

SUMMARY OF STATISTICS OF ANIMAL USE IN RESEARCH AND TEACHING

VICTORIA

REPORT NUMBER 29 1 JANUARY 2011 TO 31 DECEMBER 2011

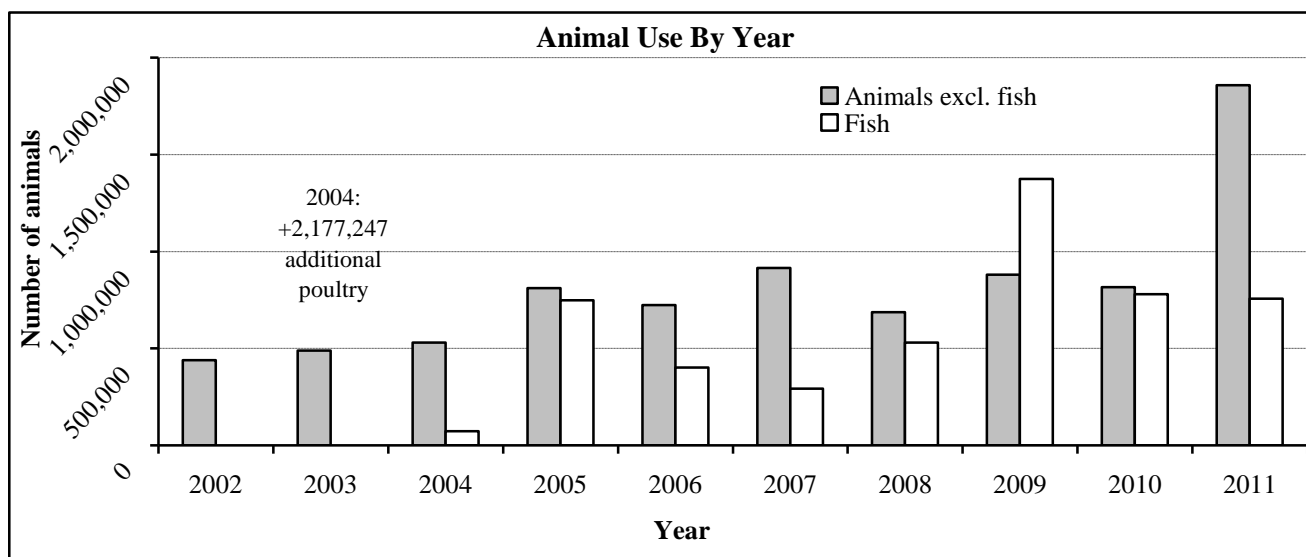
1. INTRODUCTION

This document presents salient aspects of animal use in research and education in Victoria in graphical form. Information for 2011 is set within the context of previous years' data in order to demonstrate trends of use through time. Details are available in the publications "Statistics of Animal Experimentation Victoria" for the appropriate years.

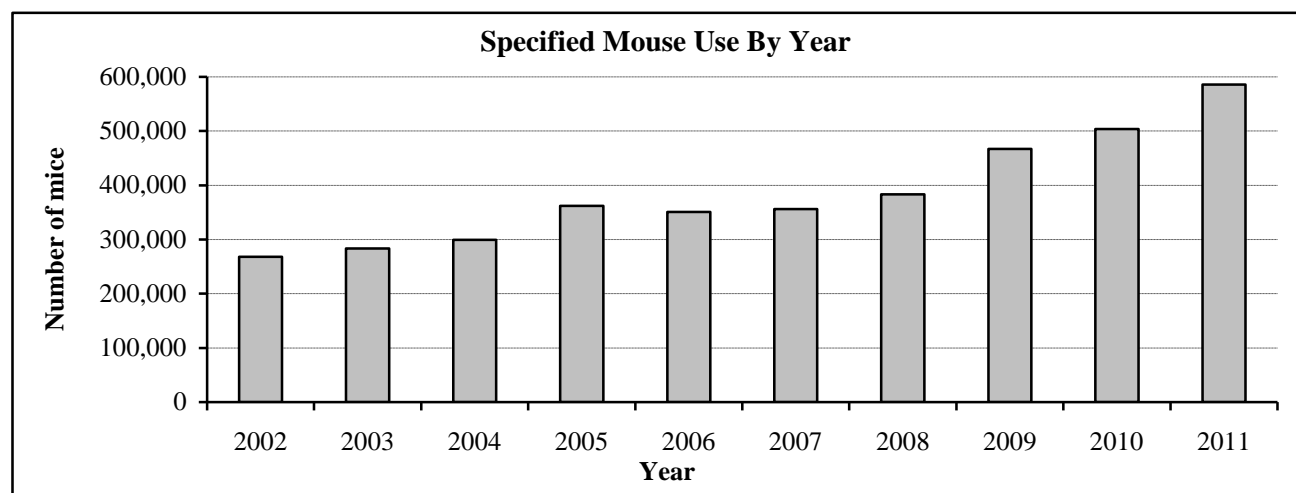
Data were collected from all institutions licensed to use animals in research and education in Victoria under the *Prevention of Cruelty to Animals Act 1986* (the Act). Animal use is conducted in projects, where each project is run by a chief investigator and is approved by an Animal Ethics Committee. 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 (i.e. laboratory animals).

