Guidance on completing Form L: Animal Use Statistics

INT21/187068

Contents

| 1. Explanatory notes | 2 |
|--|----|
| 2. AEC Activity Report | 3 |
| 3. Lethality Testing Report | 3 |
| 4. Independent Researcher Report | 3 |
| 5. General Animal Use Statistics | 3 |
| 5.1 Collecting Statistics | 3 |
| 5.2 Categorisation of procedures | 4 |
| 5.3 Multiple species and/or procedures in a single project | 4 |
| 5.4 Fate of animals | 4 |
| 5.5 Stages of development | 5 |
| 5.6 Re-use of animals | 5 |
| 5.7 Production of genetically modified animals | 5 |
| 5.8 Wildlife surveys and observation studies | 6 |
| 5.9 Field studies | 6 |
| 5.10 Submitting the General Animal Use Statistics | 6 |
| 5.10.1 Description of Columns: | 7 |
| 6. Reporting of dogs and cats | 16 |
| Appendix 1: An example of the completed spreadsheet | 16 |
| Appendix 2: Summary of codes used | 18 |
| Appendix 3: Guidance on ensuring accuracy in completing Form L: Animal Use Statistics. | 20 |

1. Explanatory notes

What is Form L?

Form L is the format in which the NSW Department of Primary Industries collects information on Animal Ethics Committee (AEC) activity and animal use in research and teaching which occurred in NSW during a calendar year (i.e. 1 January to 31 December). Under the *Animal Research Act 1985* this information must be submitted by all Accredited Animal Research Establishments and holders of Animal Research Authorities by 31 March of the following year.

Form L consists of four sections to be completed and submitted online:

- AEC Activity Report
- Lethality Testing Report (if lethality testing carried out)
- Independent Researcher Report (if independent researchers supervised)
- General animal use statistics

How do I submit the Form L?

Form L is submitted by completion of the online form.

This includes completing and uploading:

- <u>Reporting Year NSW Animal Use Statistics Excel Spreadsheet Template</u>
- The most recent AEC annual report.

When do I need to submit the Form L return?

All Form L returns must be submitted to the NSW Department of Primary Industries by no later than 31 March 2023.

Please note: The submission of a completed Form L is required under Clause 24 of the Animal Research Regulation 2021. The maximum penalty for non-compliance with this requirement is \$1,100.

Where do I get help to complete the form?

If you have read the explanation for each section of the form, and still have questions, you should, in the first instance, email your questions to: bfs.admin@dpi.nsw.gov.au with the subject line: FORM L submission query.

What happens to the information collected?

The information is collated and published on the Animal Ethics Infolink website (without identification of individual establishments).

My research is supervised by the Secretary's AEC. Do I need to submit the Form L?

No. Accredited Animal Research Establishments and individuals using the Secretary's AEC are not required to submit Form L, as this information is compiled by the NSW Department of Primary Industries.

2. AEC Activity Report

This section requests information regarding AEC activities and provides an opportunity to report on the implementation of the principles of Replacement, Reduction and Refinement.

It includes the mandatory uploading of the most recent AEC annual report. Guidance on AEC annual reporting and a suggested template are provided on the <u>Animal Ethics Infolink</u> website.

3. Lethality Testing Report

An Accredited Animal Research Establishment must keep records of all lethality tests that are approved by its AEC, during the period 1 January to 31 December and give a copy of these records to the Animal Research Review Panel following the 12 month reporting period. Each record must be kept for a period of 7 years after the record is made. A separate Lethality Testing Report form should be used for each lethality test approved.

The Animal Research Act defines a "lethality test" as "an animal research procedure in which any material or substance is administered to animals for the purpose of determining whether any animals will die or how many animals will die".

Lethality testing includes LD50 testing (as defined in the *Animal Research Act 1985*) but is not confined to this. It includes any procedure where substances are given to animals to test whether any animals will die or to measure how many animals will die.

4. Independent Researcher Report

An Accredited Animal Research Establishment must keep records of all applications for Animal Research Authorities that are made to it by independent researchers during the period 1 January to 31 December and give a copy of these records to the Secretary following the 12 month reporting period. Each record must be kept for a period of 7 years after the record is made. A separate Independent Researcher Report Form should be used for each Animal Research Authority application.

The Act defines an "independent researcher," in relation to an Accredited Animal Research Establishment, as "a person who carries out animal research, or applies for an authority to carry out animal research, otherwise than on behalf of the accredited research establishment".

