

The Parliament of the Commonwealth of Australia

ANIMAL EXPERIMENTATION

Report by the
Senate Select Committee on Animal Welfare

Australian Government Publishing Service
Canberra

© Commonwealth of Australia 1989
ISBN 0 644 09621 7

PRINTED BY PIRIE PRINTERS SALES PTY LTD, FYSHWICK, A.C.T. 2609

MEMBERSHIP OF THE COMMITTEE

Members

Senator A.R. Devlin (Tasmania), Chairman ***

Senator D. Brownhill (New South Wales) *

Senator P.H. Calvert (Tasmania) ***

Senator B. Cooney (Victoria) *

Senator J. Morris (New South Wales)***

Senator N.K. Sanders (Tasmania) **

- * From 1 July 1985
- ** From 21 August 1985
- *** From 24 September 1987

Former Members

Senator Jack Evans (Western Australia) -
(7 December 1983 - 30 June 1985)

Senator J.M. Hearn (Tasmania) -
(7 December 1983 - 30 June 1985)

Senator the Hon. D.B. Scott (New South Wales) -
(7 December 1983 - 30 June 1985)

Senator J.R. Siddons (Victoria) -
(1 July 1985 - 21 August 1985)

Senator G. Georges (Queensland) -
(7 December 1983 - 5 June 1987)

Secretary

P. Barsdell
The Senate
Parliament House
Canberra

CONTENTS

	<u>Page</u>
Membership of the Committee	iii
List of Tables	xi
Abbreviations Used in the Report	xiii
List of Recommendations	xv
CHAPTER 1 - INTRODUCTION	1
Appointment of the Committee and its Terms of Reference	1
Conduct of the Inquiry	2
Nomenclature	3
Animal Experimentation Debate	4
Acknowledgements	7
CHAPTER 2 - ANIMAL EXPERIMENTATION IN AUSTRALIA	9
Introduction	9
Victoria	9
Western Australia	13
Universities	16
CSIRO	18
Conclusions	20
CHAPTER 3 - THE MORAL STATUS OF ANIMALS AND THE ETHICS OF ANIMAL EXPERIMENTATION	23
Introduction	23
Historical Perspective	24
Utilitarianism and Suffering	25
Difficulties with Utilitarianism	28
Animal Rights	31
Animal Freedom and Other Moral Claims	33
Animals and Equality	39
Conclusions	41
CHAPTER 4 - ANIMAL PAIN AND DISTRESS	43
Definitions	43
Scientific Attitudes to Animal Pain	47
Difficulties in the Assessment of Animal Pain and Distress	49

	<u>Page</u>
Animal Pain Assessment	51
Pain Classification System	55
Pain Relief in Laboratory Animals	58
Pain in Codes of Practice	59
CHAPTER 5 - THE USE OF ANIMALS IN BIOMEDICAL RESEARCH	 65
Introduction	65
Value of Biomedical Research	66
Use of Animals in Basic Research	68
Repetition of Experiments	71
Alternatives	73
Tissue Cultures	76
Refinement of Experimental Procedures	77
Funding of Alternatives	79
CHAPTER 6 - THE USE OF ANIMALS IN THE PSYCHOLOGICAL AND BEHAVIOURAL SCIENCES	 81
Introduction	81
Extent of Psychological and Behavioural Research in Australia	83
The Use of Animals in Psychological and Behavioural Research	90
CHAPTER 7 - ANIMALS IN TOXICOLOGICAL TESTING	 97
Introduction	97
Testing Strategies	98
Drug and Chemical Testing in Australia - Regulatory Requirements	99
Cosmetics	100
General Issues in Testing	101
Toxicological Testing in Australia	102
National Biological Standards Laboratory	104
The Role of Animals in Toxicological Testing - Rationale and Alternatives	107
Alternatives	111
Development of Alternatives in Australia	114
Specific Toxicological Tests	114
The Draize Test	114
LD50 Test	117
Current Status of the LD50 Test	118
Alternatives	119
Regulatory Action in Australia	121

	<u>Page</u>
CHAPTER 8 - THE USE OF ANIMALS IN AGRICULTURAL AND WILDLIFE RESEARCH	125
Agricultural Research	125
Types of Experiment	126
Experiments Involving Native and Feral Animals	129
Supply, Handling and Husbandry	131
Observational Studies of Wild Animals	133
Marking of Fish, Birds and Animals	133
Radio Telemetry	134
Capture	134
Conclusions	135
Wildlife Research in Australian External Territories	136
 CHAPTER 9 - ANIMAL HOUSE FACILITIES AND THEIR MANAGEMENT	 141
Introduction	141
Animal House Facilities	141
Standards for Accommodation	145
Quality Control	147
SPF Animals - Facilities, Breeding and Use in Experimentation	152
The Economics of Laboratory Animal Breeding	155
Rationalisation of Breeding Units	156
Cost Recovery	160
Surplus Animals	161
Standard Operating Procedures	165
 CHAPTER 10 - THE USE OF POUND ANIMALS FOR TRAINING AND EXPERIMENTAL PURPOSES	 167
Introduction	167
Extent of Use	167
Use of Pound Dogs for Teaching	168
The Use of Pound Animals for Experimental Purposes	170
Policies of the Pounds	173
Code of Practice	175
Transport of Pound Animals	175
Receipt of Dogs at Institutions	176
Records	177
The Supply of Cats from Pounds	177
 CHAPTER 11 - ANIMAL HOUSE STAFF	 179
Introduction	179
Status of Animal House Staff	181
Training in Animal Care	185
Professional Staff	187