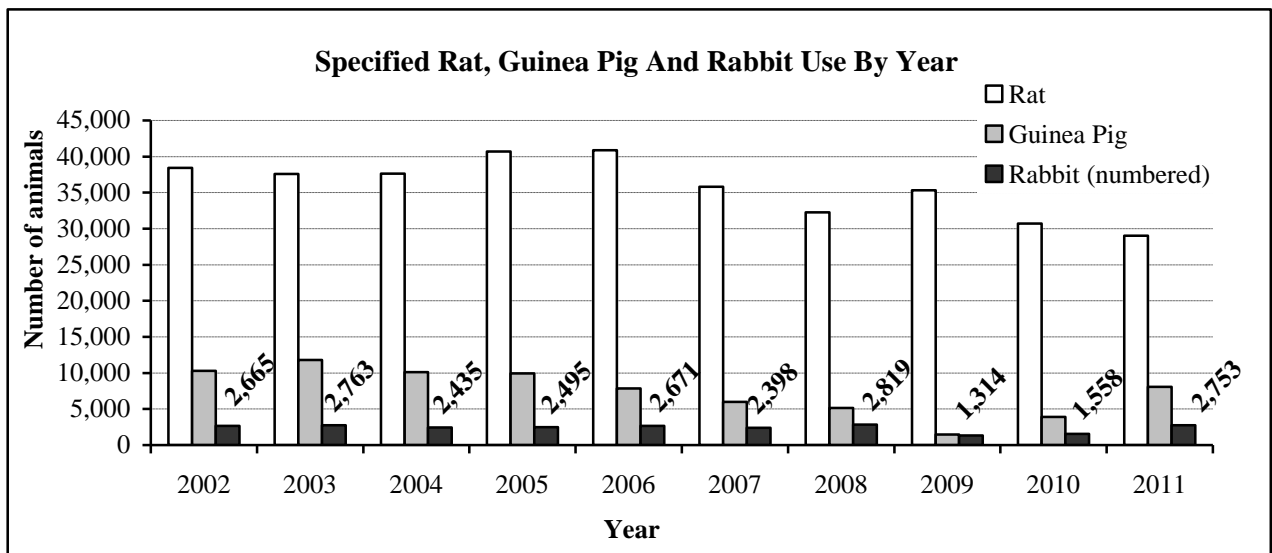
2. SELECTED DETAILS OF NUMBERS OF ANIMALS USED



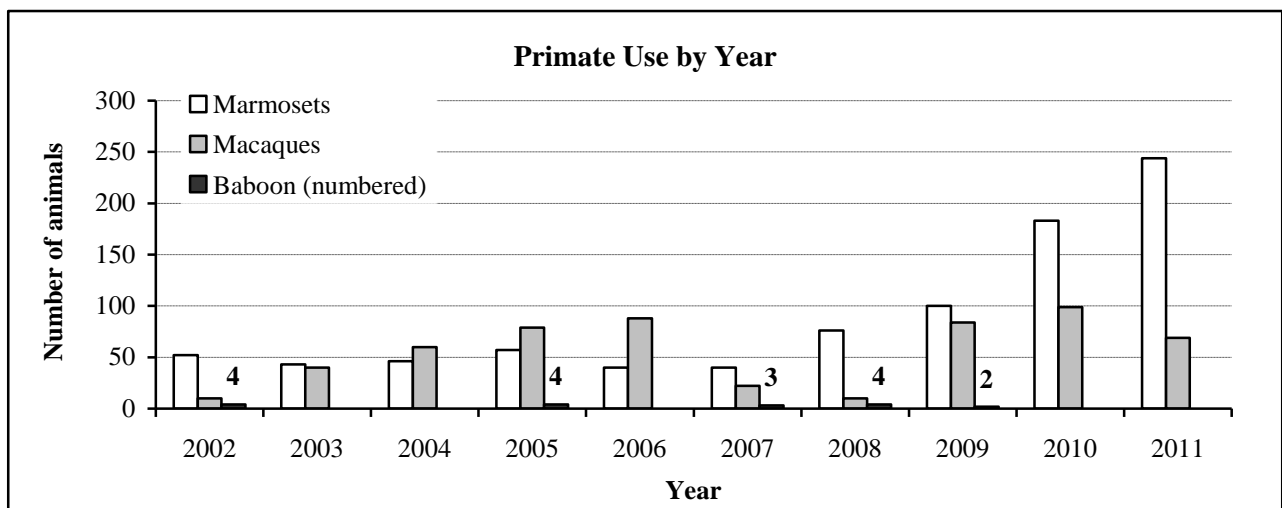
Graph 1. Total animal use, 2002 to 2011. The total number of animals used in 2011 was 2,614,472. Of these, 778,759 were fish, first counted in 2004. A single poultry project used 1,000,000 birds in 2011.



Graph 2. Specified mouse use, 2002 to 2011. There were 585,875 specified mice used in 2011, compared to the long-term average of 363,805

