

Animal Use Statistics

July 2005

Background

This document has been prepared to assist those who are required to maintain records of animal manipulations and supply statistics to the Ministry of Agriculture and Forestry (MAF). It provides information on legal requirements and guidance on how to complete the forms supplied by MAF.

Legal Requirements

Who must keep records

Every person/organisation who/which

- has an approved code of ethical conduct; or
- has an arrangement to use a code holder's code and animal ethics committee; or
- has the Minister of Agriculture's approval to carry out animal manipulations in the national interest ; or
- has the approval of the Director-General of MAF to carry out research on non-human

hominids; must maintain records.

Retention of records

The records that must be kept are set out in the Animal Welfare (Records and Statistics) Regulations 1999. These records must be kept for a period of five years after the end of the year to which they relate. (For example, all records relating to the manipulations which took place in 2000 must be kept until at least 31 December 2005.)

Annual Returns

Code holders are required to submit an annual return for each calendar year to MAF by the end of the following January. This must be in writing.

Additional requests

In addition, the Director-General of MAF or any inspector appointed under the Animal Welfare Act 1999 may require code holders to supply records or details from them within seven days.

Offences and Penalties

It is an offence to:

- wilfully fail to keep the required records

- wilfully fail to retain the required records for the five-year period
- fail, without reasonable excuse, to make a return on time
- make a return that is, to the person's knowledge, false or misleading
- fail, without reasonable excuse, to comply with the Director-General's/an inspector's request
- forward, in response to the Director-General's/an inspector's request, records/details that are false or misleading.

The maximum penalty for offences against the Animal Welfare (Records and Statistics) Regulations is \$5000 for an individual and \$25,000 for a body corporate.

Coverage

Records must be kept for all animals that are manipulated for the purposes of research, testing or teaching.

The terms 'animal', 'manipulation' and 'research, testing and teaching' are all defined in the Animal Welfare Act 1999. These definitions are repeated in appendix 3.

The killing of an animal to undertake research, testing and teaching on the dead animal, its tissues or on prenatal developmental tissue does not constitute a manipulation if the animal is killed humanely.

Organisations/animal ethics committees (AECs) may have internal rules requiring ethical approval of such animal use but statistics for such usage should not be included in the annual return to MAF.

Publication of Data

The statistics supplied to MAF are shared with the National Animal Ethics Advisory Committee (NAEAC). Collated statistics are published each year in NAEAC's annual report. The annual report is distributed widely both within New Zealand and internationally. The animal use statistics are often the subject of media interest when the report is released.

Database

MAF has developed a database to facilitate the efficient collation of statistical returns from code holders. This database package is available at no charge to code holders who use large numbers of animals annually and who want to use it to prepare their return. The package remains the property of MAF and may not be altered. The database is not compatible with Apple MacIntosh computers.

The system provides a process for statistics to be reported to the animal ethics committee from the planning stage to the final reporting stage. However, code holders are free to develop their own internal record keeping procedure so long as the final return to MAF each year is provided in the required format.

Manual Returns

Most code holders will submit manual records. In this case the form supplied by MAF should be photocopied as necessary, completed and signed. Submission of returns, including nil returns, by telephone is not acceptable. **Please note that there should be one species per page and one page per species.** Code holders are responsible for collating their own statistics.

Where code holders have arrangement in place for other individuals / organisations to use the former's code and AEC, the code holder may submit a return on behalf of the latter person / organisation, but their statistics must be clearly and separately identified.

Guidelines for selecting appropriate categories

Box 1

Animal Type

The list of types to be used, together with the appropriate code appears on the back of the form.

Box 2

Source of Animals

Select which category(ies) within the box describe(s) the animals you propose to use.

Breeding Unit

An institutional unit dedicated to breeding animals for manipulation.

Commercial

Obtained from a commercial supplier of animals

Farm

Farm animals obtained from a farm; the farm may be a commercial unit or belong to the institution.

