

## RTI 080

The number of organisations or individuals that hold an authorising licence to conduct scientific procedures with animals in Tasmania in 2021: 51 (only 31 of these institutions undertook projects involving the use of animals in 2021)

Institutions holding an animal research licence in Tasmania in 2021:

ADE Consulting Group (QLD) Pty Ltd, Queensland (no animal use in 2021)  
Agersens IC Pty Ltd (Gallagher eShepherd Pty Ltd), Queensland  
Apiam Animal Health, Victoria  
Australian Museum, New South Wales (no animal use in 2021)  
Australian National University (ANU), Australian Capital Territory  
Biosis Pty Ltd, Victoria (no animal use in 2021)  
Birdlife Tasmania (Birdlife), Tasmania  
Central Queensland University, Queensland (no animal use in 2021)  
Charles Sturt University, New South Wales  
Commonwealth Scientific and Industrial Research Organisation, (CSIRO)  
DairyTas, Tasmania (no animal use in 2021)  
Dawbuts Pty Ltd, NSW (no animal use in 2021)  
Deakin University (Deakin), Victoria  
Department of Natural Resources and Environment ( Primary Industries, Parks, Water and Environment, includes the Inland Fisheries Service), Tasmania  
Elanco, New South Wales (no animal use in 2021)  
Entura (Hydro Tasmania Group) (Entura), Tasmania  
Freshwater Biomonitoring (Freshwater), Tasmania  
Friends of Maatsuyker Island (FoMI), Tasmania  
GHD Pty Ltd (GHD), New South Wales  
Gray, Paul, (Independent researcher), Tasmania  
Huon Aquaculture Co Pty Ltd, Tasmania (no animal use in 2021)  
James Cook University, Queensland (no animal use in 2021)  
Jacobs Group, Victoria  
Jurox Pty Ltd, New South Wales (no animal use in 2021)  
Macquarie University, New South Wales (no animal use in 2021)  
Monash University (Monash), Victoria (no animal use in 2021)  
Mooney Nick Independent researcher, Tasmania  
Murdoch University (Murdoch), Western Australia  
Natural Resource Management – South (NRM Sth), Tasmania  
Natural Resource Management –North (NRM Nth), Tasmania  
Nature Advisory P/L, Victoria  
New South Wales Department of Primary Industries, New South Wales (no animal use in 2021)

North Barker Ecosystem Services (North Barker), Tasmania  
Pocus Team (Point of Care Ultrasound Scanning), New South Wales (no animal use in 2021)  
Robertson, Dr Bruce Ingram, (Independent researcher), Victoria (no animal use in 2021)  
Scibus, New South Wales (no animal use in 2021)  
Sustainable Timber Tasmania (STTAS), Tasmania  
TasNature (Peter Tonelli), Tasmania  
Tassal Operations Pty Ltd (Tassal), Tasmania  
Tasmanian Land Conservancy, Tasmania  
Troidlia Biovet Pty Ltd (Troidlia), New South Wales  
University of Adelaide (UAdelaide), South Australia  
University of New England, New South Wales (no animal use in 2021)  
University of New South Wales (UNSW), New South Wales  
University of Queensland (UQLD), Queensland  
University of Sydney (USydney), New South Wales  
University of Tasmania (UTAS), Tasmania  
University of Technology Sydney, New South Wales (no animal use in 2021)  
Victorian Wader Study Group Inc (VWSG), Victoria  
Western Sydney University, New South Wales  
Zoetis Australian Research and Manufacturing, New South Wales, (no animal use in 2021)

The number of organisations or individuals that hold an authorising breeding licence within Tasmania for supply of dogs for use in scientific procedures: 0

The number of dogs recorded in scientific projects for the period 2011- 2021:

Camera trap sightings: 478

Observations with minor interference: 189

Minor conscious procedures: 370

Minor physiological challenge :10

Minor operative procedures with recovery :0

Major surgery with recovery: 0

Major physiological challenge :0

Animal Unconscious without recovery:0

Death as an endpoint: 0

These figures are already publicly available in the Animal Research Statistics Tasmania annual reports 2011-2020 published annually and loaded to the National eDeposit (NED) for access to the public via Trove; <https://nla.gov.au/nla.obj-2362537088>

The 2021 Animal Research Statistics report is currently being compiled, to be published later in 2022. The number of dogs recorded in scientific projects in 2021 was 7: 3 were camera trap recordings only and 4 were recorded as part of an observational animal

survey (observation with minor interference). These are included in the 2011-2021 data above.

**Procedures used** – broadly describes the severity of the procedures used (ie the impact on the animal).

The following procedures are reported on:

*Camera Trapping Only:* (Prior to 2014 this category was included in *Observation Involving Minor Interference*) 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, ie not euthanased, as death is a critical measure of the experimental treatment.