Animal Research Statistics Tasmania

Annual Report

Number 29 (2024)

September 2025

Department of Natural Resources and Environment Tasmania

Tasmanian Government

This report has been compiled in accordance with Section 35 of the *Animal Welfare Act 1993* from animal usage statistics submitted by institutions licensed under the Act for the period 1 January 2024 to 31 December 2024.

Animal Research Statistics Tasmania Annual Report Number 29 (2024)
Animal Biosecurity and Welfare Branch
Biosecurity Tasmania
Department of Natural Resources and Environment
GPO Box 44 Hobart 7001
Published September 2025
© Copyright State of Tasmania 2025

Summary **2**

1 Introduction **3**

1.1 Regulation of animal research in Tasmania 3

1.2 Annual reporting in Tasmania 4

1.2.1 Explanation of the reporting format 5

1.2.2 Application of categories 5

2 Animal research activities for 2024 ..... **8**

2.1 Institutions 8

2.2 Animal categories 11

2.3 Purposes 12

2.4 Procedures 13

3 Tables and figures **15**

Table 1 Summary of animal categories used by institutions in 2024 15

Table 2 Animal categories, purposes and procedures in 2024 16

2.1 Animal categories used in 2024 16

2.2 Research and teaching purposes used in 2024 16

2.3 Research and teaching procedures used in 2024 17

Table 3 Summary of animal types used by institutions in 2024 18

Table 4 Purposes and procedures used for animal types in 2024 22

Figure 1 Animal categories used between 2020 and 2024 29

Figure 2 Projects per animal category between 2020 and 2024 30

Figure 3 Purposes for which animals were used between 2020 and 2024 31

Figure 4 Projects per purposes between 2020 and 2024 32

Figure 5 Procedures used between 2020 and 2024 33

Figure 6 Projects per procedures used between 2020 and 2024 34

ABBREVIATIONS **36**

Summary

This report details animal use for research and teaching purposes in Tasmania from 1 January to 31 December 2024. The summaries and analyses in this report are compiled from project data submitted by licensed institutions as required by the *Animal Welfare Act 1993*. The report complies with nationally agreed definitions for the collation of statistics of animal use for scientific purposes and includes data collected on live, non-human vertebrates and cephalopods.

Of the 69 licensed institutions required to report, 36 used animals during the reporting period, comprising 21 Tasmanian resident institutions and 15 institutions head quartered interstate. The Department of Natural Resources and Environment Tasmania (NRE Tas), Zoos Victoria and the Commonwealth Scientific and Industrial Research Organisation (CSIRO) were the only government departments reporting animal use in 2024. There were also 7 academic, 12 not-for-profit institutions and 14 commercial entities.

There were 2 Animal Ethics Committees (AECs) resident in Tasmania supervising projects within the Tasmanian jurisdiction during 2024 – the NRE Tas AEC and the University of Tasmania (UTAS) AEC.

The NRE Tas AEC provided project assessment and monitoring services to 39 external licensed institutions during 2024. 23 of these external institutions reported animal use in 29 projects. The NRE Tas AEC also supervised 11 internal departmental projects that reported animal use during the reporting period.

A total of 301 individual projects were reported in 2024, which is an increase on the previous year when 257 projects were reported. Of these,118 were projects involved in understanding biology and 80 were environmental studies. The remaining projects were undertaken for the purposes of education, health and welfare and/or management and production. In 2024, a total of 660,942 animals or sightings of animals were reported, recording an increase from the 402,146 reported in 2023. Several large bird and native mammal surveys were undertaken in 2024 and thus these were the animal categories accounting for most of this increase in animal use numbers or sightings of animals in 2024.

UTAS continued to be the most active research institution using animals for scientific purposes in Tasmania, reporting data from 228 projects, representing 75.7% of all projects reported. The number of animals reported by UTAS increased from 224,726 in 2023 to 598,892 in 2024. Several wild bird and native mammal observational projects undertaken in 2024 accounted for most of this change. Such significant fluctuations in specific animal use from one year to the next is common in a dynamic research context.

Native mammals was the most numerous category recorded in 2024, accounting for 292,719 animals in 63 projects. Camera trap sighting or observations with minor interference accounted for 290,296 (99.2%) of native mammal use. Birds (mainly in observational studies) were the next most common animal category reported, accounting for 263,808 of animals used in 78 projects. Consistent with this, most animals reported were in environmental studies. Fish accounted for 58,161 animals in 78 projects.

Laboratory rodent use during 2024 involved 6,199 rats and mice. This is a decrease from the 7,320 reported in 2023. A proportion of these laboratory mammals are used in colony establishment or maintenance which fluctuates from time to time, and accounts for some of the variation in laboratory animal use numbers from year to year. The other major contributors to overall numbers were the domestic mammal category (mainly cattle and sheep) representing 26,414 animals and exotic feral animal category representing 11,606 animals, of which most were camera trap sightings. Relatively small numbers of reptiles and amphibians were reported in 2024, as occurred in 2023.

Projects using higher impact procedures of *Minor Operative procedures, Major Physiological challenge, Major Surgery with Recovery, Animal Unconscious, No Recovery and Death as the End Point* procedures accounted for 4.5% of animals used for research purposes and 32.5% of projects undertaken in 2024.

Overall, the relatively low impact procedures of *Camera traps only, Observation with Minor Interference, Minor Conscious Procedure,* and *Minor Physiological Challenge* were applied to 95.5% (or 631,777) animals and were used in 67.5% of projects in 2024.

Only one project in Tasmania in 2024, involving the eradication of feral cat species, had procedures where death was an end point or deliberate measure.

1 Introduction

This report details animal use for research and teaching purposes in Tasmania from 1 January to 31 December 2024. Section 1 provides background information about the legislative requirements for reporting and how the data is compiled each year, noting any significant changes to the procedures that may affect comparisons. Section 2 outlines the animal use in Tasmania during the reporting period. Summary statistics are provided in Section 3.

1.1 Regulation of animal research in Tasmania

Animal research in Tasmania is regulated via several mechanisms:

(a) Animal Research Legislation

Part 4 of the *Animal Welfare Act 1993* (the Act) deals with animal research including teaching. Since proclamation of this part of the Act on 1 April 1996, institutions are required to be licensed by the Minister if they wish to use animals in research and teaching in Tasmania.

The Act allows licensed institutions to conduct animal research as approved by Animal Ethics Committees (AECs) in a self-regulatory environment. The institutions are, however, subject to inspection by Inspectors of Animal Research at least on an annual basis. In practice this is applied as an ongoing monitoring program with emphasis on ensuring the respective AECs are compliant and functioning and institutions are fulfilling their responsibilities according to the approved Code of Practice.

The definition of 'animal research' in the Act is:

'a procedure, test, experiment, inquiry or study on an animal which –

(a) is undertaken to develop, demonstrate or acquire knowledge, or techniques, in an area of science or teaching; and

(b) is likely to have a significant adverse effect on the welfare of the animal.'

Regulation 7 of the *Animal Welfare (General) Regulations 2013* provides for an inspector to determine whether an activity is or is not animal research. A precautionary approach is used in these determinations, based on an assessment of the risk of welfare compromise from the proposed use of, for example, novel techniques, therapeutics, nutrients, or changes in habitat. It should be noted that an institution may permit their AEC to approve research activities that require approval, for example for funding or publishing purposes, which have been previously determined by the inspector not to be research. It has become increasingly common for research journals to require projects involving the use of animals be undertaken under animal ethics approval in order for the research to be accepted for publication.

The Act has provision for the inclusion of additional species by regulation within the meaning of 'animal' for particular purposes under the Act. The class *Cephalopoda,* which includes octopus, cuttlefish, nautilus and squid, was afforded this status of 'animals' for the purposes of research in January 2009. The reporting of cephalopods has been mandatory since then.

(b) The Code

A core condition of licensing is compliance with the approved Code of Practice. Currently this is the nationally agreed *Australian Code for the Care and Use of Animals for Scientific Purposes 8th edition (2013)* (the Code). The Code and associated reference documents are published by the National Health and Medical Research Council (NHMRC) and provide specific requirements and guidance for the use of animals for scientific purposes to investigators, teachers, institutions and AECs. The eighth edition of the Code received Ministerial approval in October 2013, superseding the seventh edition. The Code was updated in 2021 to incorporate a new Section 7: Cosmetic Testing. No change in statistical reporting came about as a result of the new Code coming into operation.

The Code requires that a decision to use animals must be properly justified, and animals may only be used after due consideration of the '3Rs' (replacement, reduction and refinement). The principles of the '3Rs' are, in brief, that animals may only be used where there are no alternatives enabling ***replacement*** of animals with other methods; where ***reduction*** is applied such that the number of animals used is absolutely necessary to achieve the aims of the project;

and where ***refinement*** of techniques is used to reduce the welfare impact on animals approved for use and promote the animals' wellbeing.

Provided research and teaching activities are properly approved and monitored within a licensed institution by its AEC, and the institution, its AEC and researchers and teachers comply with the Code, the use of animals for research and teaching is protected from sections 8 and 9 of the Act *(*cruelty and aggravated cruelty). While sections 8, 9 and 10 of the Act do not apply to the reasonable use of fish in commercial and recreational activities, the research provisions do apply to aquatic vertebrates and cephalopods as well as terrestrial vertebrates.

Research project proposals are examined, approved and monitored by an AEC that has been constituted and authorised by the institution in compliance with the approved Code. Institutions that have too few projects or are not sufficiently resourced to have their own AEC may use the services of another institution's AEC. For instance, in 2024, 39 external institutions were approved to use the NRE Tas AEC services for project assessment and monitoring: of these institutions, 23 used animals in the reporting period.