5. General Animal Use Statistics

Please use the *<u>Reporting Year NSW Animal Use Statistics Excel Spreadsheet Template</u>*

- For an example of a completed spreadsheet, refer to Appendix 1.
- Please see Appendix 3 for notes on improving accuracy of reporting.

5.1 Collecting Statistics

The spreadsheet presentation of animal use statistics groups research and teaching into categories which will give some indication of the impact of the work on the animals. Animals should be counted in each project where they are used and should be included for each calendar year they are in a long-term project.

Supervising AECs may wish to gather the statistics from each establishment or independent researcher they supervise and include these with their own data. However, the responsibility for submitting statistics rests with the Accredited Animal Research Establishment carrying out the research. 'Independent researchers' should be included in the AEC's figures.

Some AECs may prefer researchers to complete the spreadsheet whilst other AECs may wish to collect the information from researchers and complete the spreadsheet on animal use. Whatever method is used, it should be accurate and be used consistently (i.e. use the same method each year).

Please confirm with the establishments supervised as to how they wish to submit their statistics, to avoid duplication.

5.2 Categorisation of procedures

Much of the animal research and teaching carried out will be relatively easy to categorise. The procedure categories are intended to give some indication of the **impact** of procedures on the animals used. With this in mind, use the brief guide and the examples given below to help categorise each procedure. The examples are only a guide and do not exclude otherwise unlisted procedures which are judged to have a similar level of impact.

5.3 Multiple species and/or procedures in a single project

Some projects will use more than one **species**. Some projects will have animals which are subject to different categories of **procedures**. This may occur, for example, where control and test groups of animals are subjected to different procedures. Another example is wildlife surveys where a variety of species are involved. In these cases, the projects should be split into appropriate 'sub-projects': each sub-project will only have one species and one category of procedure and will occupy a single line of the spreadsheet. Each line should have the same project number (as given by the AEC in approving the project).

Numerous different procedure categories AND species may require that a single project be split into 4 or more lines.

(See examples at Appendix 1).

5.4 Fate of animals

This column **MUST** be completed where species S31 Domestic cats or S32 Domestic dogs have been used. This column may also be completed where other species are used and it is recommended that this information be provided.

For each project, include additional lines where there are different fates of animals within the same project and / or multiple species and multiple procedure categories within the same project. Each line should have the same project number (as given by the AEC in approving the project). (See examples at Appendix 1).

5.5 Stages of development

Some projects, for example breeding or genetically modified animal production, may use animals which are at a very early stage of development. Others may use embryonated eggs. It is reasonable to count only those immature forms which have reached a certain stage of development. The following is a guide as to what to include:

In general, include embryonic, foetal and larval forms once the development of that form has progressed beyond **half the gestation or incubation period** for the species, or it becomes capable of independent feeding, whichever is sooner. Some differences are listed for Amphibians and Fish in the following summary:

| Mammals | From half-gestation onwards |
|------------|--|
| Birds | From half-incubation onwards |
| Reptiles | From half-incubation or half-gestation onwards |
| Amphibians | Fully metamorphosed juveniles and older |
| Fish | Fully metamorphosed juveniles and older |

Where the procedure is carried out on an immature form which then goes on to develop to the above stage or beyond, (e.g. manipulation of day old embryos which then develop and are born), these should be included.

Please note that although the use of the immature forms, at earlier than the above thresholds, does not need to be reported, their use still requires AEC approval.

5.6 Re-use of animals

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

It is important that they are counted in this way as this more closely reflects the overall use of animals for research and teaching. It may be noted that an animal has been re-used in the comments column, but this is not mandatory.

5.7 Production of genetically modified animals

The **production** of genetically modified animals can involve a wide range of procedures, making it difficult to assign them to a particular procedure category. As such, a dedicated procedure category has been included for these animals to permit easier collection of data. It effectively includes ALL animals used in genetically modified animal production other than the final progeny which are used in a different procedure category.

5.8 Wildlife surveys and observation studies

For wildlife surveys and observation studies, if individual animals are unable to be identified or individually counted, (for example: acoustic recording of frog calls, visual estimates of flying bats or remote camera images to detect species presence or absence) then these do not need to be reported. Estimates of numbers should not be reported. Such reporting leads to inaccuracy and over-reporting.

5.9 Field studies

In reporting field studies using animals primarily held for commercial purposes, care should be taken only to report the animals involved in the study, not the whole herd / flock, as this results in over-reporting.