	<u>Page</u>
CHAPTER 12 - INFORMATION AND TRAINING	189
Introduction	189
Experimentation Standards	189
Australian Council for the Care of Animals in Research and Teaching	197
 CHAPTER 13 - ANIMAL WELFARE ADMINISTRATION IN AUSTRALIA	201
Introduction	201
Commonwealth/State Responsibilities	201
Federal System	209
 CHAPTER 14 - CURRENT REGULATORY SYSTEM	213
Introduction	213
Evolution of the Code of Practice	213
Legislation	214
New South Wales	215
Victoria	217
South Australia	219
Tasmania	221
Queensland	222
Western Australia	223
Australian Capital Territory	224
Northern Territory	225
 CHAPTER 15 - PROPOSED REGULATORY SYSTEM	227
Introduction	227
Regulation or Not	228
Ethics Committees	235
Code of Practice	238
Enforcement and Accountability	239
Legislation	240
Monitoring	243
Accountability	245
Summary	245
Commonwealth Government	246
 CHAPTER 16 - CODE OF PRACTICE AND ETHICS COMMITTEES	251
Introduction	251
Code of Practice	251
Revision of the Code of Practice	252

	<u>Page</u>
Compliance with the Code of Practice	255
Emergencies	258
Animal Welfare Officers	259
Ethics Committees	260
Membership of Ethics Committees	262
Consideration of Protocols	266
Guidelines	268
REFERENCES	271
Appendix I - List of Witnesses Who Appeared Before the Committee to Give Evidence on Animal Experimentation	285

LIST OF TABLES

TABLE		<u>Page</u>
2.1	Numbers of Animals Used by Type of Vertebrate in Completed Experiments: Victoria, 1982-83 to 1986-87	11
2.2	Numbers of Animals Used and Percentage Changes by Type of Use - Victoria, 1982-83 to 1986-87	12
2.3	Rodents Issued by Monash University Animal House 1982-1987	13
2.4	Numbers of Animals Used for Research Purposes in Western Australia 1981-1986	14
2.5	Numbers of Animals Used in Experiments in the University of Western Australia and Murdoch University, 1980-84	15
2.6	Animals Issued from Central Animal Houses at the University of Sydney, University of New South Wales and the University of Queensland, 1980-84	17
2.7	Animals Used for Experimental and Teaching Purposes by Australian Universities, 1980-84	17
2.8	Animals Used for Experiments and Teaching in Australian Universities % change year to year	18
2.9	Numbers of Animals Used by CSIRO, 1981-82 to 1983-84	19
2.10	Numbers of Cattle and Sheep Used Involving Interventions or Routine Husbandry, 1981-82 to 1983-84	20
4.1	Possible Interpretation of Total Scores from an Overall Assessment of an Experimental Animal	52
4.2	Research Techniques, Pain and Distress	54
6.1	Animals Used in Psychological and Behavioural Research in Victoria by Techniques	85
6.2	Animals Used in Psychological and Behavioural Research in Victoria	86
6.3	Experiments to Study Behaviour in Animals	86

	<u>Page</u>	
6.4	Statistics of Animals Used in Teaching and Research in the Behavioural Sciences in Australian Universities	88
6.5	Australian Behavioural Research Literature Survey 1966-1983 - Species of Animals and Numbers of Experiments	89
6.6	Australian Behavioural Research Literature Survey 1966-1983 - Types of Experiments	89
6.7	Australian Behavioural Research Literature Survey 1966-1983 - Number of Experiments Performed at Various Institutions	90
7.1	The Numbers of Small Animals Issued to Users From NBSL 1975-1988	105
7.2	Number of Animals Used in Toxicological and Pharmacological Testing in Victoria 1982-1987	107

ABBREVIATIONS USED IN REPORT

AAC	Australian Agricultural Council
AAHR	Australian Association for Humane Research
AATA	Australian Animal Technicians Association
ABAH	Australian Bureau of Animal Health
ACCART	Australian Council for the Care of Animals in Research and Teaching
AEEC	Animal Experimentation Ethics Committee
AFWA	Australian Federation for the Welfare of Animals
ANAHL	Australian National Animal Health Laboratory
ANU	Australian National University
ANZFAS	Australian and New Zealand Federation of Animal Societies
APS	Australian Psychological Society
ARC	Animal Resources Centre
ARRP	Animal Research Review Panel
ASAC	Antarctic Scientific Advisory Committee
ASLAS	Australian Society for Laboratory Animal Science
ASMR	Australian Society for Medical Research
AVA	Australian Veterinary Association
AVCA	Australian Veterinary Chemicals Association
AVCC	Australian Vice-Chancellors' Committee
AWAC	Animal Welfare Advisory Council
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CTFAA	Cosmetic, Toiletries and Fragrance Association of Australia
DARA	Department of Agricultural and Rural Affairs (Victoria)