(c) Licensing

Any individual or organisation may apply to be a licensed 'institution' for the purposes of conducting animal research in Tasmania. The conditions of the licence require compliance of the institution and any persons under its auspices with the Tasmanian animal welfare legislation and the approved Code.

Licence applicants from outside Tasmania must agree to comply with the Code and provide evidence that they are equivalently licensed in their resident jurisdiction to ensure adequate monitoring of their AEC's compliance with the Code by an equivalent regulator.

Institutions that share another institution's AEC must do so via a formal sharing agreement that complies with the principles set down in the Code and that also address any other issue specific to the host or external institution.

(d) Annual reporting

Institutions are required to provide an annual report to the Minister on their activities in relation to animal research under section 35 of the Act. The report is to contain *the numbers and types of animals used* and *the types of animal research carried out*. A report summarising the institutional reports (this document) is to be tabled in both Houses of Parliament prior to 30 September each year.

(e) Inspectors

The Minister appoints inspectors under section 36 of the Act. Inspectors advise the Minister on matters relating to the granting and cancellation of licences, the conduct of the AECs and general compliance with the approved research Code of Practice. The monitoring of compliance includes the inspection of animal holding facilities within each institution, attending meetings of AECs and the collation of the annual State report. Inspectors have specific powers to investigate suspect non-compliance with the animal research provisions of the Act.

(f) Permits for wildlife and fisheries

Institutions intending to use wildlife, including native fish, for scientific purposes must also apply to the NRE Tas's Environment, Heritage and Land Division and the Inland Fisheries Service for appropriate permits.

1.2 Annual reporting in Tasmania

A reporting format was developed by the then Code Liaison Group (now known as the Code Reference Group or CRG) of the NHMRC for the purpose of compiling annual national statistics. It was endorsed by the Tasmanian Animal Welfare Advisory Committee as suitable for State reports to avoid NHMRC-funded institutions having to duplicate reporting effort.

During 2007, regulators from all states and territories agreed on an amended animal category and type list with animals grouped into more logical categories. This list was supported by the CRG and was used for the 2007 report in Tasmania and nationally from 2008. The calendar year reporting period is used as it is consistent with most other agencies' collecting animal use statistics.

Data is submitted by the responsible investigator for each project during the calendar year and collated into a standard spread sheet by their institution. If no animals were used in the reporting period despite approval to do so, the project is not included in this report.

Meaningful reporting of wild animal use that may be described as using indirect or proxy procedures, such as the collection of feathers from vacated nests, remains a contentious area and is best resolved on a case-by-case basis by the AEC involved during the project approval process where factors such as animal disturbance and damage to habitat can be explored.

Only animals used in the Tasmanian jurisdiction are required to be noted in this report. There are, however, animals used in other jurisdictions or Commonwealth waters that are reported by licensees where they have no alternative means of reporting. Where these reports impact significantly on the data or interpretations presented in this report they are noted.

Each jurisdiction collects data on animals that fall within its legislative scope. If comparing data across jurisdictions, it should be noted that, for example, fish or cephalopods may not be required to be reported in some jurisdictions. Similarly, Tasmania does not require reporting of decapod crustaceans although 'crustaceans' are included if reported.

The Tasmanian animal use statistics are published on the NRE Tas website once they have been tabled in Parliament (https://nre.tas.gov.au/biosecurity-tasmania/animal-biosecurity/animal-welfare/animal-research#Annualreportingofanimalusestatistics). Most other Australian jurisdictions also publish a summary report as a minimum. A national repository of animal use statistics is no longer maintained.

1.2.1 Explanation of the reporting format

The reporting spread sheet requires the selection of one option from a drop-down list in each of the three main areas listed below (purposes, procedures and animals). All projects are reported separately.

A project sometimes has multiple purposes, and it is quite common for a project to deploy multiple procedures and use multiple animal categories, and these are reported separately for each project. Examples of the types of activities that should be reported within each procedure group are provided in the reporting spread sheet to improve reporting precision.

Like previous reports, animals may be deployed to or simply observed in multiple projects in the reporting period. This leads to a degree of double counting that cannot be avoided. The overall number of individual animals used is therefore likely to be an overestimate and may be more precisely understood to be 'uses'. However, the numbers reported against purposes and procedures are considered accurate.

The inclusion of comments within the reporting format enables some contextualisation of the animal use and assists with resolving double counting issues.

1.2.2 Application of categories

Animal categories - within each animal category there are several types. Sub-types may also be included where it is considered they are of particular interest to the State. For reporting purposes, the term 'animal' covers fully metamorphosed juveniles, embryos in the latter half of gestation, eggs in the latter half of incubation and larval fish that can feed independently. This definition complies with the National Statistics of Animal Use for Scientific Procedures and is consistent with the Code. However, all life stages of relevant species are included under the Act.

The categories routinely reported against are:

Amphibians

Aquatic animals (non-mammalian)

Birds

Domestic mammals (including livestock species)

Exotic feral mammals

Exotic zoo animals

Laboratory mammals

Native mammals (including marine mammals)

Primates

Reptiles

Projects involving exotic zoo animals or primates have not been conducted in Tasmania for some time although those options remain available.

Purpose of Project – categorises the reason/s for the study.

Understanding Biology e.g. comparative anatomy studies, animal physiology, adaptations of wild animals, wildlife survival studies.

Health and Welfare e.g. cancer research, drug therapy, residue and toxin testing, vaccine development.

Management or Production e.g. effect of nutrition supplements, evaluating husbandry techniques, animal production trials.

Education e.g. classroom studies on animal behaviour or physiology.

Environmental Study e.g. population surveys, acquisition of museum specimens.

Procedures used – broadly describes the severity of the procedures used (i.e. the impact on the animal).

The following procedures are reported on:

Camera Trapping Only: This category was introduced in the 2014 report. It was previously included in *Observation Involving Minor Interference*). It refers to studies exclusively using continuous or motion-triggered photographic recording of animals via fixed cameras with or without lures/baits in the aquatic or terrestrial environment. Note that camera trap numbers relate to sightings rather than individual animals as it is usually not possible to differentiate between individuals of the same species.

Observation Involving Minor Interference: studies in which the normal activities of animals are impacted in a minor way.

Examples of Observation Involving Minor Interference:

- Wildlife studies involving repeated spotlighting or intrusion into groups of animals or nursing animals.
- Feeding trial, such as Digestible Energy determination of feed in a balanced diet.
- Behavioural study with minor environmental manipulation.
- Teaching of normal, non-invasive husbandry such as handling, grooming, etc.
- Production of products, such as hormones or drugs, in milk or eggs from genetically modified animals that are subject to normal husbandry procedures only.

Note some observational data collection has no conceivable impact on animals. For instance, the detection of bat species by recording echolocation calls or collection of scats in the wild environment. Where an institution identifies and reports such activity it is recorded against their name, but no further reference is made in the report.

Minor Conscious Procedure: animal is subjected to minor procedures that would normally not require anaesthesia. Any pain is minor or short term and analgesia is usually considered unnecessary although it may be used; some distress may occur as a result of trapping or handling.

Examples of Minor Conscious Procedure:

- Tail tipping and toe clipping for identification of animals.
- Injections, blood sampling in conscious animal.
- Minor dietary or environmental deprivation or manipulation, such as feeding nutrient-deficient diets for short periods.
- Trapping and release as used in species impact studies, etc.
- Trapping and humane euthanasia for collection of specimens.
- Shearing and similar livestock management practices.

Minor Operative Procedure with Recovery: animal is rendered unconscious, with as little pain or distress as possible. A minor procedure such as cannulation or skin biopsy is carried out and the animal is allowed to recover. Depending on the procedure, pain may be minor or moderate and post-operative analgesia may be appropriate.

Field capture using chemical restraint methods is also included here.

Examples of Minor Operative Procedure with Recovery:
- Biopsies under anaesthesia or sedation.
- Cannulations under anaesthesia or sedation.
- Sedation/anaesthesia for relocation, examination, or injections/blood sampling.

Major Surgery With Recovery: generally, animal is rendered unconscious, with as little pain or distress as possible. A major procedure such as abdominal or orthopaedic surgery is carried out and the animal allowed to recover. Post-operative pain is expected to be considerable and requiring analgesia if possible.

Examples of Major Surgery with Recovery:
- Orthopaedic surgery.
- Abdominal or thoracic surgery.
- Transplant surgery.

Minor Physiological Challenge: animal remains conscious for some or all of the procedure. There is interference with the animal's physiological or psychological processes. The challenge may cause only a small degree of pain/distress or any pain/distress is quickly and effectively alleviated.

Examples of Minor Physiological Challenge:
- Minor infection, minor or moderate phenotypic modification, early oncogenesis.
- Arthritis studies with pain alleviation.
- Prolonged deficient diets, induction of metabolic disease.
- Polyclonal antibody production.
- Antiserum production.

Major Physiological Challenge: animal remains conscious for some or all of the procedure. There is interference with the animal's physiological or psychological processes. The challenge causes a moderate or large degree of pain/distress which is not quickly or effectively alleviated.

Examples of Major Physiological Challenge:
- Major infection, major phenotypic modification, oncogenesis without pain alleviation.
- Arthritis studies with no pain alleviation, uncontrolled metabolic disease.
- Isolation or environmental deprivation for extended periods.
- Monoclonal antibody raising in mice.

Animal Unconscious Without Recovery: the animal is rendered unconscious under controlled circumstances with as little pain or distress as possible. Any pain is minor and brief and does not require analgesia. Procedures are carried out on the unconscious animal that is then killed without regaining consciousness.

Examples of Animal Unconscious Without Recovery:
- Laboratory mammals killed humanely for dissection, biochemical analysis.
- Teaching surgical techniques on live, anaesthetised animals that are not allowed to recover following the procedure.

