



Guidance for researchers on reporting animals used in research - Secretary's Animal Care and Ethics Committee

DOCUMENT NUMBER:	RDOC21/49175	VERSION	1.0
AUTHORISED BY:	Group Director Science, Chief Scientist	AUTHORISED DATE	24/08/2021
ISSUED BY:	Chief Scientist's Branch	EFFECTIVE DATE	24/08/2021
		REVIEW DATE:	24/08/2024

Under the NSW Animal Research legislation, details of animal use in research and teaching must be submitted to the NSW Department of Primary Industries (DPI) annually by all holders of Animal Research Authorities for the purpose of reporting on animal use and Animal Ethics Committee (AEC) activity. The information is collected because it is required by law and is used by NSW DPI for administration of the Act and will be stored securely within NSW DPI.

The information is collated into a report (excluding information identifying the Accredited Animal Research Establishment or individuals) which is provided to the Animal Research Review Panel and the Minister. The report is then <u>published</u>.

Submission of this animal use information for projects approved by the Secretary's ACEC is done by the ACEC on behalf of the Accredited Animal Research Establishment/independent researcher. However, the Principal Investigator of a project must include the project's categories of purpose and procedures in the project application for ACEC approval.

In addition, in the Annual and Final report for each project, the code for the species used, the category of fate of animals (if using domestic cats and/or dogs) and the number of animals used are required in the Animal Use Reporting Table. See Appendix 1 for additional guidance on completing animal use tables in these reports.

Details required in project application forms

Proposed category of:

- 1. Purpose
- 2. Procedure.

Details required for Annual and Final reports

- 1. Species Code
- 2. Category of fate of animal (if domestic cats and/or dogs were used)
- 3. Number used

For more information on animal use reporting in NSW, please refer to **Form L** on the <u>Animal Ethics</u> <u>Infolink</u>.

Categorisation of Purpose

Select the **most appropriate** numerical code (A1-A10) from those listed below to describe the **primary purpose** of the project (only one purpose for each project should be selected on the ACEC application form.

Purpose			
category	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).		
AZ	Stock maintenance		
	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		
٧3	Education		
A3	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		
	would include interactive or demonstration classes in methods of animal husbandry,		
	management, examination and treatment.		
	Examples:		
	• Animals used 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		
	Animals used in workshops to teach specific techniques and procedures		
Δ <i>Δ</i>	Research: human or animal biology		
71	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.		
	Examples:		
	Molecular biology studies		
	 Studies of hormone levels for reproductive physiology 		
A5	Research: human or animal health and welfare		
-	Research projects which aim to produce improvements in the health and welfare of animals,		
	including humans.		
	Examples:		
	• Animals used to develop a new diagnostic test for a disease		
	 Development of a painless method of spaying cattle 		
	Developing a new vaccine for animals or humans		
	Production of biological products such as anti-sera, hormones and antibodies		

A6	 Research: animal management or production Research projects which aim to produce improvements in domestic or captive animal management or production. Examples: Developing an improved molasses/urea based supplement for cattle Determining optimum stocking rate for a pasture Evaluation of a calcium supplement for layer hens
A7	Research: environmental study Research projects which aim to increase the understanding of animals' environment or their role in it. These will include studies to determine population levels and diversity and may involve techniques such as observation, radio tracking or capture and release. <i>Examples:</i>
	 Pre-logging or pre-development fauna surveys Fauna surveys for environmental impact studies Research into methods to control feral animals
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
A10	 <i>Regulatory product testing</i> Projects for the testing of products required by regulatory authorities, such as the APVMA. If the product testing is not a regulatory requirement, e.g. it is part of a quality assurance system only, those animals should be included in the appropriate category selected from above. (This would be normally be Purpose A8 (Production of biological products) in the case of QA testing.) <i>Examples:</i> Pre-registration efficacy or toxicity testing of drugs and vaccines

Categorisation of procedures

The procedure categories are intended to give some indication of the **impact** of procedures on the animals used. Use the brief guide and the examples given in the table below to help categorise the procedure. The examples are only a guide and do not exclude otherwise unlisted procedures which are judged to have a similar level of impact.

On the ACEC application form enter the **highest appropriate** numerical code (P1-P9) to describe the type of procedures carried out on the animals in the project.

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

Procedure	Description:		
category			
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. <i>Examples:</i>		
	 Observational study only Wildlife survey using camera trapping with lure and/or white flash 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 Pasture studies using grazing animals Teaching of normal, non-invasive husbandry such as handling and grooming Production of products, such as hormones or drugs, in milk or eggs from animals which are subject to normal husbandry procedures only 		
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 No experimentation on living animals, e.g., animals killed painlessly for dissection, biochemical analysis, in vitro cell culture, tissue or organ studies Collecting blood or plasma from anaesthetised dogs prior to euthanasia Live animals euthanased for later scientific use, e.g., rats and toads for dissection 		
Ρ3	 Minor conscious intervention Animal is subjected to minor procedures which would normally not 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 (not drugs trials), 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 Trapping and humane euthanasia for feral animal control research Stomach tubing, shearing Performing ultrasound under sedation 		

