

SUMMARY OF STATISTICS OF ANIMAL USE IN RESEARCH AND TEACHING

VICTORIA

REPORT NUMBER 27

1 JANUARY 2009 TO 31 DECEMBER 2009

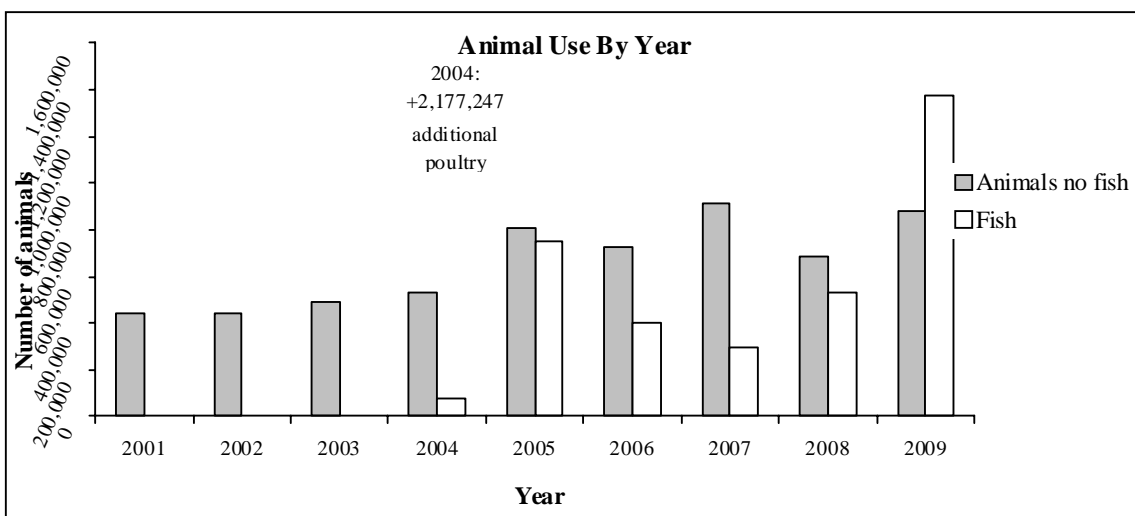
1. INTRODUCTION

This document presents salient aspects of animal use in research and tertiary education in Victoria in graphical form. Information for 2009 is set within the context of previous years' data in order to demonstrate trends of usage through time. Comprehensive details of usage are available in the publication "Statistics of Animal Experimentation Victoria" for the appropriate years.

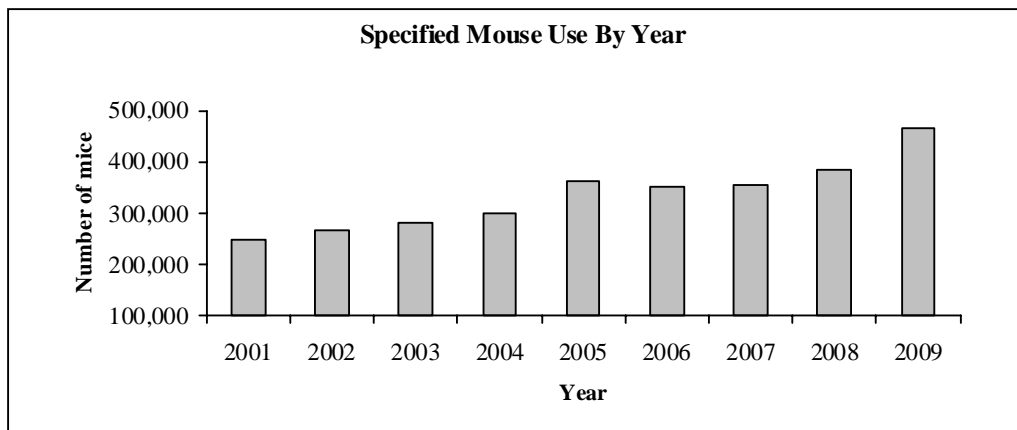
Data were collected from all institutions licensed to use animals in research and tertiary education in Victoria under the *Prevention of Cruelty to Animals Act 1986* (the Act). Animal usage within institutions is conducted on the basis of projects, where each project is run by a chief investigator and is approved by an Animal Ethics Committee. An "Animal Use Return" form that describes project methodologies and animal usage is required to be submitted each year for each project (*Regulation 100, Prevention of Cruelty to Animals Regulations 2008*).