5.10 Submitting the General Animal Use Statistics

This section must be created using the **Reporting Year NSW Animal Use Statistics Excel Spreadsheet Template** as per the following example:

| A. Year | B. Project no. | C. Purpose | D. Procedure | E. Species | F. Fate | 6. Number used | 7. Comments |
|---------|----------------|------------|--------------|------------|---------|----------------|-------------|
| 20XX | | | | | | | |
| | | | | | | | |

- Data submitted on word or pdf documents will not be accepted.
- Please use the Reporting Year NSW Animal Use Statistics Excel Spreadsheet
- The Spreadsheet Template has been developed to reduce inaccuracies such as entering species codes which do not exist and adding purpose and procedure codes in the wrong columns. In the Spreadsheet Template there are drop down lists for entering codes, which helps validate the data as it is entered, ensuring the correct columns re used.
- Although the use of drop down lists is encouraged to reduce errors, codes can alternatively be manually entered into the Spreadsheet Template (without using the drop down lists). Existing spreadsheets can also be copied and pasted into the Spreadsheet Template (without using the drop down lists), but if using this method make sure the data are copied and pasted into the correct columns.
- For Establishments which transfer data from a database into the Excel spreadsheet, please ensure correct data are entered into the correct columns at the initial data entry stage and when transferring the data to the Excel spreadsheet. Please also see Appendix 3 for further guidance on ensuring accuracy.
- The codes are alphanumeric and must be used. The letters have been selected to try to match the category:
 - A = Purpose (Activity)
 - P = Procedure
 - S = Species
 - F = Fate of animal
- On the Spreadsheet Template there is a 'Code Mapping' sheet which outlines what the codes are and includes the definition of 'Death as an endpoint'.

5.10.1 *Description of Columns:* Column A: YEAR

Enter the calendar year, in four-figure format, in this case 2022.

Column B: PROJECT NUMBER

Enter the project number as given by the AEC.

Column C: PURPOSE

Please note – Purpose codes have an A (for Activity) in front of the number in order to help improve accuracy of data entry.

Enter the **most appropriate** numerical code (**A1-A10**) from those listed below to describe the **primary** purpose of the project (one purpose only for each project should be entered).

| Purpose Code: | Description: |
|------------------|---|
| A1 | Stock breeding Breeding projects to produce new teaching or research stock. Include the animals used to produce progeny and any breeders or progeny culled in the process, NOT the final progeny themselves (as these will be counted under the project in which they go on to be used). |
| A2 | Stock maintenance Holding projects for animals maintained for use in other projects. These animals may be maintained under an Animal Research Authority because they require special management. If they are not held under an Authority, (e.g. normal stock animals kept mainly for commercial production, but occasionally used in research) then they are only counted in the project where they are used for teaching/research. Examples Fistulated ruminants which are maintained under a holding project, for use in other short term feeding trial projects Non-breeding colony of diabetic rats held for research in other projects |
| A3 | <i>Education</i> Projects carried out for the achievement of educational objectives. The purpose of the project is not to acquire new knowledge, rather to pass on established knowledge to others. This includes interactive or demonstration classes in methods of animal husbandry, management, examination and treatment. <i>Examples</i> Animals used by veterinary schools to teach examination procedures such as pregnancy diagnosis Sheep used in shearing demonstration classes for students; Dogs used to teach animal care to TAFE students |

| A4 | Research: human or animal biology Research projects which aim to increase the basic understanding of the structure, function and behaviour of animals, including humans, and processes involved in physiology, biochemistry and pathology. | | | |
|----|--|--|--|--|
| A5 | Research: human or animal health and welfare | | | |
| | Research projects which aim to produce improvements in the health and welfare of animals, including humans. | | | |
| A6 | Research: animal management or production Research projects which aim to produce improvements in domestic or captive animal management or production. | | | |
| A7 | Research: environmental study | | | |
| | Research projects which aim to increase the understanding of animals' environments or their role in them. These include studies to determine population levels and diversity and may involve techniques such as observation, radio tracking or capture and release. Examples | | | |
| | Pre-logging or pre-development fauna surveys | | | |
| A8 | Production of biological products | | | |
| | Using animals to produce products other than milk, meat, eggs, leather, fur, etc. | | | |
| | Examples | | | |
| | • Use of a sheep flock to donate blood to produce microbiological media | | | |
| | Production of commercial anti-serum | | | |
| | Production of products, such as hormones or drugs, in milk or eggs from genetically modified animals | | | |
| | • Quality Assurance testing of drugs but do not include animals which come under Purpose A10, below. | | | |
| A9 | Diagnostic procedures | | | |
| | Using animals directly as part of a diagnostic process. | | | |
| | Examples | | | |
| | Inoculation of day old chicks with ND Virus to determine virulence | | | |
| | Water supply testing using fish | | | |

| 10 | Regulatory product testingProjects for the testing of products required by regulatory authorities, such as theAPVMA. If the product testing is not a regulatory requirement, e.g. it is part of aquality assurance system only, those animals should be included in theappropriate category selected from above. (This is normally Purpose A8 (Productionof biological products) in the case of QA testing.) |
|----|--|
| | Example Pre-registration efficacy or toxicity testing of drugs and vaccines |