Note that in Tasmania research involving trawling of wild fisheries is included within this procedural group as it is considered to describe more accurately the impact on the individual animal captured this way. Although trawling results in the death of most animals captured, death is not a measure in itself and is thus not considered to be a 'death as the end point' activity (see below).

Death as the End Point: the aim of the experiment requires the animal to die unassisted, i.e. not euthanised, as death is a critical measure of the experimental treatment.

Examples of Death as the End Point:
- Toxicological experiments (e.g. ascertaining LD50s)
- Assessing the relative resistance to the effects of infections if euthanasia cannot be provided at any stage to achieve the aim of the experiment.

2 Animal research activities for 2024

2.1 Institutions

There were 69 licensed institutions required to report animal use during 2024. They are listed below.

ADE Consulting Group (QLD) Pty Ltd, Queensland (no animal use in 2024)

Agscent, NSW (no animal use in 2024)

Apiam Animal Health, Victoria (no animal use in 2024)

Australian National University (ANU), Australian Capital Territory

Australian Veterinary Serum Laboratory (AVSL) New South Wales

Australian Ocean Biotechnology Pty Ltd, (AOB) Tasmania

Biosis Pty Ltd, Victoria (no animal use in 2024)

Birdlife Tasmania (Birdlife), Tasmania

Bookend Trust, Tasmania

Bush Heritage Australia, Victoria

Central Queensland University, Queensland (no animal use in 2024)

Charles Sturt University, New South Wales

Commonwealth Scientific and Industrial Research Organisation, (CSIRO)

Dairy Systems Pty Ltd Tasmania (no animal use in 2024)

Dawbuts Pty Ltd, NSW

Deakin University (Deakin), Victoria (no animal use in 2024)

Department of Natural Resources and Environment Tasmania (NRE Tas), Tasmania

Derwent Estuary Program (DEP), Tasmania

Elanco, New South Wales (no animal use in 2024)

Entura, Tasmania

EnviroDynamic, Tasmania

Flinders University, South Australia (no animal use in 2024)

Fonterra Co-operative Group Limited, Victoria

Freshwater Biomonitoring (Freshwater), Tasmania

Friends of Maatsuyker Island (FoMI), Tasmania

Gallagher eShepherd Pty Ltd, Queensland (no animal use in 2024)

GHD Tasmania Pty Ltd (GHD), Tasmania

Gray, Paul, (Independent researcher), Tasmania

Huon Aquaculture Co Pty Ltd, Tasmania (no animal use in 2024)

Jacobs Group, Victoria

James Cook University, Queensland (no animal use in 2024)

Kannunah Pty Ltd, Tasmania (no animal use in 2024)

Landscape Recovery Foundation (LRF) Tasmania

Macquarie University (Macq Uni), New South Wales (no animal use in 2024)

Melbourne University (Melb Uni) Victoria

Monash University (Monash), Victoria (no animal use in 2024)

Mooney Nick Independent researcher, Tasmania

Murdoch University (Murdoch), Western Australia

Natural Resource Management –North (NRM Nth), Tasmania

Natural Resource Management –South (NRM Sth), Tasmania (no animal use in 2024)

Nature Advisory P/L, Victoria

Nature Glenelg Trust (NGT) South Australia (no animal use in 2024)

New South Wales Department of Primary Industries, New South Wales (no animal use in 2024)

North Barker Ecosystem Services (North Barker), Tasmania

Orion Training and Performance Management P/L (Orion), Queensland

Peden Susan, Independent researcher, Tasmania (no animal use in 2024)

Pinion Advisory, Tasmania

Queen Victoria Museum and Art Gallery (QVMAG) Tasmania

RTV Training, Tasmania (no animal use in 2024)

Sea Forest Pty Ltd, Tasmania

Sustainable Timber Tasmania (STTAS), Tasmania (no animal use in 2024)

Tasmanian Aboriginal Centre (TAC), Tasmania (no animal use in 2024)

Tasmanian Farmers and Graziers Association (TFGA) Tasmania (no animal use in 2024)

Tasmanian Land Conservancy (TLC), Tasmania

Tassal Operations Pty Ltd (Tassal), Tasmania (no animal use in 2024)

Treidlia Biovet Pty Ltd (Treidlia), New South Wales (no animal use in 2024)

University of Adelaide (UAdelaide), South Australia

University of New England, New South Wales (no animal use in 2024)

University of New South Wales (UNSW), New South Wales (no animal use in 2024)

University of Queensland (UQLD), Queensland (no animal use in 2024)

University of Sydney (USydney), New South Wales

University of Tasmania (UTAS), Tasmania

University of Technology Sydney, New South Wales (no animal use in 2024)

Victorian Department of Energy, Environment and Climate Action (DEECA) Victoria (no animal use in 2024)

Victorian Wader Study Group Inc (VWSG), Victoria

VPocus (Veterinary Point of Care Ultrasound Scanning), New South Wales (no animal use in 2024)

Western Sydney University, New South Wales (no animal use in 2024)

Zoetis Australian Research and Manufacturing, New South Wales, (no animal use in 2024)

Zoos Victoria (Zoos Vic) Victoria

There were two AECs resident in Tasmania (NRE Tas and UTAS) in 2024.

Of the 69 licensed institutions, 36 reported animal use in Tasmania in 2024. The active institutions comprised 21 Tasmanian resident and 15 head quartered interstate.

The number and variety of institutions conducting animal research in Tasmania fluctuates according to academic and commercial interests for the period. Licensed institutions include the CSIRO, environmental consultants, corporate farmers, individuals, or not-for-profit organisations as well as the conventional academic and government research entities.

The 21 Tasmanian resident institutions using animals in 2024 comprised one academic institution (UTAS), one government department (NRE Tas), 8 commercial entities and 11 not-for-profit organisations. Interstate institutions using animals comprised two Government entities (CSIRO and Zoos Victoria), 6 academic institutions, 6 commercial entities, and one not-for-profit organisation. There were no overseas institutions licensed in the state during 2024.

Table 1 lists the institutions that used animals, and the categories and numbers of animals involved, including a comparison with 2023 data. Table 2.1 summarises animal categories used; Table 3 provides detail on the types of animals used by each institution, and Figure 1 provides a 5-year visual comparison.

In 2024, 660,942 animals or sightings of animals were reported within 301 projects (compared to 402,146 in 257 projects in 2023).

The major contributor to this increase in animal use over 2023 figures, was an increase in the numbers of native mammals and birds (see sections 2.2 and 2.4) reported in native mammal surveys and wild bird observational studies respectively.

Changes in the number of individual projects provides a rough guide to the level of activity an institution is engaged in or the level of interest an animal category or purpose is attracting from one reporting period to the next. This report includes figures illustrating the relative level of activity over the past five years in terms of project number per categories of animals (Figure 2), purposes (Figure 4) and procedures (Figure 6). Care should be taken interpreting this data on an institutional basis as projects may be the result of a licensed institution contracting or otherwise collaborating with another licensee ('lead' institution) to provide the research service entirely or a proportion of projects. The data from collaborative projects is therefore reported by the 'lead' institution to avoid double counting and maintain commercial-in-confidence.

UTAS continued to be the most active institution in Tasmania during 2024, with 228 or 75.7% of all projects reported (Table 1), compared to 163 projects in 2023, using or sighting 598,892 animals. All animal categories were represented in the UTAS report. The number of animals reported by UTAS in 2024 increased compared to the number of animals used or sighted in 2023 (224,726). The increase was due mainly to increased sightings recorded in wild bird and native mammal observational projects or camera trap surveys assessing native and domestic animal ecosystems.

NRE Tas's Environment, Heritage and Land Division and Biosecurity Tasmania reported animal use in 6 and 5 projects respectively identifying a total of 3,503 animals or 0.33% of all animals reported in 2024. In 2023, 2,196 animals were reported in 8 and 8 projects respectively. The increased animal use or sightings reported in 2024 compared to 2023 was mostly due to several projects involving the development of salmonid fish vaccines. Other NRE Tas projects included a wide variety of subjects from Tasmanian devil and orange bellied parrot conservation, feral cat and feral pig control strategies through to the impact of ectoparasites on livestock in Tasmania.

Projects conducted by commercial entities involved aquatic animals in ecological surveys of waterways for various development or monitoring purposes, fauna and bird surveys for terrestrial development purposes and sheep and cattle in projects aimed at improving sheep and cattle health, welfare and production.

In 2024, all not-for-profit organisations reporting animal use in 2024 were supervised by the NRE Tas AEC and accounted for 9,113 animals (compared to 6,284 animals in 2023) in 16 projects. Of these projects, 8 involved wild bird research, 4 involved native terrestrial wildlife research and 3 reptile surveys.

Seven academic institutions were active in Tasmania during 2024. Apart from UTAS, academic institutions reported a total of 6,071 animals (compared with 3,568 were reported in 2023), with each institution having between 1 to 3 projects targeting a small range of animal categories, with birds, domestic, feral and native mammals featuring.

Of the 39 external licensees using the NRE Tas AEC in 2024, 23 reported animal use, totalling 42,799 animals in 29 projects. Commercial enterprises using the NRE AEC (Australian Ocean Biotechnology, Entura, Enviro Dynamic, Fonterra, Freshwater Biomonitoring, Jacobs Group, Nature Advisory, North Barker Ecosystems, Orion Training,

Pinion Advisory and Sea Forest) reported a total of 33,686 animals across 13 projects, noting that one large observational bird survey accounted for 27,851 of these animals.

Apart from NRE Tas, CSIRO and Zoos Victoria were the only government departments reporting animal use in 2024. CSIRO undertook 10 projects in Tasmania in 2024 involving 9,052 animals (601birds, 50 sheep and 8,401 fish).