Specified animal is a term defined in the Act that means mouse, rat, rabbit, or guinea pig other than a mouse, rat, rabbit bred in its native habitat, and non-human primate.

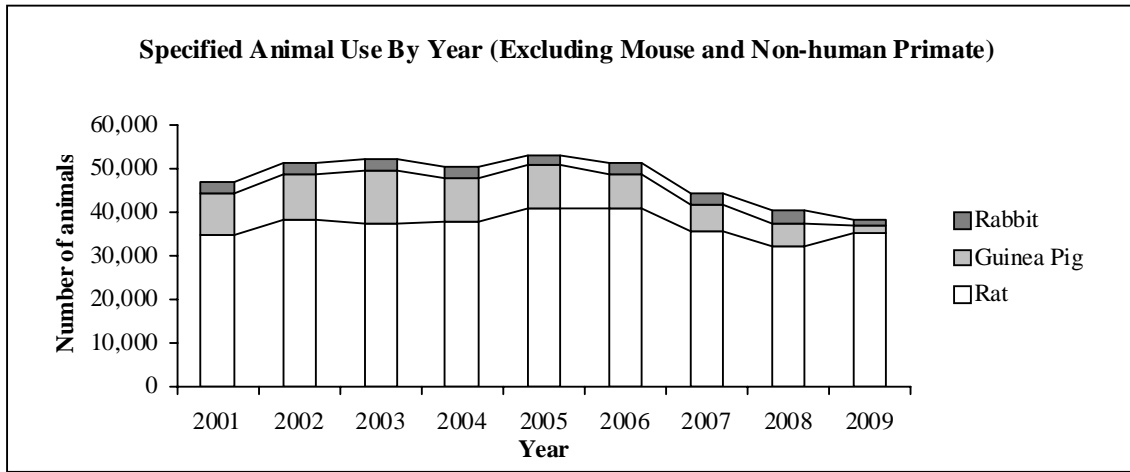
2. SELECTED DETAILS OF NUMBERS OF ANIMALS USED



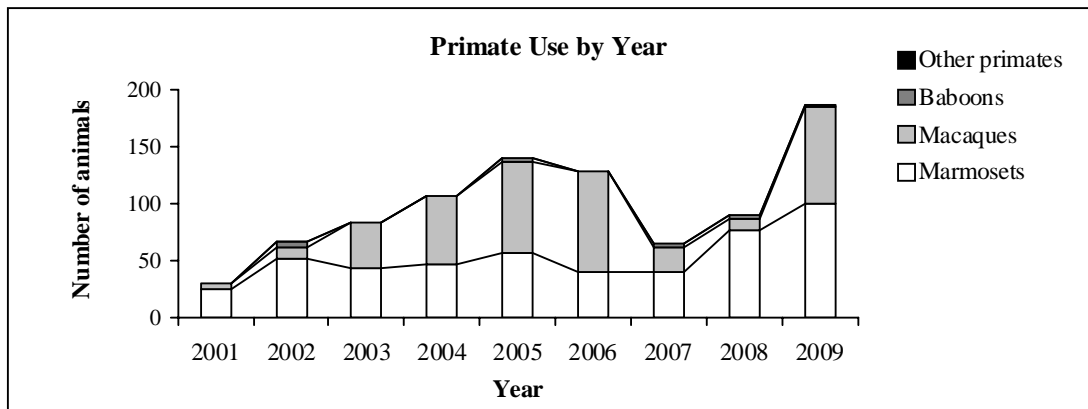
Graph 1. Total animal use, 2001 to 2009. The total number of animals used in 2009 was 2,255,076. Of these, 1,374,627 were fish, first counted in 2004.



Graph 2. Specified mouse use, 2001 to 2009. There were 467,097 specified mice used in 2009, compared to the long-term average of 318,916