Born During Project

Primarily intended for offspring whose birth is part of the project, e.g. lambing or hatching studies

Captured

Captured in the wild

Imported

Imported from an overseas source.

Public Sources

Public donations, animals obtained from pound, other public sources.

Box 3

Status of Animals

Select which category (ies) within the box describes (describe) the status of the animals you propose to use.

Normal/Conventional

Normal healthy animals.

SPF / Germfree

Animals reared under conditions in which the presence of disease agents (pathogens) has been controlled, e.g. 'Specific Pathogen-Free' (SPF) animals, nematode parasite-free animals, gnotobiotic animals.

Diseased

Animals afflicted with a naturally occurring disease, the focus of study usually being the cause, effects, cure or prevention of the disease.

Transgenic/Chimera

Animals genetically modified by molecular genetic methods.

Protected Species

A permit is required for use of protected species; give your permit number (on back of form). If you have queries about protected and endangered species, consult the Protected Species Division, Department of Conservation, Wellington.

Unborn / Prehatched

Mammalian foetus in the last half of gestation or prehatched avian or reptilian young in last half of development or marsupial pouch young.

Other

Categories not covered above should be included here.

Box 4

Main reasons for manipulation / use - select the category which best suits the purpose of the manipulation. (One category only)

Teaching

Animals used for teaching or instruction, at any level.

Species Conservation

Work directed towards species conservation: the species to be conserved may or may not be directly involved, e.g. nutrition studies using a more common species can benefit an endangered species.

Environmental Management

Environmental management including the control of animal pests.

Animal Husbandry

Animal husbandry, including reproduction, nutrition, growth, production.

Basic Biological Research

Basic biological research.

Medical Research

Medical research involving animals, but not research on human subjects.

Veterinary Research

Research, particularly that aimed at improving the health and welfare of production and companion animals.

Testing

Animals used for public health testing or to ensure the safety, efficacy or quality of products to meet regulatory requirements for human or animal products, either in New Zealand or internationally.

Production of biological agents

Animals used for raising antibodies or for the supply of blood products.

Development of alternatives

Work aimed at developing methods to replace or reduce the use of live animals in research, testing and teaching.

Other

Manipulations for purposes other than those listed above.

Box 5

Any Re-Use of Animals

The objective is to indicate animals which are used in a single study or experiment, as opposed to animals used in more than one study or experiment, that is, recycled from one study into another study.

For example, a typical study or experimental design might include the collection of a series of blood samples from each animal. At the conclusion of this experiment the animal may be euthanased (if a rodent) or returned to pasture (if a ruminant). It is not considered reasonable to count every blood sample as a separate use, rather, to consider that the animals have been used in a single study.

This contrasts with animal re-use, in which an animal is used in one study (which may include serial blood sampling), and then at the completion of this first study the same animal is put into a second (possibly unrelated) study for another experiment. Such an animal has experienced re-use.

Where animals are subjected to repetitive procedures, which continue for prolonged periods. For example, blood removal for serum production would be classified as re-use because of the large volumes of blood involved.

To summarise

- **No prior use** - Used in one study or experiment only.
- **Previously used** - Recycled from one study to another, or repetitive long-term manipulations.

Box 6

Grading of Manipulations

The purpose of this is to provide an overall estimate of the severity or invasiveness of each animal use, taking into account the effect of any anaesthetic, analgesic, euthanasia technique, or other strategy or practice that is applied or used, or any other step taken to avoid or alleviate the stress or pain caused to the animal. Select which of the five grades (0, A, B, C, X) best describes the severity of the proposed manipulation using the examples provided.

Grade 0 - 'No suffering or virtually no suffering'

Grazing trials or field behavioural studies using healthy animals; exposure to ambient conditions within the thermoneutral range; non-invasive studies of tame or trained animals kept in benign indoor conditions.