2.2 Animal categories

Tables 1 and 2.1 summarise the number of animals and projects reported within animal categories for 2024. Table 3 provides detail on the types of animals within each category used by each institution. Figures 1 and 2 illustrate a rolling 5-year distribution of animals and projects respectively within animal categories.

Native mammals were the most active area of research for 2024 in terms of animal numbers. 292,719 native mammals were reported in 2024, which is a large increase from the 134,142 reported in 2023. Several large camera trap or observational surveys undertaken in 2024 accounts for most of this animal use, Native mammals were also the most common category in terms of project numbers. There were 63 projects using native mammals in 2024, up from 52 in 2023. In 2024 UTAS projects accounted for 286,181 native mammals reported. As in previous years, camera trap sightings, observational studies and environmental surveys accounted for most of the native mammal animal use in 2024. Three UTAS projects alone in 2024, using camera traps only, accounted for 274,995 (94%) native mammal sightings. Camera trap sightings or observations with minor interference accounted for 290,296 (99.2%) of native mammal use.

Birds were the second most active area of research for 2024 in terms of animal numbers and accounted for 263,808 animals used in 2024. This also is a large increase from the 41,598 reported in 2023. There was also an increase in the number of projects using birds, from 69 in 2023 to 78 in 2024. Fluctuations in specific animal use and sightings from one year to the next is common in a research context, particularly in projects recording wild bird camera trap or observational sightings. Two projects using camera traps or observation accounted for 233,703 bird sightings in 2024. Camera trap sightings or observations with minor interference accounted for 263,307 birds reported which is 99.8% of bird use in 2024. Projects involving birds included surveys to assess seabird populations and ecosystem recovery, investigations to assess conservation requirements of Tasmanian threatened bird species, the impacts of humans and pollutants on bird health and mapping migration patterns.

Aquatic animals accounted for 58,161 animals used in 2024, which is a decrease from the number (181,245) used in 2023. All of these aquatic animals were fish. The number of projects using aquatic animals increased from 60 in 2023 to 78 in 2024. Fish and birds (which also had 78 projects) were the most active area of research for 2024 in project terms. The largest user of aquatic animals was UTAS, using a total of 46,998 aquatic animals (compared to 38,061 in 2023), all of which were fish. Aquatic research projects included a range of subjects, for example surveys to assess impacts of terrestrial activities on marine biodiversity, monitoring fish habitat restoration, aquaculture production and the impacts of elevated temperatures on salmonids, conservation strategies for threatened marine species, teaching fish handling and aquaculture production techniques and developing fish vaccines. 590 Zebra fish were used in a biomedical research project investigating cataract formation.

In 2023 many of the fish recorded (136,092) were caught via trawling in 2 projects as part of marine surveys for research purposes. These marine surveys projects were not undertaken in 2024, hence the significant decrease in fish numbers reported in 2024, compared to 2023. No institutions reported the use of cephalopods in 2024.

Currently crustaceans do not need to be reported. However, sometimes institutions may include crustaceans' numbers despite this not being a requirement. If reported, these animal numbers are usually included in this report for interest. In 2024 no use of crustaceans was reported.

Domestic mammal use in 2024 involved 26,414 animals used in 37 projects, which is similar to the number reported in 2023 (26,956 in 37 projects). In 2024 9,068 were recorded as part environmental surveys using camera traps only. A further 12,963 were recorded in observational studies which included assessing feed additives, reproductive programs and management systems. Most other projects involving domestic mammals involved livestock management programs aiming to improve animal welfare, health outcomes or breeding success of terrestrial livestock species.

Exotic feral mammal use involved 11,606 animals, which was greater than that reported in 2023 (9,171). Most projects in 2024 involved camera trap sightings or observation with minor interference procedures and involved 99% of animal use in this category. The projects involved mainly cats, rabbits, rats and mice.

Laboratory mammal use involved 6,199 mammals (all rodents) in biomedical research in 2024. This was a decrease compared to 2023 figures when 7,320 laboratory mammals were reported. Some of these fluctuations in animal use numbers may occur due to colony establishment and maintenance, which varies from time to time. The number of animals maintained in breeding colonies fluctuates with specific project requirements and is therefore highly unpredictable. There were 57 projects using laboratory mammals in 2024, which is an increase compared to the 45 projects reported in 2023. Some 117 rats and mice were used for training and assessment of rodent experimental techniques.

Reptile use in 2024 involved 2006 lizards and other reptile species in 30 projects, up from 1,634 reptiles used in 19 projects in 2023. UTAS projects accounted for most (over 98.6%) of the reptiles reported in 2024. The remainder were reported as part of ecological surveys.

Amphibian use in 2024 involved 29 frogs in 9 projects. Most were reported a part of environmental and ecological surveys.

2.3 Purposes

Table 2.2 summarises the research and teaching purposes for which animals were used during 2024. Figures 3 and 4 illustrates a rolling 5-year distribution of animals and projects respectively within purposes. Table 4 presents the details on the purposes and procedures applied to animal types within categories.

Management and production research used a larger number of animals (226,993) in 36 projects compared to the 15,589 reported in 25 projects in 2023. The majority of animals used for this purpose were birds (205,875), cattle and sheep (9,744), fish (7,095), and laboratory mice and rats (2,477), as part of rodent colony management, maintenance and breeding projects. In 2023 most animals used for this purpose were fish (8,784), cattle (1,570), sheep (1,125) and laboratory mice and rats (2,540 and 450 respectively). Almost all the 205,875 birds in this category in 2024 were reported in a single project assessing wildlife on Macquarie Island. This project mostly accounts for the large increase in animals reported in this category in 2024. There was also an increase in domestic mammal use in this category. Two observational studies assessing grazing and feeding systems involving 3,812 sheep and 1,200 cattle and a project aimed at improving lamb survival and involving 3,335 sheep accounts for most of the domestic mammal use in this category.

Environmental studies used 225,442 animals (or 34%) in 2024. This is a decrease in the number of animals used or sighted for this purpose compared to that used or sighted in 2023 (308,375), The majority of these animals were recorded in camera trap or observational studies. The number of projects (80) also decreased slightly compared to the 84 projects undertaken in 2023 for this purpose. Environmental projects involved large numbers of macropods (69,316), wild birds (55,966), possums (34456) and fish (28,048), however, almost all animal categories and types were represented.

Understanding biology projects used192,650 animals in 118 projects in 2024, compared to 62,627 animals and 99 projects in 2023. This is an increase in animal use numbers and continues the upward trend that had been occurring since 2022. Native mammals (167,518), fish (19,005), laboratory mammals (3,282) and wild birds (816) featured, accounting for over 99% of animals reported in this type of project. Fish (14,563), native mammals (32,218), wild birds (10,572) and laboratory mammals (3,633) accounted for over 97% of animals reported in this type of project in 2023.

Health and welfare studies reported a decreased level of animal use in 2024 (11,879 animals) when compared to that used in 2023 (12,463). However, the number of projects conducted for this purpose increased from 37 in 2023 to 51 in 2024. As has been the case for several years, most projects and animals used in this area were livestock (6,542 in 2024 compared with 6,670 in 2023), fish (3,577 in 2024 compared with 4,737 in 2023), or laboratory mice and rats (323 in 2024 compared with 385 in 2023) aimed at improving livestock, salmonid or human health and welfare respectively.

Education projects reported for 2024, used a similar number of animals (3,978) to those reported in 2022 (3,583), and involved 18 projects which is the same number of projects in this category in 2023. 120 of the animals used in this category were laboratory rodents used in the training of experimental techniques (compared to 312 in 2023). Observational bird, domestic mammal and fauna surveys undertaken as part of a teaching program by UTAS accounted for majority of animal use in this category. 436 fish, 543 birds, 930 domestic mammals and 1,952 native mammals were used or sighted in educational projects.

2.4 Procedures

Table 2.3 summarises the procedures used on animals during 2024. Figures 5 and 6 illustrate rolling 5-year distributions of animals and projects respectively, according to various procedural categories. The procedures are listed below in descending order of animal use; procedures are listed in the tables in ascending order of welfare impact.

Observation with Minor Interference procedures were applied to 312,752 animals in 128 projects in 2024. This is an increase on 2023 figures of 118,113 animals in 118 projects. Birds (256,712), aquatic animal (31,240), domestic mammals (12,876) and native mammal (11,727) surveys were the main users of observational procedures in 2024.

Camera Traps Only sightings increased markedly during 2024 with 309,337 sightings reported in 24 projects. This is compared to 111,869 sightings in 15 projects in 2023. Most of the sightings were recorded in environmental projects, with the remainder in management and production projects. Most sightings were of native mammals (278,569) followed by domestic mammals (9,068), exotic feral mammals (7,986), fish (3,823) and birds (5,426).

Animal Unconscious, No Recovery procedures were applied to 25,101 animals in 80 projects. The number of projects using these procedures, is greater than that in 2023 (72 projects), though the number of animals used in these projects was markedly decreased compared to 2023 (154,205). In Tasmania research involving trawling of wild fisheries is included within the *Animal Unconscious Without Recovery* procedural group. In 2023 there were two large marine surveys for research purposes which involved trawling and the use of 136,092 fish and these surveys accounted for 88% of animals recorded in this category in 2023. These fish were retained as specimens and were not subject to any other procedures. These marine surveys were not undertaken again in 2024, hence the marked difference in animal use numbers in this category over the two years. In 2024 these procedures were applied mainly to fish (18,951) and laboratory mammals (5,827) as has been the case for several years. With regard to aquatic animals, these procedures were applied in wild fisheries, aquaculture disease management and production projects and a biomedical project involving zebrafish. The large representation of laboratory mammals is consistent with the invasive nature of some biomedical research where recovery is not in the interests of the animal.