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. <i>Examples:</i>
	BiopsiesCannulations
	 Sedation/anaesthesia for relocation, examination or injections/blood sampling Castration with regional or general anaesthesia and post-operative analgesia Implantation of microchip in horse after injecting local anaesthesia
Р5	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. Post-operative pain is usually considerable and at a level requiring analgesia. <i>Examples:</i>
	 Orthopaedic surgery Abdominal or thoracic surgery
	 Abdominal of thoracic surgery Transplant surgery
	Mulesing or castration without anaesthesia
P6	<i>Minor physiological challenge</i> 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. <i>Examples</i> :
	Minor infection Minor ar moderate abaneturis modification
	 Minor or moderate phenotypic modification Early oncogenesis
	Arthritis studies with pain alleviation
	 Induction of metabolic disease Prolonged deficient dists
	 Polyclonal antibody production
	Antiserum production
D7	
Ρ/	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. <i>Examples:</i>
	 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

P8	Death as an endpoint			
of the procedures and animals die but are not euthanased. Where predictive sign have been determined <i>and</i> euthanasia is carried out before significant suffering o may be placed in category P6 or P7. <i>Examples:</i> Death as an end-point does include:				
	 Lethality testing (LD50, LC50) Toxicity testing with death as a planned end-point without euthanasia Dose rate studies for feral animal control. 			
	Death as an end-point does not include:			
	 Death by natural causes (incidental to the scientific use) Animals which are euthanased as part of the project Animals which are euthanased on completion of the project Animals which are euthanased as a result of an unexpected adverse event Animals euthanased for dissection or for use as museum voucher 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 category of procedure. <i>Examples:</i>			
	Initial breeding animals for GM productionAnimals culled as part of the GM production process			

Fate of animals

This information **MUST** be provided in your Annual and Final report where **domestic cats** or **domestic dogs** are used. This information may also be provided where other species are used. Select the **most appropriate** numerical code (F1-F10).

Fate category	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. <i>Examples</i> :
	 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) and where the animal is released to the wild. <i>Examples</i> :
	 Wildlife fauna surveys Native animal captive breeding and monitored release programs

Species Codes

When entering the species into your Animal Use Reporting Table in your Annual or Final report:

- 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 for each species used select the appropriate numerical code as listed in the table below.
- There are no species codes S15, S19, S22, S25, S26, S44 or S55, and the highest number is S56.
- In filling out the table in the annual Interim or Final report, include additional lines for each species where more than one species is used in a project.

Laboratory mammals	S1	Mice
	S2	Rats
	S3	Guinea Pigs
	S4	Rabbits
	S5	Hamsters
	S6	Ferrets
	S7	Other laboratory
		mammals (not
		primates)
Domestic mammals	<u>S8</u>	Sheep
	S9	Cattle
	S10	Pigs
	S11	Horses
	S12	Goats
	S14	Deer
	S31	Cats
	S32	Dogs
	S33	Other domestic
		mammals
Birds	S13	Poultry
	S16	Exotic Captive
	S17	Exotic Wild
	S18	Native Captive
	S20	Native Wild
	S21	Other birds
Aquatic animals	S23	Fish
	S23A	Cephalopods
		(reporting not mandatory)
	S23B	Crustaceans (reporting
		not mandatory)
Amphibians	S24	Amphibians
Reptiles	S27	Lizards
	S28	Snakes
	S29	Turtles and Tortoises
	S30	Other reptiles

Primates	S34	Marmosets
	S35	Macaques
	S36	Baboons
	S37	Other primates
Native mammals	S38	Macropods
	S39	Possums and gliders
	S40	Native rats and mice
	S41	Dasyurids
	S42	Wombats
	S43	Koalas
	S44A	Monotremes
	S44B	Bandicoots
	S44C	Bats
	S44D	Other native mammals
	S44E	Seals
	S44F	Whales and dolphins
Exotic feral	S45	Camels
mammals	S46	Cats
	S47	Cattle
	S48	Goats
	S49	Hares
	S50	Horses
	S51	Mice
	S52	Pigs
	S53	Rabbits
	S54	Rats
	S55A	Dingo/Wild Dogs
	S55B	Foxes
	S55C	Other exotic feral
		mammals
Exotic zoo animals	S56	Exotic zoo animals
	1	

Appendix - Examples of the Annual and Final report Animal Use Tables

Multiple species and/or procedures in a single project

Some projects will have more than one **species** group of animals. Some projects will have animals which are subject to different categories of **fate**.

This is what the **Animal Use Reporting table** might look like if there are:

1. Multiple **species** used in one project

Species	Species Code	Number Used	Fate
E.g. Laughing Kookaburra (Dacelo novaeguineae)	S20	5	
E.g. Ringtail possum (Pseudocheirus peregrinus)	S39	5	
E.g. Crowned toadlet (Seudophryne australis)	S24	7	

2. Multiple types of **fate** in one project

Species	Species Code	Number	Fate
		Used	
E.g. Cat	S31	24	F2
E.g. Dog	S32	10	F2
E.g. Dog	S32	2	F5

Revision history

Version	Date issued	Notes	Ву
1	24/08/2021	New document	Research Ethics Officer

Contact

secretary.acec@dpi.nsw.gov.au