DASETT Department of Arts, Sport, Environment, Tourism and Territories
DCSH Department of Community Services and Health
DITAC Department of Industry, Technology and Commerce
JAWC Joint Animal Welfare Council
NBSL National Biological Standards Laboratory
NHMRC National Health and Medical Research Council
NIH National Institute of Health (U.S.A.)
OTA Office of Technology Assessment (U.S. Congress)
RSPCA Royal Society for the Prevention of Cruelty to Animals
UFAW Universities Federation for Animal Welfare
UNSW University of New South Wales
USDA United States Department of Agriculture

LIST OF RECOMMENDATIONS

2.30 The Committee RECOMMENDS that the Commonwealth, State and Territory Governments publish annually accurate and comprehensive information on the extent and forms of animal experimentation conducted within their respective jurisdictions. In addition, government authorities should provide some analysis of the statistics to make them meaningful to the public, and to reduce the potential for misinterpretation.

5.49 The Committee RECOMMENDS that the Commonwealth Government establish a separate fund for research into the use of alternatives to animal experimentation and that grants be disbursed from this fund by a board composed of representatives of the scientific community, animal welfare organisations, ACCART and government authorities.

7.80 The Committee ... RECOMMENDS that the Draize test be banned in Australia.

7.81 The Committee RECOMMENDS a ban on the classical LD50 test in Australia but that acute toxicity tests be allowed with ministerial approval.

8.41 The Committee RECOMMENDS that ACCART in co-operation with the relevant bodies with specialist knowledge draw up appropriate guidelines and standard operating procedures for the capture of wildlife and their housing, nutrition and management in captivity.

8.48 The Committee RECOMMENDS that Antarctic research protocols be assessed and approved under the Code of Practice and that additional detailed guidelines be drawn up on the techniques, procedures and practices to be used by experimenters on animals in the Antarctic.

9.34 The Committee RECOMMENDS that all institutions which conduct animal experimentation have periodic analyses done on animal feed to ensure that it is of a high and consistent quality, not only to maintain standards of animal welfare but also to guarantee the validity of experimental data.

9.69 The Committee RECOMMENDS that animal house supply and breeding units develop appropriate pricing policies to enable recovery of all recurrent costs including caging and minor equipment and that surpluses generated be used to develop animal house facilities.

9.80 The Committee RECOMMENDS that a study be undertaken by ACCART to determine the most effective means for production planning of laboratory animals in terms of minimising excess production.

10.29 The Committee RECOMMENDS that State Governments legislate so that pounds hold dogs for at least seven days before disposing of them to an institution except where a dog is surrendered by its owner.

10.30 The Committee RECOMMENDS that State Governments legislate so that all owners who surrender dogs to pounds be informed in writing of the possible transfer of the animals to a research institution and that pounds obtain the written authorisation of owners to transfer the dogs to an institution.

10.46 The Committee RECOMMENDS that institutions either breed or purchase cats from an institution in which they are bred for experimental purposes and not acquire them from pounds or other non-institutional sources.

11.29 The Committee RECOMMENDS that all institutions with animal houses require unqualified staff to undertake technical training courses in animal care at colleges of technical and further education.

12.18 The Committee ... RECOMMENDS that extra funds be made available by the Commonwealth Government to enable the University of Sydney to establish a course in laboratory animal science.

12.20 The Committee RECOMMENDS that funds be made available to the University of Queensland to establish a chair in animal welfare and behaviour.

13.46 The Committee RECOMMENDS that all States and Territories upgrade animal welfare legislation, and establish animal welfare advisory councils and departmental animal welfare units as has been done in New South Wales, Victoria and South Australia.

15.57 The Committee RECOMMENDS that the system of controlling animal experimentation in New South Wales, Victoria and South Australia be extended to the other States and Territories. This system is based on upgraded legislation; incorporation of a code of practice in regulations; the accreditation and licensing of institutions in which animal experimentation is conducted; and the appointment of inspectors to monitor the work of ethics committees, animal house facilities and practices, and the conduct of animal experimentation.

15.69 The Committee RECOMMENDS that the Commonwealth Government enacts legislation to remove any doubt that the conduct of animal experimentation by Commonwealth employees comes under the control of Commonwealth authorities.

16.15 The Committee RECOMMENDS that future revisions of the Code of Practice be carried out by a national conference consisting of representatives of governments, institutions which conduct animal experimentation, experimenters, animal house staff, specialist societies, animal welfare organisations, educational organisations and funding bodies and that final approval for those revisions be given by Commonwealth, State and Territory Governments which include the Code of Practice in regulations.

16.62 The Committee RECOMMENDS that the Australian Council for the Care of Animals in Research and Teaching prepare guidelines on procedures and practices in relation to animal experimentation to supplement the Code of Practice.