COLUMN D: PROCEDURE

Please note – Procedure codes have a P (for Procedure) in front of the number in order to help improve accuracy of data entry.

Enter the **highest appropriate** alphanumerical code (**P1-P9**) from those listed below to describe the type of procedures carried out on the animals in the project. The descriptions given are a guide only.

Where 'Death as an endpoint' or 'Production of genetically modified animals ' applies, animals must be placed in these categories (P8 or P9) rather than any others which might also appear appropriate.

Note: for each project include additional lines for each procedure category where different animals within the same project are subjected to different procedure categories.

| Procedure Code: | Description: | | | |
|--------------------|--|--|--|--|
| P1 | Observation involving minor interference | | | |
| | Animals are not interacted with or, where there is interaction, it would not be expected to compromise the animal's welfare any more than normal handling, feeding, etc. There is no pain or suffering involved. | | | |
| | Examples | | | |
| | Observational study only | | | |
| | Breeding animals for supply, where only normal husbandry procedures are used | | | |
| | Breeding or reproductive study with no detriment to the animal | | | |
| | • 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 and grooming | | | |

| P2 | Animal unconscious without recovery |
|----|---|
| | Animal is rendered unconscious under controlled circumstances with little or no pain or distress. Capture methods are not required. Any pain is minor and brief and does not require analgesia. Procedures are carried out on the unconscious animal which is then killed without regaining consciousness. |
| | Examples Laboratory animals killed painlessly for dissection, biochemical analysis, etc. Teaching surgical techniques on live, anaesthetised patients which are not allowed to recover following the procedure |
| P3 | Minor conscious intervention |
| | Animal is subjected to minor procedures which do not normally require anaesthesia or analgesia. Any pain is minor and analgesia is usually unnecessary, although some distress may occur as a result of trapping or handling. |
| | Examples |
| | 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 |
| | Trapping and humane euthanasia for collection of specimens |
| | Stomach tubing, shearing |
| P4 | Minor surgery with recovery |
| | Animal is given appropriate regional or general anaesthesia 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 postoperative analgesia may be appropriate. Field capture using chemical restraint methods is also included here. |
| | Examples |
| | Biopsies |
| | Cannulations |
| | • Sedation/anaesthesia for relocation, examination or injections/blood sampling |
| | Castration with regional or general anaesthesia and post-operative analgesia |

| P5 | Major surgery with recovery |
|----|---|
| | 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. Postoperative pain is usually considerable and at a level requiring analgesia. |
| | Examples |
| | Orthopaedic surgery |
| | Abdominal or thoracic surgery |
| | Transplant surgery |
| P6 | 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 |
| | Induction of metabolic disease |
| | Prolonged deficient diets |
| | Polyclonal antibody production |
| | Antiserum production |

| P7 | 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 | | |
| | Forced swim test | | |
| | Nose-only smoke exposure | | |
| P8 | Death as an endpoint | | |
| | This category only applies in those rare cases where the death of the animal is a planned part of the procedures and animals die but are not euthanased. Where predictive signs of death have been determined <i>and</i> euthanasia is carried out before significant suffering occurs, they may be placed in category P6 or P7. | | |
| | Examples | | |
| | Lethality testing (including LD50, LC50) | | |
| | It does not include: death by natural causes; animals which are euthanased as part of the project; animals which are euthanased if something goes wrong; animals euthanased for dissection or for use as museum specimens; or accidental deaths. | | |
| P9 | Production of genetically modified animals | | |
| | This category is intended to allow for the variety of procedures which occur during the production of genetically modified animals. As animals in this category may be subjected to both minor <i>and</i> major physiological challenges <i>and</i> surgical procedures, this category reflects the varied nature of the procedures carried out. It effectively includes ALL animals used in GM production other than the final progeny which are used in a different procedure category. | | |
| | Examples | | |
| | Initial breeding animals for GM production | | |
| | Animals culled as part of the GM production process | | |

Column E: SPECIES

Please note – the species codes have an S (for Species) in front of the number in order to help improve accuracy of data entry.

