potential for individual licence holders to submit more than one response. Any bias created by using the email contact method was reduced by supplementing the online survey with computer assisted telephone interviews (CATI).

1,671 complete survey responses were used in the analysis.

For on-trip expenditure, survey data were collected about respondents' last trip expenditures, what animal group was mainly hunted on that trip and when that trip occurred. Data were also collected on the total number of recreational hunting trips they took in Victoria in the last 12 months and the breakdown of those trips by main animal hunted. Expenditure data, from respondents' last trips, were extrapolated to all the trips respondents took, by animal group, in the last 12 months. Expenditures were excluded where they occurred outside Victoria.

For off-trip expenditure, survey data were collected about respondents' expenditures and where they occurred. Expenditure on items used for purposes other than recreational hunting was adjusted by the proportion of use on hunting as indicated by respondents for each item. Expenditures were excluded where they occurred outside Victoria.

Information regarding the characteristics of the recreational game hunting population was drawn from an anonymised extract of the Victorian game licence database provided by the Game Management Authority for this project. The data were analysed to estimate the number of game licence holders in each licence category for each age group as enumerated in the survey. The game-hunting population was further split into active (i.e. have hunted in the last 12 months) and non-active hunters (i.e. have not hunted in the last 12 months). This is an important characteristic, as active hunters' expenditure is higher than non-active. The estimates of the proportion of active hunters for each animal group provided by Game Management Authority from the 2019 recreational hunting season survey of game hunters (using random selection of hunters to survey) were used to estimate the numbers of active and inactive hunters in the population. The survey sample of active and inactive hunters was sufficient to weight individual responses for each animal group to match the population level of activity, gender and age distributions for that animal group. Assuming these characteristics are correlated with recreational hunting behaviour, this provides a better estimate of population level activity than simply weighting each response by the ratio of population size to sample size.