Minor Conscious Procedures were applied to 8,551 animals across 62 projects in 2024, which was a decrease in relation to the number of animals used but an increase in relation to the number of projects compared to 2023 figures (14,035 animals used in 59 projects). These procedures were applied mainly to aquatic animals (289), laboratory mammals (68), native mammals (2168), birds (501), cattle and sheep (3970) and reptiles (1361). Minor conscious procedures were applied in projects addressing population monitoring (e.g. via bird banding and telemetry), domestic and wild animal disease (eg via blood sampling, tagging for identification of domestic species or trapping and release of wild species), genetic surveillance and habitat use.

Minor Operative Procedures With Recovery were applied to 2,471 animals in 2024. This is a slight increase on the 2023 figure (2,345). There was a slight decrease in the number of projects using this procedure, with 17 in 2024 (compared to 19 in 2023). These procedures are generally applied to a wide range of animals as they include anaesthesia with recovery – a common procedure for restraining wild mammals, fish, and birds. In 2024, 2,000 (81%) of animals subjected to these procedures were fish species addressing specific disease issues.

Major Surgery With Recovery procedures were applied to 1,955 animals in 2024 in 11 projects. (In 2023 these procedures were applied to 234 animals in 4 projects). These procedures were applied to fish and laboratory mice involved in neuropathology research.

Minor Physiological Challenge was applied to 1,137 animals across 15 projects in 2024. Projects using this procedure included a livestock drench trial, development of vaccines and an investigation into the effectiveness of enrichment as a management tool for farmed species. These procedures were applied to 263 animals across 3 projects in 2023.

Major Physiological Challenge was applied to 215 animals in 1 project in 2024. This was a decrease in both project numbers and animal use numbers compared to the 1,057 animals used in 2 projects in 2023. All animals undergoing this procedure in 2024 were part of a project concerned with increasing genetic diversity of captive animals. No laboratory rodents underwent this procedure in 2024.

Death as the End Point procedures are rarely used in Tasmania. Only one project, involving the eradication of feral cat species, had procedures where death was an end point or deliberate measure in Tasmania in 2024.

Projects using higher impact procedures of *Minor Operative procedures, Major Physiological challenge, Major Surgery with Recovery, Animal Unconscious, No Recovery and Death as the End Point* procedures accounted for 4.5% of animals used for research purposes and 32.5% of projects undertaken in 2024.

The relatively low impact procedures of *Camera traps only, Observation with Minor Interference, Minor Conscious Procedure,* and *Minor Physiological Challenge* were applied to 95.5% (or 631,777) animals and in 67.5% of projects in 2024.

3 Tables and figures All summarised data is displayed in this section.

Table 1 Summary of animal categories used by institutions in 2024

Institution	Project number	Amphibia	Aquatic animals	Birds	Domestic mammals	Exotic feral mammals	Lab mammals	Native mammals	Reptiles	Total
ANU	3			80						80
AusVetSerumLab	1				1					1
Aus Ocean Biotec	1		100							100
Birdlife Tas	3			6514						6514
Bookend Trust	1							39		39
Bush Heritage Aust	1					14		304		318
Charles Sturt Uni	1			80						80
CSIRO	10		8401	601	50					9052
Dawbuts	1				120					120
DEP	2			150						150
Entura	1		162							162
EnviroDynamic	1				3					3
Fonterra	1				1200					1200
Freshwater	1		55							55
FoMI	1			972						972
GDH Tas	8	9		196		5		54	3	267
Gray, Paul	1							0		0
Jacobs Group	1	10		25				39	1	75
Landscape RF	1			50		43				93
Melb Uni	2					143		5474	2	5619
Mooney, Nick	1			27						27
Murdoch Uni	2			6		9		129		144
NRE Tas	11		2445	603	150	158		147		3503
NRM Nth	2	3		796		14		39	2	854
Nature Advisory	1			27851						27851
North Barker	1	2							4	6
Orion Training	1				90					90
Pinion Advisory	2				3537					3537
QVMAG	1								16	16
Sea Forest	2				607					607
TLC	1							37		37
UAdelaide	1					23				23
USydney	3				86			39		125
UTAS	228	5	46998	225764	20570	11197	6199	286181	1978	598892
VWSG	1			93						93
Zoos Vic	1							237		237

	Projects	Amp	Aquatic	Birds	DM	EM	LM	NM	Rept	Total
2024 Totals	**301**	**29**	**58161**	**263808**	**26414**	**11606**	**6199**	**292719**	**2006**	**660942**
2023 Totals	257	80	181245	41598	26956	9171	7320	134142	1634	402166

Table 2 Animal categories, purposes and procedures in 2024

Table 2.1 Animal categories used in 2024

Animal category	Animals per category	Projects per category *
Amphibia	29	9
Aquatic animals	58161	78
Birds	263808	78
Domestic mammals	26414	38
Exotic feral animals	11606	24
Lab mammals	6199	57
Native mammals	292719	63
Reptiles	2006	30
Total	**660942**	**377***

***A project may use multiple animal categories. See body of report Section 1.2.1**

Table 2.2 Research and teaching purposes used in 2024

Purpose	Animals per purpose	Projects per purpose *
Education	3978	18
Environmental study	225442	80
Health & welfare	11879	51
Management & production	226993	36
Understanding biology	192650	118
Total	**660942***	**303***

***A project may have multiple purposes. See body of report Section 1.2.1**

Table 2.3 Research and teaching procedures used in 2024

Procedure	Animals per procedure*	Projects per procedure*
Camera Traps only	309337	24
Observation with minor interference	312752	128
Minor conscious procedure	8551	62
Minor physiological challenge	1137	15
Minor operative procedure with recovery	2471	17
Major physiological challenge	215	1
Major surgery with recovery	1955	11
Animal unconscious no recovery	25101	80
Death as end point	23	1
Total	**661542***	**339***

***A project may use multiple procedures. See body of report section 1.2.1**

Table 3 Summary of animal types used by institutions in 2024

Institution	ANU	AVSL	AOB	Birdlife Tas	Bookend Trust	Bush Heritage	Charles Sturt U	CSIRO
Amphibia								
Amphibia								
Aquatic animals								
Cephalopods								
Crustaceans								
Fish			100					8401
Other Aquatic Animals								
Birds								
Exotic wild								
Native captive	50							
Native wild	30			6514			80	601
Other birds								
Poultry								
Domestic Mammals								
Cats								
Cattle								
Deer								
Dogs		1						
Goats								
Horses								
Pigs								
Sheep								50
Exotic Feral mammals								
Cats						2		
Mice						5		
Other exotic feral mammals						7		
Pigs								
Rabbits								
Rats								
Laboratory mammals								
Mice								
Rats								
Native Mammals								
Cetaceans								
Echidna						3		
Macropods						217		
Native Rats and Mice						10		
Other Native Animals					39	3		
Platypus								
Possums and Gliders						3		
Quoll						1		
Tasmanian Devils						3		
Wombats						64		
Reptiles								
Lizards								
Total	**80**	**1**	**100**	**6514**	**39**	**318**	**80**	**9052**

Table 3 Summary of animal types used by institutions in 2024

Institution	Dawbuts	DEP	Entura	EnviroD	Fonterra	FreshW	FoMI	GHD
Amphibia								
Amphibia								9
Aquatic								
Cephalopods								
Crustaceans								
Fish			162			55		
Other Aquatic Animals								
Birds								
Exotic wild								
Native captive								
Native wild		150					972	196
Other birds								
Poultry								
Domestic mammals								
Cats								
Cattle					1200			
Deer								
Dogs				3				
Goats								
Horses								
Pigs								
Sheep	120							
Exotic Feral Mammals								
Cats								1
Mice								
Other exotic feral mammals								
Pigs								
Rabbits								4
Rats								
Laboratory								
Mice								
Rats								
Native Mammals								
Cetaceans								
Echidna								2
Macropods								32
Native Rats and Mice								
Other Native Animals								9
Platypus								
Possums and Gliders								1
Quoll								1
Tasmanian Devils								9
Wombats								
Reptiles								
Lizards and snakes								3
Total	**120**	**150**	**162**	**3**	**1200**	**55**	**972**	**267**

Table 3 Summary of animal types used by institutions in 2024

Institution	Gray, P	Jacobs	LRF	Melb Uni	Mooney N	Murdoch	NRE Tas
Amphibia							
Amphibia		10,					
Aquatic animals							
Cephalopods							
Crustaceans							
Fish							2445
Other Aquatic Animals							
Birds							
Exotic wild							
Native captive							48
Native wild		25	50		27	6	555
Other birds							
Poultry							
Domestic Cats							
Cattle							150
Deer							
Dogs							
Goats							
Horses							
Pigs							
Sheep							
Exotic mammals							
Feral Cats				5			44
Mice						2	100
Other exotic feral mammals			43	36			
Pigs							8
Rabbits				102			1
Feral Rats						7	5
Laboratory							
Mice							
Rats							
Native mammals							
Cetaceans							
Echidna				8			
Macropods		23		4817		6	12
Native Rats and Mice							
Other Native Animals	0	4				60	6
Platypus						32	
Possums and Gliders		12		424		31	6
Quoll				8			
Tasmanian Devils				74			118
Wombats				143			5
Reptiles							
Lizards and snakes		1		2			
Total	**0**	**75**	**93**	**5619**	**27**	**144**	**3503**