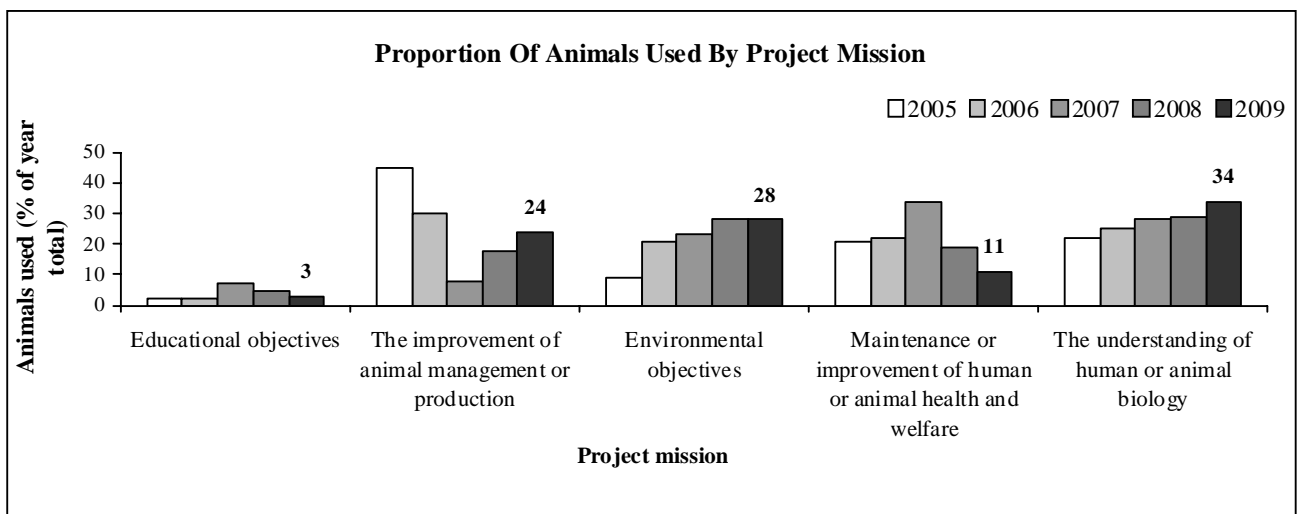


Graph 3. Specified animal use excluding mice and non-human primate, 2001 to 2009. A total of 38,081 specified rats, guinea pigs, and rabbits were used in 2009, compared to the long-term average of 48,708. These were composed of 35,309 rats (average of 37,242); 1,458 guinea pigs (average of 8,826); and 1,314 rabbits (average of 2,640).

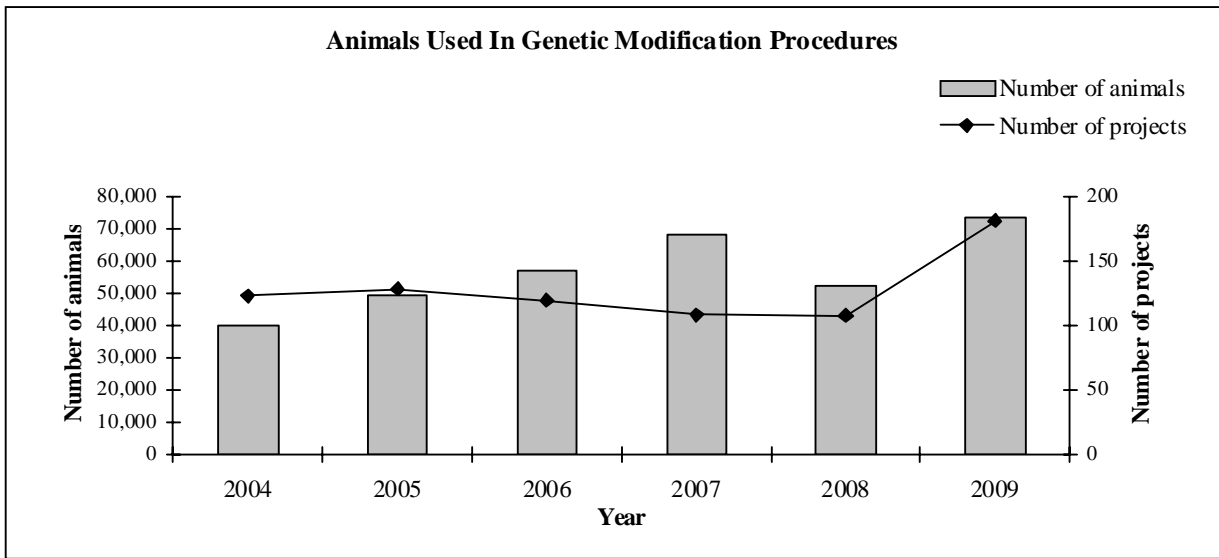


Graph 4. Primate use, 2001 to 2009. One hundred and eighty six non-human primates were used in 2009, compared to a long-term average of 88. These were composed of 100 marmosets (average of 47), 84 macaques (average of 39), and 2 baboons (average of 2).