- Enter the alphanumerical code from those listed below to describe the species or species group used in the project.
- The alphanumerical code is not sequential.
- There are no species codes S15, S19, S22, S25, S26, S44 or S55, and the highest number is S56.
- In filling out the spreadsheet include additional lines for each species where more than one species is used in a project.
- Please see Appendix 3 for advice on improving accuracy of species reporting.

| Laboratory | S1 | Mice | Primates | S34 | Marmosets |
|------------------|-----|----------------------------|--------------------|-----|----------------------|
| | S2 | Rats | | S35 | Macaques |
| | S3 | Guinea Pigs | | S36 | Baboons |
| | S4 | Rabbits | | S37 | Other primates |
| | S5 | Hamsters | Native mammals | S38 | Macropods |
| | S6 | Ferrets | | S39 | Possums and gliders |
| | S7 | Other | | S40 | Native rats and mice |
| | | laboratory mammals (not | | S41 | Dasyurids |
| Domestic mammals | S8 | Sheep | | S42 | Wombats |
| | S9 | Cattle | | S43 | Koalas |
| | S10 | Pigs | | S44 | Monotremes |
| | S11 | Horses | | S44 | Bandicoots |
| | S12 | Goats | | S44 | Bats |
| | S14 | Deer | | S44 | Other native mammals |
| | S31 | Cats | | S44 | Seals |
| | S32 | Dogs | | S44 | Whales and dolphins |
| | S33 | Other domestic | Exotic | S45 | Camels |
| | | mammals | feral | S46 | Cats |
| Birds | S13 | Poultry | | S47 | Cattle |
| | S16 | Exotic Captive | | S48 | Goats |
| | S17 | Exotic Wild | | S49 | Hares |
| | S18 | Native Captive | | S50 | Horses |
| | S20 | Native Wild | | S51 | Mice |
| | S21 | Other birds | | S52 | Pigs |
| Aquatic animals | S23 | Fish | | S53 | Rabbits |
| | S23 | Cephalopods | | S54 | Rats |
| | А | (reporting not | | S55 | Dingo/Wild Dogs |
| | S23 | Crustaceans (reporting | | S55 | Foxes |
| | В | not mandatory) | | S55 | Other exotic feral |
| Amphibians | S24 | Amphibians | | С | mammals |
| Reptiles | S27 | Lizards | Exotic zoo animals | S56 | Exotic zoo animals |
| | S28 | Snakes | | | |
| | S29 | Turtles and | | | |
| | S30 | Other reptiles | | | |

Column F: FATE OF ANIMAL

This column **MUST** be completed where species S31 Domestic cats or S32 Domestic dogs have been used.

This column may also be completed where other species are used and it is recommended that this information be provided.

For each project, include additional lines where there are different fates of animals within the same project.

| Fate Code | Description |
|--------------|--|
| F1 | Retained in project This is where the project is ongoing and the animal will remain in the project in the next reporting year. |
| F2 | Retained for use in other projects or supplied to another establishment / individual for research This is where the animal is kept by the establishment / individual for use in other research projects or supplied to another establishment / individual for use in research. |
| F3 | Retired from research and kept by the establishment / individual This is where the animal is kept by the establishment / individual in retirement with no further plans for use in research. |
| F4 | Privately (non-research) owned and remained with owner This is where the animal is privately owned and remains with the owner. Examples: Animal presented to veterinary clinic for treatment and participates in clinical trial Behavioural study with privately owned companion animals |
| F5 | Rehomed (as companion animal to private (non-research) home or rehoming organisation) This is where the animal is rehomed as a companion animal to a private (non-research) home or to a rehoming organisation with the consent of the rehoming organisation. |
| F6 | Euthanased or died related to the project This is where the animal is required to be euthanased as an integral part of the research project, or is euthanased or dies during the project as a consequence of the project procedures. |
| F7 | Euthanased or died unrelated to the project This is where the animal is euthanased or dies during the project for reasons unrelated to the project. Example: Animal in long-term food palatability trial euthanased due to unmanageable osteoarthritis |

| F8 | Euthanased because unsuitable to be rehomed This is where the animal is no longer required for research and is euthanased on the basis of an assessment that the animal is unsuitable for rehoming. Reasons the animal is unsuitable for rehoming may include physical, behavioural and biosecurity factors. |
|-----|---|
| | Examples: |
| | Animals with unmanageable health conditions causing discomfort or distress Animals that have problem behaviours that are unable to be addressed through rehabilitation Animals that could pose a biosecurity risk to other animals, people or the environment |
| | Animals that are genetically modified |
| F9 | Euthanased because unable to find a suitable home This is where the animal is no longer required for research and is assessed as suitable for rehoming, but is euthanased because a suitable home is unable to be found. |
| F10 | Remain free living in the wild or released to the wild This is where the animal is free living and remains in the wild (including where the animal is captured and released) or where the animal is released to the wild. |
| | Examples: |
| | Wildlife fauna surveys Native animal captive breeding and monitored release programs |