Table 3 Summary of animal types used by institutions in 2024 continued

Institution	NRM Nth	Nature Ad	Nth Barker	Orion	Pinion	QVMAG	Sea Forest
Amphibia			2				
Amphibia	3						
Aquatic animals							
Cephalopods							
Crustaceans							
Fish							
Other Aquatic Animals							
Birds							
Exotic wild		406					
Native captive							
Native wild	796	27445					
Other birds							
Poultry							
Domestic Mammals							
Cats							
Cattle				90	192		557
Deer							
Dogs							
Goats							
Horses							
Pigs							
Sheep					3345		50
Exotic Mammals							
Cats	5						
Mice							
Other exotic feral mammals							
Pigs							
Rabbits	5						
Rats	4						
Laboratory mammals							
Mice							
Rats							
Native Mammals							
Cetaceans							
Echidna							
Macropods	15						
Native Rats and Mice							
Other Native Animals	5						
Platypus							
Possums and Gliders	12						
Quoll	7						
Tasmanian Devils							
Wombats							
Reptiles							
Lizards and snakes	2		4			16	
Total	**854**	**27851**	**6**	**90**	**3537**	**16**	**607**

Table 3 Summary of animal types used by institutions in 2024 continued

Institution	TLC	UAdelaide	USyd	UTAS	VWSG	Zoos Vic
Amphibia						
Amphibia				5		
Aquatic animals						
Cephalopods						
Crustaceans						
Fish				46998		
Other Aquatic Animals						
Birds						
Exotic wild				526		
Native captive						
Native wild				223744	93	
Other birds				1494		
Poultry						
Domestic mammals						
Cats						
Cattle				7910		
Deer						
Dogs			86	25		
Goats						
Horses						
Pigs						
Sheep				12635		
Exotic mammals						
Cats		23		1556		
Mice				38		
Other exotic feral mammals				4058		
Pigs						
Rabbits				2860		
Rats				2685		
Laboratory mammals						
Mice				4985		
Rats				1214		
Native Mammals						
Cetaceans				191		
Echidna				1212		39
Macropods				70600		74
Native Rats and Mice				1017		12
Other Native Animals			1	164049		17
Platypus				20		
Possums and Gliders				34711		53
Quoll	19			3068		9
Tasmanian Devils	18		38	4831		9
Wombats				6482		24
Reptiles						
Lizards and snakes				1978		
Total	**37**	**23**	**125**	**598892**	**93**	**237**

Table 4 Purposes and procedures used for animal types in 2024

	Amphibians	Aquatic animals			
	Amphibians	Cephalopods	Crustaceans	Fish	Other Aquatics
Purpose					
Education				436	
Environmental study	29			28048	
Health & welfare				3577	
Management & production				7095	
Understanding biology				19005	
Procedure					
Camera traps only	5			3823	
Observation with minor interference	22			31240	
Minor conscious procedure	2			289	
Minor physiological challenge				471	
Minor operative procedure with recovery				2000	
Major physiological challenge				215	
Major surgery with recovery				1772	
Animal unconscious no recovery				18951	
Death as End Point					

Table 4 Purposes and procedures used for animal types in 2024 continued

	Birds				
	Exotic wild	Native captive	Native wild	Other birds	
Purpose					
Education			543		
Environmental study	932		53540	1494	
Health & welfare			608		
Management & production			205875		
Understanding biology		75	741		
Procedure					
Camera traps only	494		3438	1494	
Observation with minor interference	438		257443		
Minor conscious procedure		75	426		
Minor physiological challenge					
Minor operative procedure with recovery					
Major physiological challenge					
Major surgery with recovery					
Animal unconscious no recovery					
Death as End Point					

Table 4 Purposes and procedures used for animal types in 2024 continued

	Domestic mammals								
	Cats	Cattle	Deer	Dogs	Goats	Horses	Pigs	Sheep	other
Purpose									
Education		490						440	
Environmental study		771		25				8272	
Health & welfare		6412		87				130	
Management & production		2426		3				7318	
Understanding biology								40	
Procedure									
Camera traps only		771		25				8272	
Observation with minor interference		8504		89				4373	
Minor conscious procedure		455						3425	
Minor physiological challenge		369		1				120	
Minor operative procedure with recovery									
Major physiological challenge									
Major surgery with recovery									
Animal unconscious no recovery								10	
Death as End Point									

Table 4 Purposes and procedures used for animal types in 2024 continued

	Exotic feral mammals						Laboratory mammals		
	Cats	Mice	Other exotic feral mammals	Pigs	Rabbits	Rats	Mice	Rats	other
Purpose									
Education							72	45	
Environmental study	1568	143	4112		2874	2682			
Health & welfare	2					7	288	35	
Management & production	43				1	5	1993	484	
Understanding biology	20		36	8	102	3	2632	650	
Procedure									
Camera traps only	1537	143	4065		2830	2682			
Observation with minor interference	12		40		145		30		
Minor conscious procedure	18				1	10	38	30	
Minor physiological challenge	5				1	5		18	
Minor operative procedure with recovery							73		
Major physiological challenge									
Major surgery with recovery							183		
Animal unconscious no recovery	38		43	8			4661	1166	
Death as End Point	23								

Table 4 Purposes and procedures used for animal types in 2024 continued

	Native mammals					
	Cetaceans	Echidnas	Macropods	Native Rats and Mice	Other native mammals	Platypus
Purpose						
Education	6	23	1566		59	
Environmental study		1233	69316	1039	2185	20
Health & welfare	40		9		76	32
Management & production			12		1612	
Understanding biology	145	8	4817		160355	
Procedure						
Camera traps only		1250	68377	1039	161243	33
Observation with minor interference	151	11	7421		2875	
Minor conscious procedure		3			46	
Minor physiological challenge			12		6	
Minor operative procedure with recovery					60	19
Major physiological challenge						
Major surgery with recovery						
Animal unconscious no recovery			2		5	
Death as End Point						

Table 4 Purposes and procedures used for animal types in 2024 continued

	Native mammals continued				Reptiles
	Possums and gliders	Quolls	Tas Devils	Wombats	Lizards and snakes
Purpose					
Education	273	1	6	18	
Environmental study	34456	2057	3994	6548	154
Health & welfare	67	13	410	4	2
Management & production	6		118	5	
Understanding biology	440	1035	572	143	1850
Procedure					
Camera traps only	34147	1988	3924	6566	121
Observation with minor interference	1027	20	83	147	65
Minor conscious procedure	55	1088	975		1383
Minor physiological challenge	6		118	5	
Minor operative procedure with recovery		10			309
Major physiological challenge					
Major surgery with recovery					
Animal unconscious no recovery	7				128
Death as End Point					

