



ANIMAL USE FOR SCIENTIFIC PURPOSES – ANNUAL REPORTING

Annual reporting of animal use statistics is required of licensed institutions.

Reporting period

The reporting period is the calendar year (1st January to 31st December).

Report deadline

The report must be forwarded to the Inspector of Animal Research by the 31st May of the following year.

Animals to be reported

All non-human **vertebrate** animals that are alive or which are killed for research purposes must be reported. This includes fish and (as of the 1st January 2009) cephalopods. The following minimum ages/life stages that must be reported are in accordance with those used for the National Statistics of Animal Use for Scientific Purposes:

- Mammals From half-gestation onwards (ex-utero animals only to be reported);
- Birds From half-incubation onwards;
- Reptiles From half-incubation onwards;
- Amphibians Fully metamorphosed juveniles and older;
- Fish and cephalopods Fully metamorphosed juveniles and older.

While there is no obligation to report crustaceans they may be included.

Report format

The report is in two parts.

Part I

A summary of the animal research activities of the institution during the calendar year as it relates to **research conducted in Tasmania**. The following aspects must be addressed as a minimum:

- Any changes in research area in terms of animal type, purpose and/or procedure, and the reasons for the change/s.

- Any systemic changes in the administration of animal research projects (eg the creation of additional Animal Ethics Committees for specific areas or new animal house facilities which may impact on future animal use or welfare of projects conducted in Tasmania).
- Any specific issues or strategies that impacted positively on research conducted in Tasmania (eg monitoring techniques).
- Was an external review of the operation of the institution and its AEC conducted as per Appendix 1 of the Australian code of practice for the care and use of animals in research and teaching, 7th Edition, 2004?
- **For interstate institutions, please include a copy of the institution's licence or equivalent from your jurisdiction for the reporting period if licensed in Tasmania for more than 12 months.**

Part 2

The second part of the report relates to the number of animals used for various purposes and undergoing various procedures for each project. A spreadsheet is supplied for this part of the report. Definitions of reuse, purposes and procedures are those used for the National Statistics of Animal Use for Scientific Purposes and are summarised below to help you record data accurately.

When you open the spreadsheet you will see a number of titles across the page. Fill them in as appropriate. Note: Do not leave any blank rows e.g. some projects may involve having more than one purpose in which animals are used. In such cases, you need to re-enter the same Project ID and Title in each row and then provide the appropriate information for each purpose or procedure.

Some hints on completing the spreadsheet :

- Project ID: project number issued by the AEC.
- Purpose: click on the cell below and you will trigger a drop-down arrow. Choose and click on the appropriate Purpose.
- Procedure: click on the cell below and you will trigger a drop-down arrow. Choose and click on the appropriate Procedure. Where several procedures may have been used, the one with the severest impact should be recorded.
- Category: this relates to the animal category (e.g. Aquatic Animals, Native Animals etc). Click on the cell below and you will trigger a drop-down arrow. Choose and click on the appropriate animal category.
- Type: this relates to the type of animal in the category (e.g. fish or whale under the category 'Aquatic'). Click on the cell below and you will trigger a drop-down arrow. Choose and click on the appropriate type of animal for that category. If the type of animal is not listed, then click on e.g. "Other Aquatic Animals" and move on to the next column "Other Type". Note: please enter **cane toads** under 'Amphibia'.
- Other Type : insert the type of animal not covered in the Type column.

- More than one procedure. Where the **same** animals are used for more than one procedure, choose the one with the maximum impact and assign the no of animals used for that procedure and not again to another procedure. We need to avoid a double count.
- More than one purpose: it is not critical to choose between the purposes but if you assign a number of animals to one purpose, do not again assign the **same animals** to another purpose i.e avoid a double count.

Please note that this data collection is being used to generate totals and conduct various analyses, graphs etc for the State Report.

Reporting definitions for Part 2.

Re-use of animals

Each year, an animal should be counted for each protocol in which it is used. For example, where animals are used repeatedly in one protocol (eg. teaching animal handling once a week) these animals are counted once for their inclusion in this protocol. If the protocol is renewed the following year, then they are counted once again in that subsequent year. If these same animals are used in two protocols in one year (eg. weekly handling and a short behavioural study), they will be counted twice - once for each protocol.

1. Project Purpose

“The understanding of human or animal biology”: projects that aim to increase the basic understanding of the structure, function and behaviour of animals, including humans, and processes involved in physiology, biochemistry and pathology.

“The maintenance and improvement of human or animal health and welfare”: projects that aim to produce improvements in the health and welfare of animals, including humans.

“The maintenance and improvement of animal management or production”: projects that aim to produce improvements in domestic or captive animal management or production.

“The achievement of education objectives”: *projects carried out for the achievement of educational objectives.*

“Environmental objectives”: projects that aim to increase the understanding of the animals’ environment or its role in it, or aim to manage wild or feral populations. These will include studies to determine population levels and diversity and may involve techniques such as observation, radio tracking or capture and release.

2. Category of Procedure

This describes the impact of the procedure on the welfare of the animals. The highest relevant impact procedure from those listed is to be entered to describe the greatest impact of the procedure carried out on animals.

“Observation Involving Minor Interference”: studies in which the normal activities of animals are impacted on. Does not apply to animals that were euthanased.

Examples:

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

“Animal Unconscious Without Recovery”: animal is rendered unconscious under controlled circumstances (ie. not in a field situation) with as little pain or distress as possible. Capture methods are not required. 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:

Laboratory animals killed painlessly for dissection, biochemical analysis, etc (euthanased)
Teaching surgical techniques on live, anaesthetised patients that are not allowed to recover following the procedure

“Minor Conscious Intervention”: animal is subjected to minor procedures that would normally not require anaesthesia or analgesia. Any pain is minor and analgesia usually unnecessary, although some distress may occur as a result of trapping or handling.

Examples:

Tail tipping and toe clipping for identification of new line GM 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
Stomach tubing, branding, disbudding, shearing, etc

“Minor Surgery 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 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:

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 usually considerable and at a level requiring analgesia.

Examples:

Orthopaedic surgery
Abdominal or thoracic surgery
Transplant surgery
Mulesing, surgical castration without anaesthesia

“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:

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:

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

“Death As An Endpoint”: This category only applies to those rare cases where a procedure is designed to cause the death of an animal. Death as an endpoint **does not include**: animals killed for dissection; animals which are euthanased on completion of the project or when predictive signs of death have been determined; animals which are killed if something goes wrong; accidental deaths; or death by natural causes.

Examples:

Toxicity testing (LD50, LC50)

Testing of antivenoms

Fatal disease progression without euthanasia