Column G: NUMBER USED

Enter the number of animals **that were actually used** (i.e. not just the number supplied or authorised) in the project in the year for which statistics are being collected. Please see Appendix 3 for advice on improving accuracy of numbers reporting.

Column H: COMMENTS

Use this column to communicate any other information, e.g. if you are unsure as to whether the project used animals old enough to be counted (see *Stages of development* page 5). You may also wish to note re-use of animals here, although this information is not mandatory (see *Re-use of animals* page 5).

6. Reporting of dogs and cats

These sections must be completed by any Accredited Animal Research Establishment that kept domestic dogs or cats for research during the period 1 January to 31 December of the reporting year. There is a separate section for each species (dogs and cats).

This includes any domestic dog or cat kept for research during the reporting year, regardless of whether they were used in a project. This information must be provided in addition to the General Animal Use Statistics.

This does not include any privately owned domestic dogs or cats that were primarily kept by an individual for reasons other than research (e.g., as a companion animal).

Information required for the reporting year includes:

- Numbers of dogs and cats kept, obtained, bred, and supplied,
- Fate of dogs and cats (including rehoming and euthanasia), and
- Numbers and outcomes of any applications made to the Animal Research Review Panel under section 54C(4)(a) of the *Animal Research Act 1985*.

Appendix 1: An example of the completed spreadsheet

| Row | A. Year | B. Project number | C. Purpose | D. Procedure | E. Species | F. Fate | G. Number used | H. Comments |
|-----|------------|----------------------|---------------|-----------------|------------|---------|-------------------|----------------|
| 1 | 2023 | 09/215 | A1 | P1 | S1 | | 30 | |
| 2 | 2023 | 09/217 | A8 | P8 | S1 | | 24 | |
| 3 | 2023 | 08/001 | A5 | P4 | S2 | | 12 | |
| 4 | 2023 | 07/002 | A4 | P3 | S1 | | 6 | |
| 5 | 2023 | 07/002 | A4 | P6 | S1 | | 10 | |
| 6 | 2023 | 07/003 | A1 | P1 | S3 | | 4 | |
| 7 | 2023 | 07/003 | A1 | P1 | S4 | | 8 | |
| 8 | 2023 | 08/183 | A5 | P2 | S1 | | 23 | |
| 9 | 2023 | 08/183 | A5 | P2 | S3 | | 20 | |
| 10 | 2023 | 08/183 | A5 | P4 | S1 | | 15 | |
| 11 | 2023 | 08/183 | A5 | P4 | S3 | | 12 | |
| 12 | 2023 | 09/004 | A7 | P1 | S28 | | 30 | |
| 13 | 2023 | 09/001 | A1 | P1 | S1 | | 20 | |
| 14 | 2023 | 07/002 | A5 | P2 | S2 | | 34 | Smith & Co. |
| 15 | 2023 | 908218 | A7 | P3 | S55B | | 12 | Joe Bloggs |
| 16 | 2023 | 18/020 | A5 | P1 | S32 | F4 | 20 | |
| 17 | 2023 | 18/035 | A4 | P1 | S31 | F2 | 10 | |
| 18 | 2023 | 18/035 | A4 | P1 | S31 | F5 | 2 | |
| 19 | 2023 | 18/035 | A4 | P2 | S31 | F6 | 5 | |

Statistics submitted by Establishment XX, (which has its own AEC) for the calendar year

- Rows 4-5: Example of one project with differing procedure categories and the same species of animals.
- Rows 6-7: Example of one project with the same procedure categories and differing species of animals.

- Rows 8-11: Example of one project with differing procedure categories and differing species of animals.
- Rows 14-15: Example of where Accredited Establishment Smith & Co. and independent researcher Joe Bloggs have been included in the Form L submission as they are supervised by Establishment XX's AEC and Establishment XX chose to include them with its From L statistics.
- Row 16: Example of one project using domestic dogs where all animals were privately owned and remained with the owners.
- Rows 17-19: Example of one project using domestic cats with differing procedure categories and differing fates of animals.