Figure 1 Animal categories used between 2020 and 2024

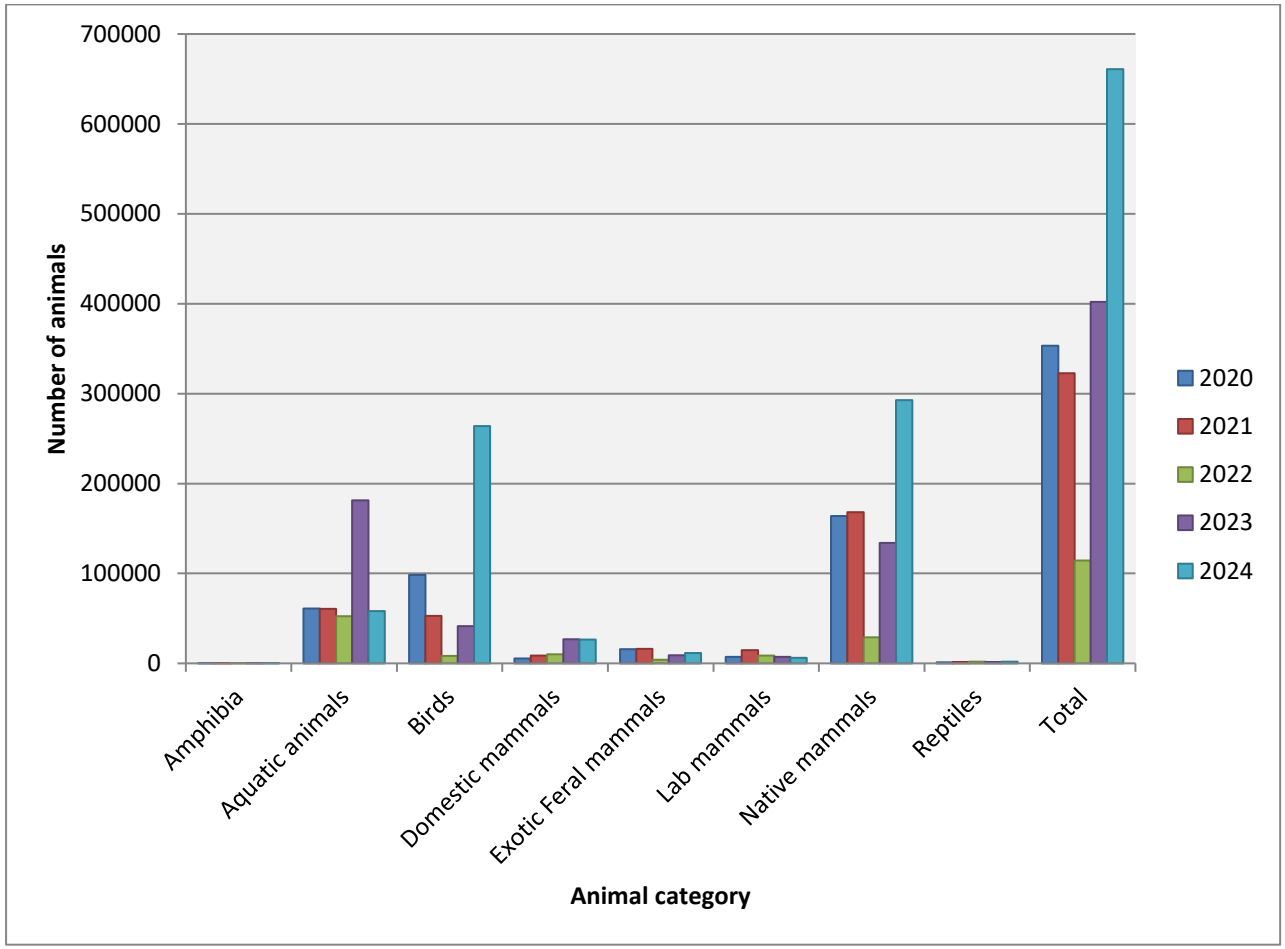


Figure 2 Projects per animal category between 2020 and 2024

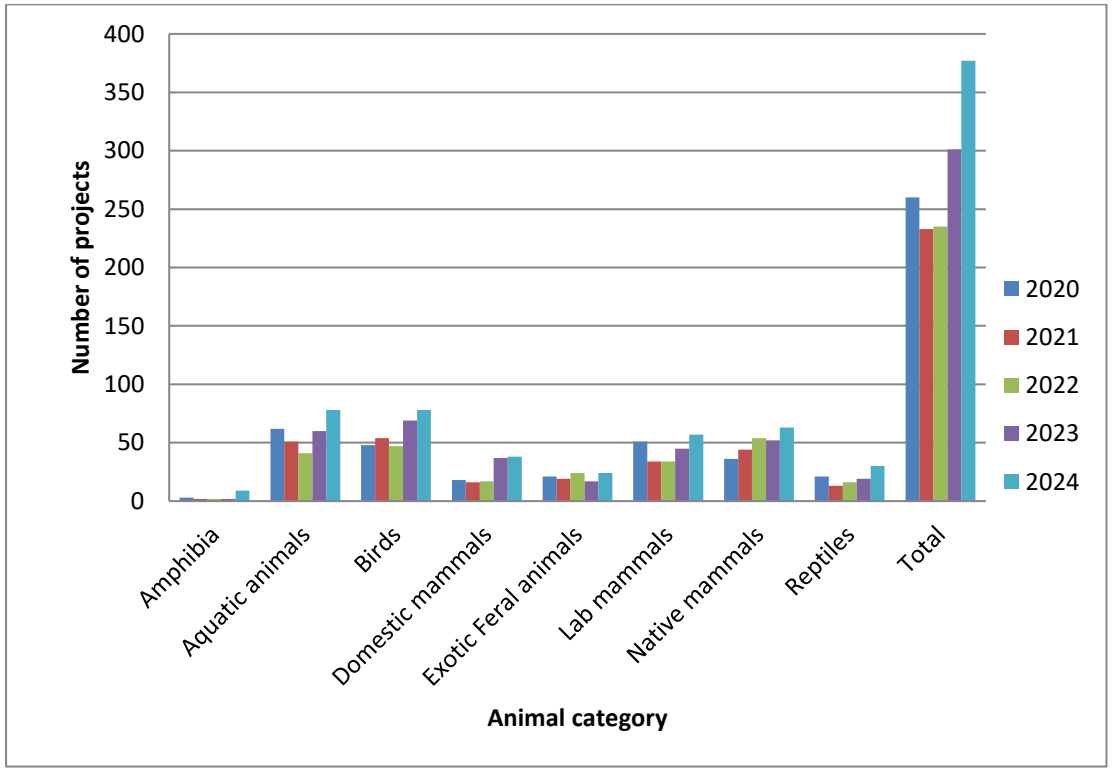


Figure 3 Purposes for which animals were used between 2020 and 2024

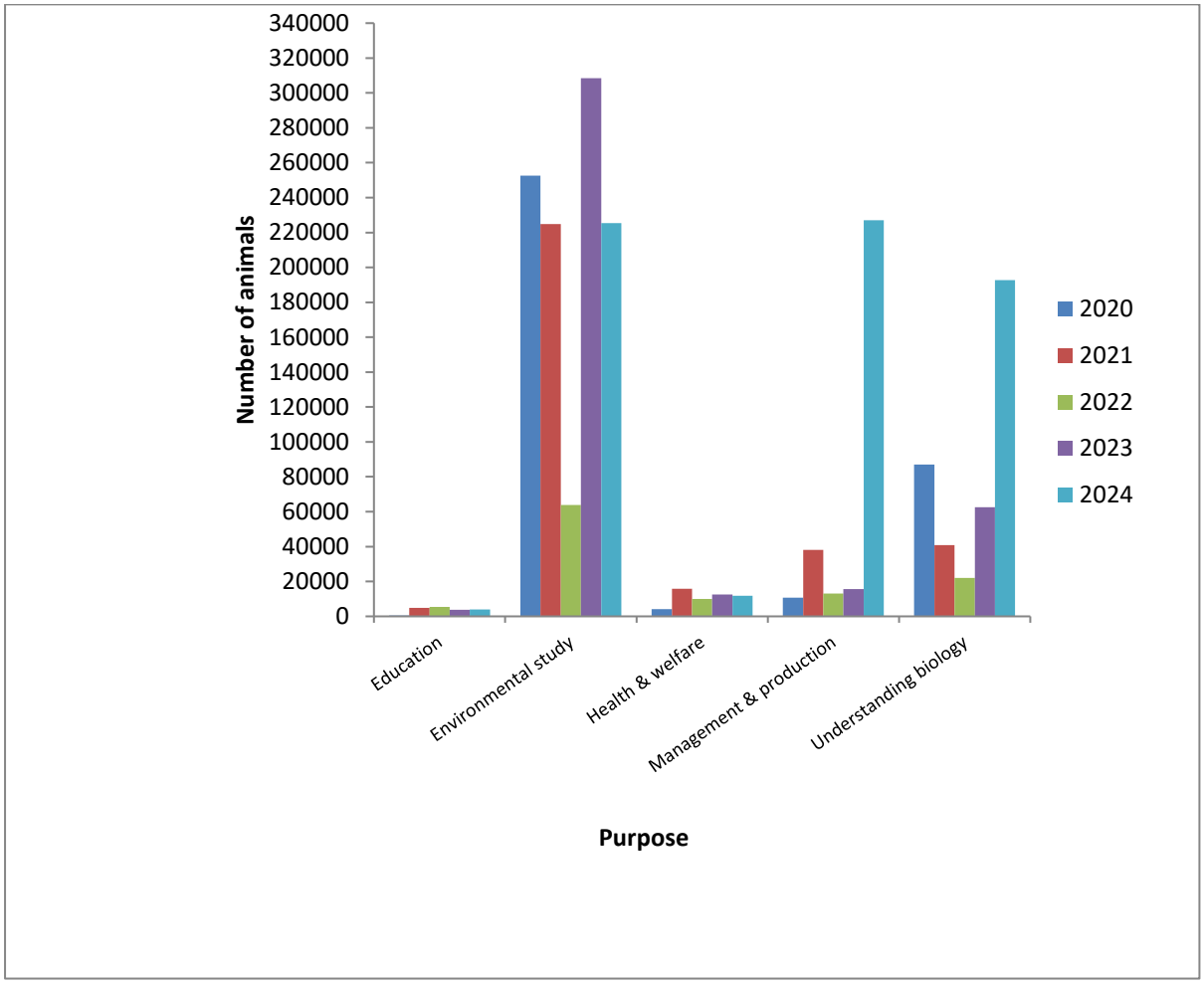


Figure 4 Projects per purposes between 2020 and 2024

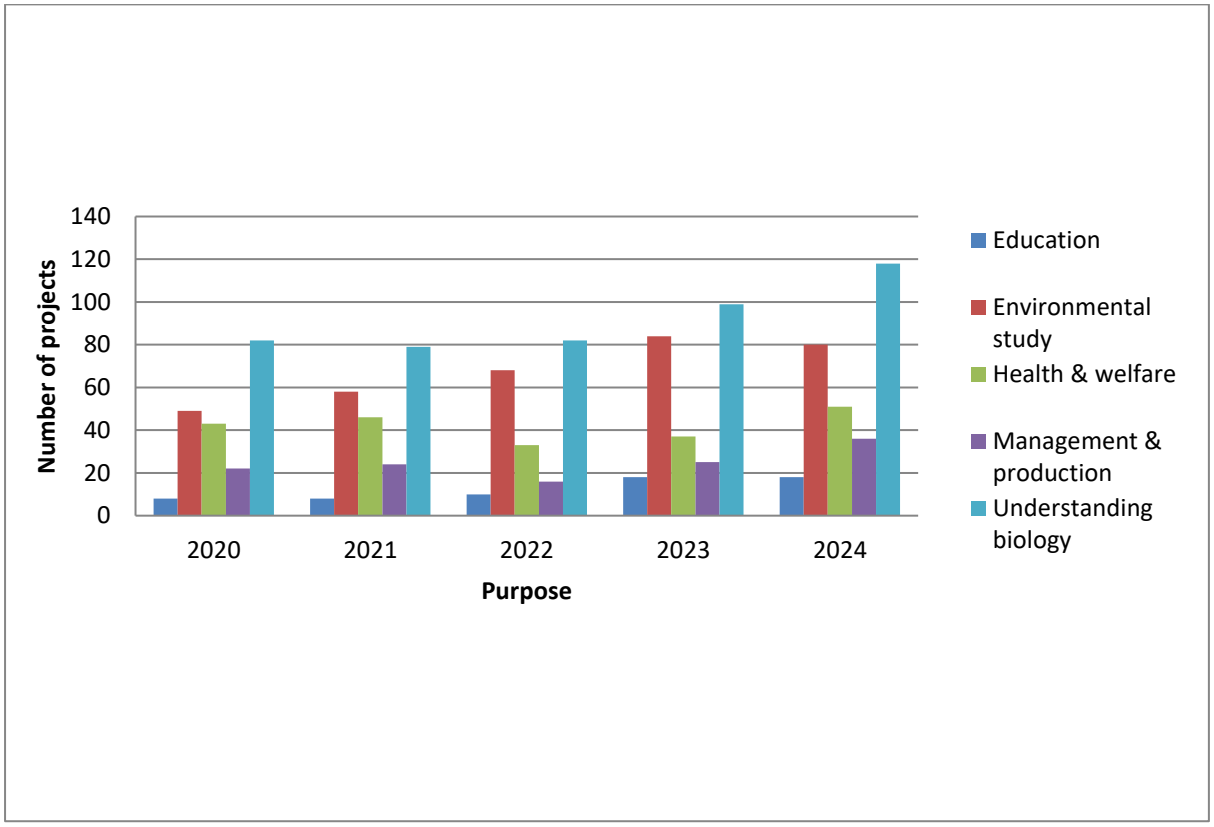


Figure 5 Procedures used between 2020 and 2024

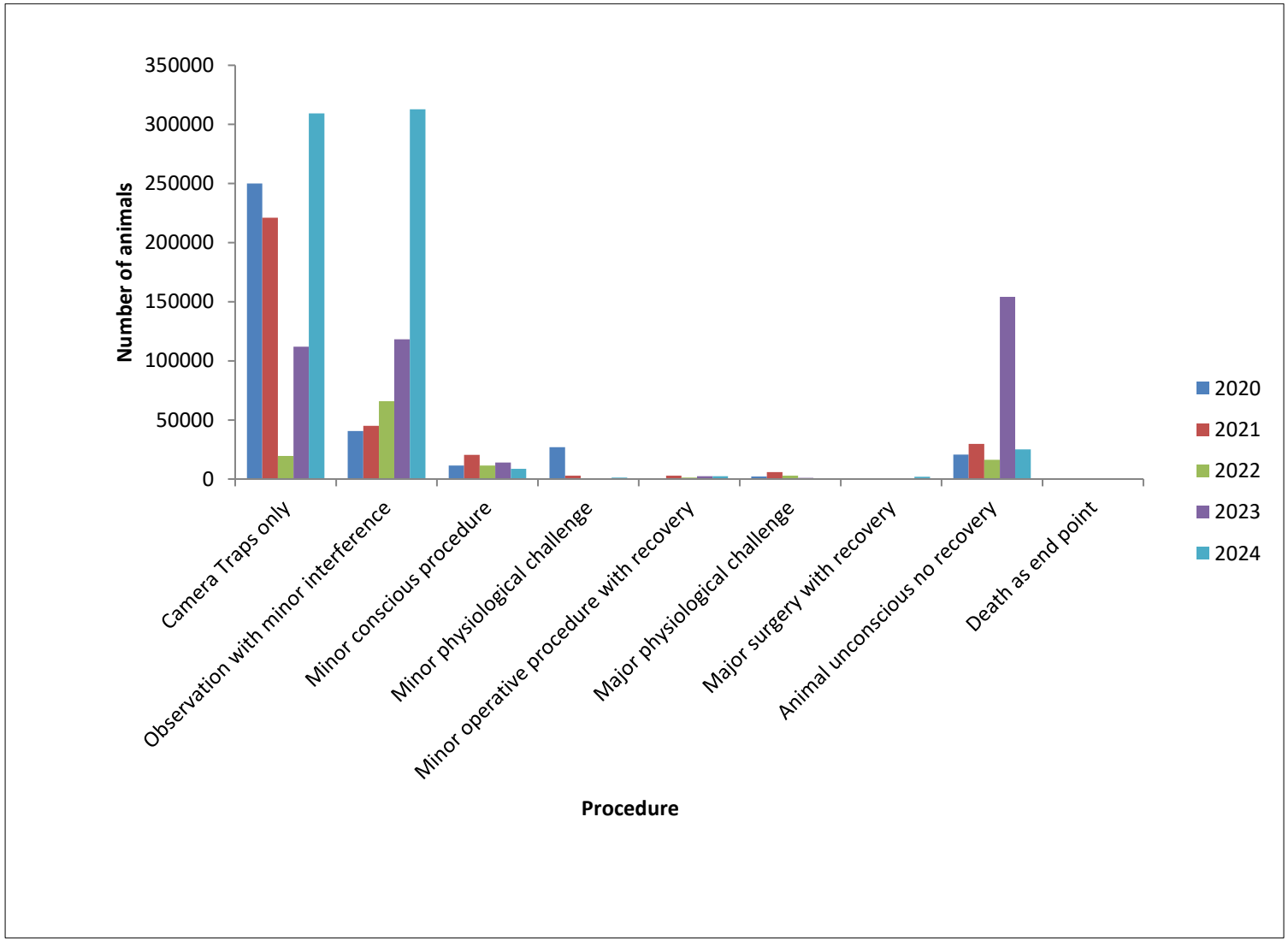
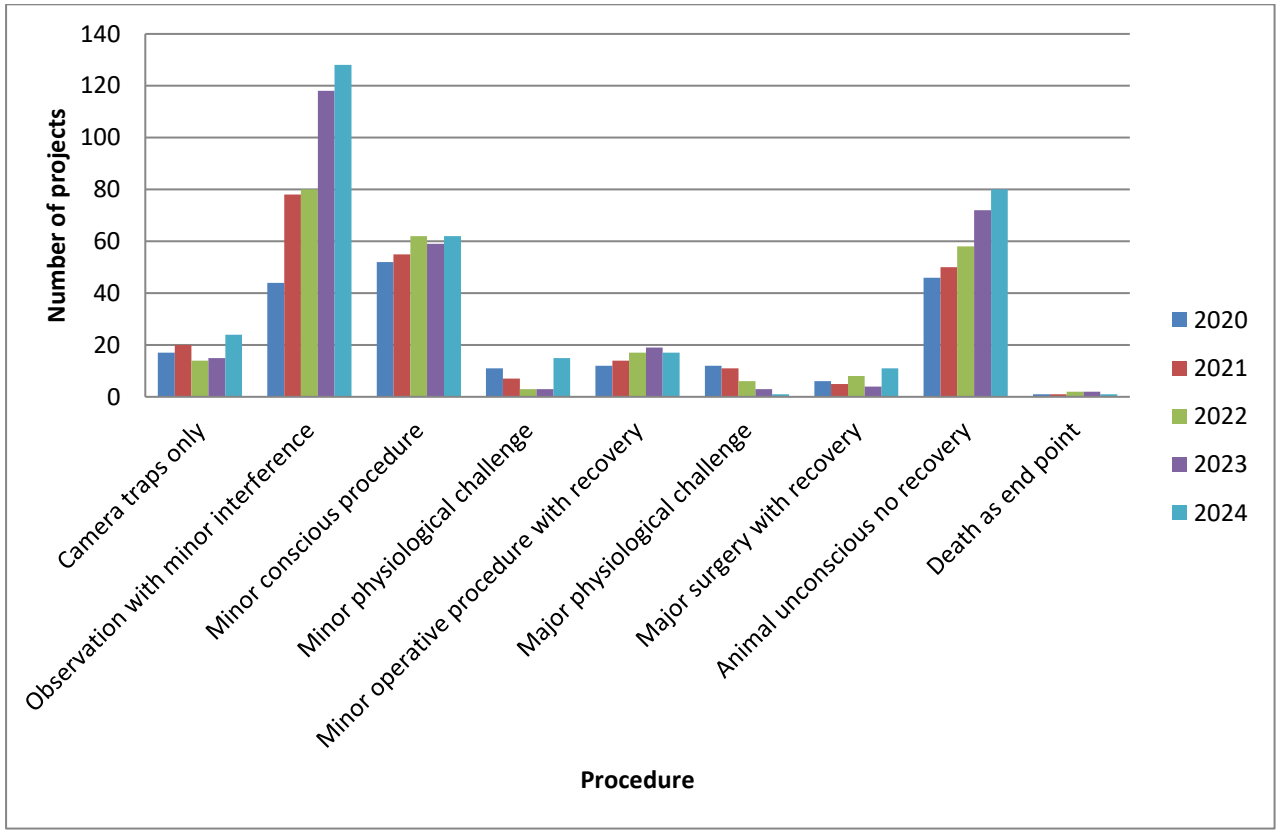


Figure 6 Projects per procedures used between 2020 and 2024



Left intentionally blank

ABBREVIATIONS

AEC	Animal Ethics Committee
ANU	Australian National University
Aust Ocean Biotech	Australian Ocean Biotechnology Pty Ltd
Birdlife.	Birdlife Tasmania
CRG	Code Reference Group (NHMRC)
CSIRO	Commonwealth Scientific and Industrial Research Organisation
Deakin	Deakin University, Victoria
DPIPWE	Department of Primary Industries, Parks, Water and Environment
Entura	Entura (Hydro Tasmania Group)
FoMI	Friends of Maatsuyker Island
Freshwater	Freshwater Biomonitoring
Gallagher	Gallagher eShepherd Pty Ltd
GHD	GHD Pty Ltd
Monash	Monash University
Murdoch	Murdoch University
NHMRC	National Health and Medical Research Council
North Barker	North Barker Ecosystem Services
NRE Tas	Department Natural Resources and Environment Tasmania
NRM Sth	Natural Resource Management – South
NSW DPI	New South Wales Department Primary Industry
STTAS	Sustainable Timber Tasmania
TLC	Tasmanian Land Conservancy
Treidlia	Treidlia Biovet Pty Ltd, New South Wales
UAdelaide	The University of Adelaide, South Australia
UNSW	The University of New South Wales
UQLD	The University of Queensland
USydney	University of Sydney, New South Wales
UTAS	University of Tasmania
Virbac	Virbac (Australia) Pty Ltd
Vic DJPR	Victorian Dept Jobs, Precinct and Regions
VWSG	Victorian Wader Study Group Inc
3Rs	Replacement, Reduction and Refinement

End