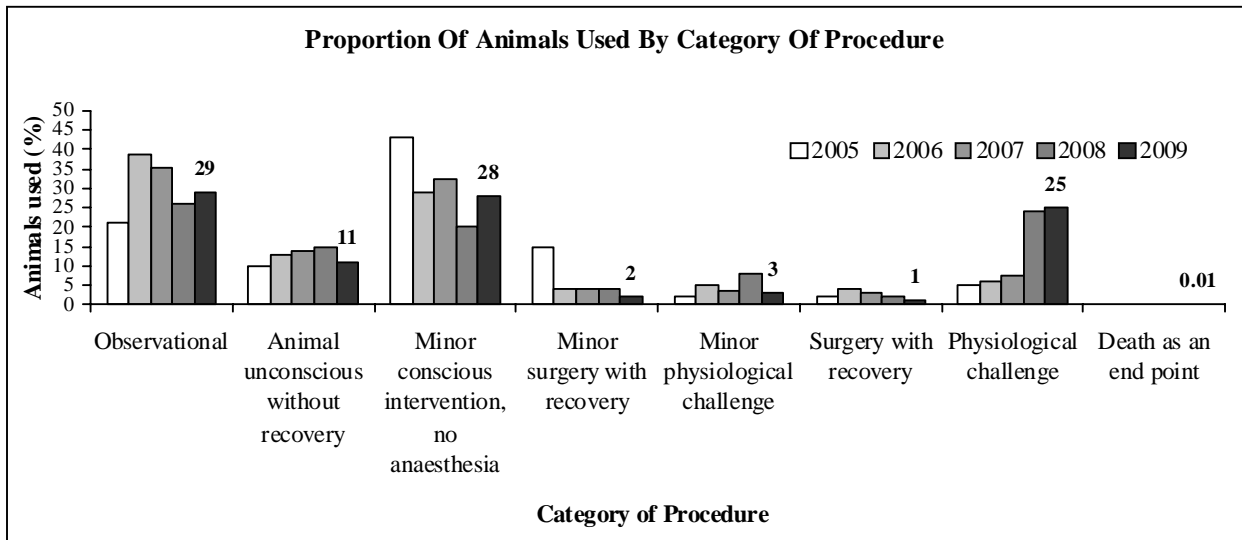
3. SELECTED ASPECTS OF ANIMAL USAGE



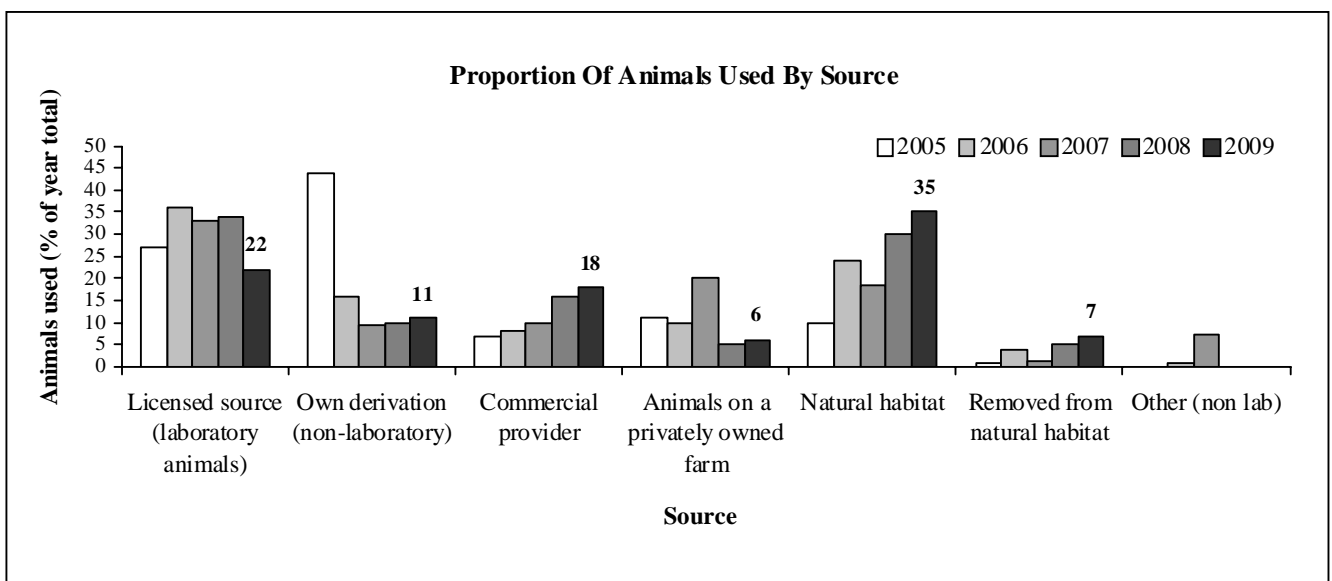
Graph 5. Animal use by project mission for the last 5 years (rounded).