Grade A - 'Little suffering'

Use of completely anaesthetised animals which do not regain consciousness; standard methods of euthanasia which rapidly induce unconsciousness (e.g. anaesthetic overdose, physical or electrical stunning); simple venipuncture or venisection; injection of non-toxic substances, skin tests which cause low-level irritation without ulceration; feeding trained animals by orogastric tube; studies of vaccines using killed pathogens; induction of subclinical

parasitism; induction of mild fever without other debilitating effects; benign preference tests in unnatural surroundings; movement of free-range domesticated livestock to unfamiliar housing.

Grade B – ‘Moderate suffering’

Recovery from major surgery like thoracotomy, orthopaedic procedures, hysterectomy or gall bladder removal, with effective use of analgesics, surgical procedures on conscious animals but with the use of local anaesthetics and systemic analgesics, studies of live vaccines, induction of clinical parasitism, induction of mild reversible diarrhoea, moderate surgical or pharmacological modification of homeostatic capacity (e.g. limited gut resection), long-term restraint leading to reversible stereotypes, changing social group composition, movement of excitable free range domesticated livestock to unfamiliar housing.

Grade C - ‘Severe suffering’

Recovery from major surgery without the use of analgesics; marked social or environmental deprivation; studies of facial eczema; induction of severe diarrhoea or severe infectious pneumonia; modification of homeostatic capacity (e.g. chemical induction of diabetes mellitus without replacement therapy); marked surgical modification of homeostatic capacity (e.g. extensive gut resection); induction of severe aggressive behaviour which does not lead to self-mutilation or excessive intraspecific aggression; capture, handling, restraint or housing, without the use of tranquillisers, of wild or semi-domesticated animals that exhibit marked flight responses.

Grade X - ‘Very severe suffering’

Conducting major surgery without the use of anaesthesia (e.g. where animals are immobilised physically or with muscle relaxants); testing the efficacy of analgesics in animals with induced pain; toxicity testing using the traditional LD50 test; evaluation of vaccines where death is the measure of failure to protect; studies of the pathogenesis of fatal diseases caused by infectious or toxic agents; studies of recovery from third degree burns or serious traumatic injuries; induction of psychotic-like behaviour or of agonistic interactions which lead to severe injury or death.

Notes:

- i. These examples are not exhaustive or definitive.
- ii. Every endeavour must be made to minimise the severity or intrusiveness of proposed manipulations (e.g. by using analgesics to control pain; by euthanasia of conscious animals before they progress to an unpleasant death).
- iii. The greater the severity or intrusiveness of a manipulation the greater the strength of the required justification for the work. Manipulations graded 'X' require especially strong justification and would be approved only in exceptional circumstances and with close supervision.
- iv. Grading the manipulation(s) clearly requires a value judgement to be made by the applicant. This is verified subsequently (or amended) by the AEC. The experience of the investigator, and the quality of the environment in which the manipulation is carried out may alter the grading that is selected - this needs to be kept in mind.

The National Animal Ethics Advisory Committee understands that some inconsistencies may occur when those judgements are made; this will not seriously distort the overall picture. What is expected is that an honest assessment be made.

Box 7

Expected Date of Completion

This provides the basis on which the secretary of the AEC will request final data for the project. This applies only to those using the database. This box does not appear on the manual form.

Box 8

Alive

This information records the fates of animals that survived the manipulation(s) and were disposed of to one of the categories identified in Box 8. Select the category(ies).

Animals sent to freezing works or slaughterhouses subsequent to the manipulation should be included under "disposed of to others". Where the "disposed of to others" categories is used, code holders are required to record the name and address and number of animals delivered to that person.

This information need not be submitted to MAF as a matter of routine, but must be available if required.

Box 9

Dead

This information records the number of animals that died or were euthanased during the course of or after the manipulation.

Box 10

Grand Total

Records the actual number of animals that were manipulated in the project.