Appendix 2: Summary of codes used

| PURPOSE | | | | PROCEDURE | | | | | |
|-----------------|--|----------|------------------------|-----------|--|-----|----------------------|--|--|
| A1 | Stock breeding | | | Р | Observation involving minor interference | | | | |
| A2 | Stock maintenance | | | Р | Animal unconscious without recovery | | | | |
| A3 | Education | | | Р | Minor conscious intervention | | | | |
| A4 | Research: Human or animal biology | | | Р | Minor surgery with recovery | | | | |
| A5 | Research: Human or animal health & welfare | | | | Major surgery with | | | | |
| A6 | Research: Ani | imal ma | nagement or production | Р | Minor physiological challenge | | | | |
| A7 | Research: Env | | | Р | Major physiologica | | | | |
| A8 | Production of | f biolog | ical products | Р | Death as an end point | | | | |
| A9 | Diagnostic pr | ocedure | es | Р | Production of genetically modified animals | | | | |
| A10 | Regulatory pr | roduct t | esting | | | | | | |
| SPECIES | CODES | | | | | | | | |
| Laborate | ory | S1 | Mice | Prin | Primates | | Marmosets | | |
| | | S2 | Rats | | | S35 | Macaques | | |
| | | S3 | Guinea Pigs | | | S36 | Baboons | | |
| | | S4 | Rabbits | | | S37 | Other primates | | |
| | | S5 | Hamsters | Nati | Native mammals | | Macropods | | |
| | | S6 | Ferrets | | | | Possums and gliders | | |
| | | S7 | Other laboratory | | | S40 | Native rats and mice | | |
| | | | mammals (not | | | S41 | Dasyurids | | |
| Domest | ic mammals | S8 | Sheep | | | S42 | Wombats | | |
| | | S9 | Cattle | | | S43 | Koalas | | |
| | | S10 | Pigs | | | S4 | Monotremes | | |
| | | S11 | Horses | | | S4 | Bandicoots | | |
| | | S12 | Goats | | | S4 | Bats | | |
| | | S14 | Deer | | | S4 | Other native mammals | | |
| | | S31 | Cats | | | S44 | Seals | | |
| | | S32 | Dogs | | | S4 | Whales and dolphins | | |
| | | S3 | Other domestic | Exot | ic feral mammals | S45 | Camels | | |
| | | 3 | mammals | | | | Cats | | |
| Birds | Birds | | Poultry | | | | Cattle | | |
| | | S16 | Exotic Captive | | | S48 | Goats | | |
| | | S17 | Exotic Wild | | | S49 | Hares | | |
| | | S18 | Native Captive | | | S50 | Horses | | |
| | | S20 | Native Wild | | | S51 | Mice | | |
| | | S21 | Other birds | | | S52 | Pigs | | |
| Aquatic animals | | S23 | Fish | | | S53 | Rabbits | | |
| | | S2 | Cephalopods (reporting | | | S54 | Rats | | |
| | | 3A | not mandatory) | | | S5 | Dingo/Wild Dogs | | |
| | | S2 | Crustaceans (reporting | | | S5 | Foxes | | |
| | | 3B | not mandatory) | | | S5 | Other exotic feral | | |
| | | S24 | Amphibians | | | 5C | mammals | | |
| Reptiles | | S27 | Lizards | Exot | ic zoo animals | S56 | Exotic zoo animals | | |
| | | S28 | Snakes | | | | | | |
| | | S29 | Turtles and Tortoises | | | | | | |
| | | S30 | Other reptiles | | | | | | |

| FATE OF A | FATE OF ANIMAL | | | | | |
|-----------|---|--|--|--|--|--|
| F1 | Retained in project | | | | | |
| F2 | Retained for use in other projects or supplied to another establishment / individual for research | | | | | |
| F3 | Retired from research and kept by the establishment/ individual | | | | | |
| F4 | Privately (non-research) owned and remained with owner | | | | | |
| F5 | Rehomed (as companion animal to private (non-research) home or rehoming organisation) | | | | | |
| F6 | Euthanased or died related to the project | | | | | |
| F7 | Euthanased or died unrelated to the project | | | | | |
| F8 | Euthanased because unsuitable to be rehomed | | | | | |
| F9 | Euthanased because unable to find a suitable home | | | | | |
| F10 | Remain free living in the wild or released to the wild | | | | | |

Appendix 3: Guidance on ensuring accuracy in completing Form L: Animal Use Statistics

Year

• Ensure the correct year is entered in column A – i.e. the reporting year for which the information is being submitted.