Graph 6. Animals used in genetic modification procedures, 2004 to 2009. One hundred and eighty one projects used 73,416 animals in genetic modification in 2009. Meaningful data are only available from 2004 due to a change in the way data were collected.



Graph 7. Animal use by category of procedure for the last 5 years (rounded). The large proportion of animals in physiological challenge procedures in 2008 and 2009 reflects relatively high impact analyses of large numbers of fish in commercial fisheries.



Graph 8. Animal use by source for the last 5 years (sources representing less than 1% of animal use not included). The increasing percentage of animals in their natural habitat in 2008 and 2009 reflects analyses of large numbers of fish in commercial fisheries.

	Year					
	2004	2005	2006	2007	2008	2009
Number of animals in death as an end-point procedures	6,280	799	360	251	471	327
Number of projects using death as an endpoint procedures	9	6	3	4	10	9

Table 1. Numbers of animals used in death as an end-point procedures and projects with death as an end-point procedures, 2004 and 2009. Nine projects used 327 animals in death as an end-point procedures in 2009. Data on this procedure type prior to 2004 are inaccurate due to inappropriate application of the “death as an end-point” term by licences.

4. DETAILS OF SCIENTIFIC PROCEDURE LICENCES AND PROJECTS

	Year									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of projects	2,035	1,981	2,078	2,030	2,176	2,458	2,386	2,358	2,455	2,673
Number of licences using animals	93	98	105	107	97	99	104	110	107	111
Number of projects per licence	22	20	20	19	22	25	23	21	23	24

Table 2. Number of projects and number of licences, 2000 to 2009 (licences and projects included only where animals were used).

	Year									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of animals used	649,663 (409,663)	441,256	439,133	488,808	2,780,290 (603,043)	1,560,340	1,125,487	1,207,360	1,216,393	2,255,076
Number of licences using animals	93	98	105	107	97	99	104	110	107	111
Number of animals per licence	6,986 (4,404)	4,503	4,182	4,568	28,663 (6,217)	15,761	12,066	10,976	11,368	20,316

Table 3. Number of project animals used and number of licences, 2000 to 2009 (licences included only where animals were used). Figures in parentheses exclude the aberrant poultry projects in 2000 and 2004.

	Year									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of animals used	649,663 (409,663)	441,256	439,133	488,808	2,780,290 (603,043)	1,560,340	1,125,487	1,207,360	1,216,393	2,255,076
Number of projects	2,035 (2,034)	1,981	2,078	2,030	2,176 (2,175)	2,458	2,386	2,358	2,455	2,673
Number of animals per project	319 (201)	223	211	241	1,278 (277)	635	472	512	495	844

Table 4. Number of project animals used and number of projects, 2000 to 2009 (projects included only where animals were used). Figures in parentheses exclude single poultry projects in 2000 and 2004.

5. SPECIFIED ANIMALS IN BREEDING COLONIES

Type of Animal	Non-GM animals					GM animals				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Guinea pigs	2,147	2,604	3,638	1,142	1,087					
Macaques	142	159	203	341	225					
Marmosets	60	173	159	135	166					
Mice	262,645	261,697	237,246	281,875	344,823	212,094	333,266	389,632	461,745	490,962
Rabbits	741	638	527	504	515			370		
Rats	29,893	31,391	33,407	42,558	56,993	2,388	1,031	13,120	9,304	1,923
Total	295,628	296,662	275,180	326,555	403,809	214,482	334,297	394,201	471,049	492,885

Table 5: Specified animals in breeding colonies for scientific procedures in 2005 and 2009. 2005 was the first year for which data on specified animal breeding colonies were collected.