Appendix 1- Sample Form for Annual Return to MAF

ANIMAL MANIPULATION FIGURES: Period: 1 January to 31 December

Name /Institution:

ONE SPECIES PER SHEET PLEASE

1. Animal Type:

2. Source of Animals: No. Used

Breeding unit

Commercial

Farm

Born during project

Captured

Imported into New Zealand

Public sources

Total

3. Status of Animals: No. Used

Normal/conventional
SPF/germ free
Diseased
Transgenic/chimaera
Protected species
Unborn/prehatched
Other

4. Manipulation: No. Used

Teaching
Species conservation
Environmental management
Animal husbandry
Basic biological research
Medical research
Veterinary research
Testing
Production of Biological Agents
Development of Alternatives
Other

5. Re-use: No. Used

No prior use
Previously used

6. Grading: No. Used

No suffering	O
Little suffering	A
Moderate suffering	B
Severe suffering	C
Very severe suffering	X

8. Alive: No. Used

Retained [by your institution]

Returned [to owner]

Released [to the wild]

Disposed of [to others eg works]

Total Alive

9. Dead: No. Used

Total Dead

10. Total Manipulated/Used:

We agree that these statistics may be released if requested under the Official Information Act.
Yes No

Nil Return:

Completed by:
please print clearly

Designation:

Signature:

Box 1 Animal Type Codes:

No distinction on basis of sex, age, breed, strain or physiological condition

Animal Type	Code	Animal
Rodents	1 a	Mice
	1 b	Rats
	1 c 1 d	Guinea pigs Hamsters
Rabbits	1 e	Rabbits
Farm Animals	1 f 1 g 1 h	Sheep Cattle Goats
	1 j 1 k	Deer Pigs
Other Domestic	1 m	Horses
Mammals	1 n 1 o	Dogs Cats
Birds	1 p 1 q 1 r	Fowls, chickens Pigeons Other birds

Miscellaneous	1 s	Marine Mammals
	1 t	Possums
	1 u 1 w 1 x	Reptiles Amphibia Fish
	1 z	Octopus, squid, crabs, lobster, crayfish
Other	1 y	Other species (*name)

Appendix 2:

Legal Definitions from the Animal Welfare Act 1999

Excerpt from section 2(1) – Animal

"Animal"—

- a. Means any live member of the animal kingdom that is--
 - i. A mammal; or
 - ii. A bird; or
 - iii. A reptile; or
 - iv. An amphibian; or
 - v. A fish (bony or cartilaginous); or
 - vi. Any octopus, squid, crab, lobster, or crayfish (including freshwater crayfish); or
 - vii. Any other member of the animal kingdom which is declared from time to time by the Governor-General, by Order in Council, to be an animal for the purposes of this Act; and
- b. Includes any mammalian foetus, or any avian or reptilian pre-hatched young, that is in the last half of its period of gestation or development; and
- c. Includes any marsupial pouch young; but
- d. Does not include--
 - i. A human being; or
 - ii. Except as provided in paragraph (b) or paragraph (c) of this definition, any animal in the pre-natal, pre-hatched, larval, or other such developmental stage:

3 Definition of "manipulation"-

1. In this Act, unless the context otherwise requires, the term "manipulation", in relation to an animal, means, subject to subsections (2) and (3), interfering with the normal physiological, behavioural, or anatomical integrity of the animal by deliberately—
 - a. Subjecting it to a procedure which is unusual or abnormal when compared with that to which animals of that type would be subjected under normal management or practice and which involves-
 - i. Exposing the animal to any parasite, micro-organism, drug, chemical, biological product, radiation, electrical stimulation, or environmental condition; or
 - ii. Enforced activity, restraint, nutrition, or surgical intervention; or
 - b. Depriving the animal of usual care;- and "manipulating" has a corresponding meaning.
2. The term defined by subsection (1) does not include-