Species codes

- Avoid entering incorrect species codes such as S558 instead of S55B.
- Do not add 0 in front of species numbers S1-S9.
- There are NO species codes S15, S19, S22, S25, S26, S44 or S55. Please make sure these codes are not used.
- Using the *Reporting Year NSW Animal Use Statistics Excel Spreadsheet Template*

should help reduce these sources of error by using the dropdown lists.

Purpose and procedure

 Please make sure the order of the columns is as per the *Reporting Year NSW* Animal Use Statistics Excel Spreadsheet Template

| А. | B. Project no. | C. Purpose | D. Procedure | E. Species | F. Fate | G. Number used | H. Comments |
|------|----------------|------------|--------------|------------|---------|----------------|-------------|
| Year | - | | | | | | |
| 20XX | | | | | | | |
| | | | | | | | |

Procedure P8: Death as an endpoint

• Entries with procedure category P8 Death as an endpoint should always be checked to ensure this is the correct procedure category, noting the definition. Often this procedure category is entered incorrectly, such as where animals are euthanased as part of a project.

Fate of animals

• If species S31 Domestic cats or S32 Domestic dogs are entered then the column on the *Fate of animal* MUST be completed.

Numbers used

- Sometimes the year number is added in by mistake instead of the number of animals used such as 2022. Hint: Sort numbers to check for the year number in the number of animals used column.
- Large numbers should additionally be checked to make sure they are correct.
- To help detect over-reporting of animals used, all numbers used for each project should be checked against the number approved for that project.
- Tadpoles are sometimes recorded under amphibians whether the numbers are frogs/toads or tadpoles needs to be confirmed. Tadpoles do not need to be reported unless they go on to fully metamorphosed development. See *Stages of development* (page 5) for guidance on what immature forms do and do not need to be reported.

- In reporting observation studies care should be taken only to report those animals observed and **counted** not an estimate of numbers seen or an estimate of the entire population, as this results in over-reporting.
- In reporting field studies using animals primarily held for commercial purposes, care should be taken only to report the animals involved in the study, not the whole herd / flock, as this results in over-reporting.

Researchers to double check information submitted

• A common source of error in the animal use reporting is researchers inaccurately recording the purpose, procedures (putting these in the wrong columns) and numbers used for projects. Researchers must check the information submitted to ensure it matches what actually occurred and the numbers used.

Certain combinations should trigger checking

• Unusual or unexpected combinations of Purpose and Procedure categories reported together should be checked for accuracy. These include:

| Purpose | Procedure (exceptions in brackets) |
|---------------------------------------|--|
| A1 Stock breeding | P5 Major surgery with recovery (except laboratory mammals) |
| | P7 Major physiological challenge |
| | P8 Death as an endpoint |
| A2 Stock maintenance | P5 Major surgery with recovery |
| | P7 Major physiological challenge |
| | P8 Death as an endpoint |
| A3 Education | P5 Major surgery with recovery |
| | P7 Major physiological challenge |
| | P8 Death as an endpoint |
| | P9 Production of genetically modified animals |
| A4 Human and animal biology | P8 Death as an endpoint |
| A5 Human or animal health and welfare | P8 Death as an endpoint |
| A6 Animal management and production | P8 Death as an endpoint |
| A7 Environmental study | P5 Major surgery with recovery |
| | P7 Major physiological challenge |
| | P8 Death as an endpoint |
| | P9 Production of genetically modified animals |

| A8 Production of biological products | P5 Major surgery with recovery |
|--------------------------------------|---|
| | P7 Major physiological challenge |
| | P8 Death as an endpoint |
| | P9 Production of genetically modified animals |
| A9 Diagnostic procedures | P5 Major surgery with recovery |
| | P7 Major physiological challenge |
| | P8 Death as an endpoint |
| | P9 Production of genetically modified animals |
| A10 Regulatory product testing | P9 Production of genetically modified animals |

AEC assessment and approval

• Figures on animal use to be submitted via Form L should be presented to the responsible AEC for assessment and approval prior to submission.

[©] State of New South Wales through Regional NSW 2024. The information contained in this publication is based on knowledge and understanding at the time of writing (January 2024). However, because of advances in knowledge, users are reminded of the need to ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of the Department of Regional NSW or the user's independent adviser.