- a. Any therapy or prophylaxis necessary or desirable for the welfare of an animal; or
 - b. The killing of an animal by the owner or person in charge as the end point of research, testing, or teaching if the animal is killed in such a manner that the animal does not suffer unreasonable or unnecessary pain or distress; or
 - c. The killing of an animal in order to undertake research, testing, or teaching on the dead animal or on prenatal or developmental tissue of the animal if the animal is killed in such a manner that the animal does not suffer unreasonable or unnecessary pain or distress; or
 - d. The hunting or killing of any animal in a wild state by a method that is not an experimental method; or
 - e. Any procedure that the Minister declares, under subsection (3), not to be a manipulation for the purposes of this Act.
3. The Minister may from time to time, after consultation with the National Animal Welfare Advisory Committee and the National Animal Ethics Advisory Committee, declare any procedure, by notice in the Gazette, not to be a manipulation for the purposes of this Act.
4. The Minister must, in deciding whether to publish a notice under subsection (3) in relation to a procedure, have regard to the following matters:
- a. The nature of the procedure; and
 - b. The effect that the performance of the procedure will or may have on an animal's welfare; and
 - c. The purpose of the procedure; and
 - d. The extent (if any) to which the procedure is established in New Zealand in relation to the production of animals or commercial products; and
 - e. The likelihood of managing the procedure adequately by the use of codes of welfare or other instruments under this Act or any other Act; and
 - f. The consultation conducted under subsection (3); and
 - g. Any other matter considered relevant by the Minister.

5 Definition of "research, testing, and teaching"-

1. In this Act, unless the context otherwise requires, the term "research, testing, and teaching" means, subject to subsections (2) to (4),-
- a. Any work (being investigative work or experimental work or diagnostic work or toxicity testing work or potency testing work) that involves the manipulation of any animal; or
 - b. Any work that-
 - i. Is carried out for the purpose of producing antisera or other biological products; and
 - ii. Involves the manipulation of any animal; or
 - c. Any teaching that involves the manipulation of any animal.
2. The term defined by subsection (1) does not include any manipulation that is carried out on any animal that is in the immediate care of a veterinarian, if--
- a. The veterinarian believes on reasonable grounds that the manipulation will not cause the animal unreasonable or unnecessary pain or distress, or lasting harm; and
 - b. The manipulation is-
 - i. For clinical purposes in order to diagnose any disease in the animal or any associated animal; or

- ii. For clinical purposes in order to assess the effectiveness of a proposed treatment regime for the animal or any associated animal; or
 - iii. For the purposes of assessing the characteristics of the animal with a view to maximising the productivity of the animal or any associated animal.
- 3. The term defined by subsection (1) does not include any manipulation of an animal--
 - a. Which is carried out with the principal objective of-
 - i. Assisting the breeding, marking, capturing, translocation, or trapping of animals of that type; or
 - ii. Weighing or taking measurements from the animal; or
 - iii. Assessing the characteristics of animals of that type; and
 - b. Which is a manipulation of an animal that-
 - i. Is carried out routinely; or
 - ii. Is a minor modification of a manipulation that is carried out routinely; and
 - c. Which is used to fulfill responsibilities and functions under-
 - d.
 - i. The Conservation Act 1987; or
 - ii. Any Act listed in the First Schedule of the Conservation Act 1987; or
 - iii. Any other Act or regulations under which the Minister of Conservation or the Director-General of Conservation or the Department of Conservation has responsibilities or functions; or
 - iv. The Fisheries Act 1996.
- 4. For the purposes of this section, an animal is in the immediate care of a veterinarian if the veterinarian-
 - a. Has accepted responsibility for the health and welfare of the animal; and
 - b. Is providing the animal with direct and continuing care.
- 5. In the other sections of this Act (except section 57(a)(i)),-
 - a. The term "research" means any research work that comes within the term defined by subsection (1); and
 - b. The term "testing" means any testing work that comes within the term defined by subsection (1); and
 - c. The term "teaching" means any teaching that comes within the term defined by subsection (1).