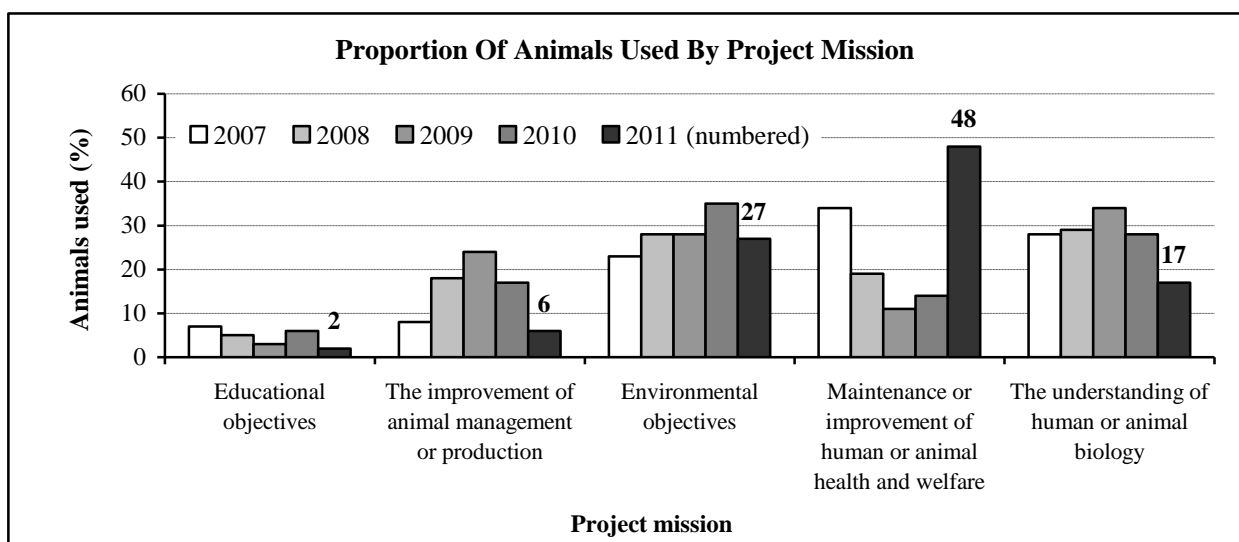


Graph 3. Specified animal use excluding mice and non-human primate, 2002 to 2011. A total of 39,881 specified rats, guinea pigs, and rabbits were used in 2011, compared to the long-term average of 46,322. These were composed of 29,030 rats (average of 39,589); 8,098 guinea pigs (average of 7,386); and 2,753 rabbits (average of 2,346).

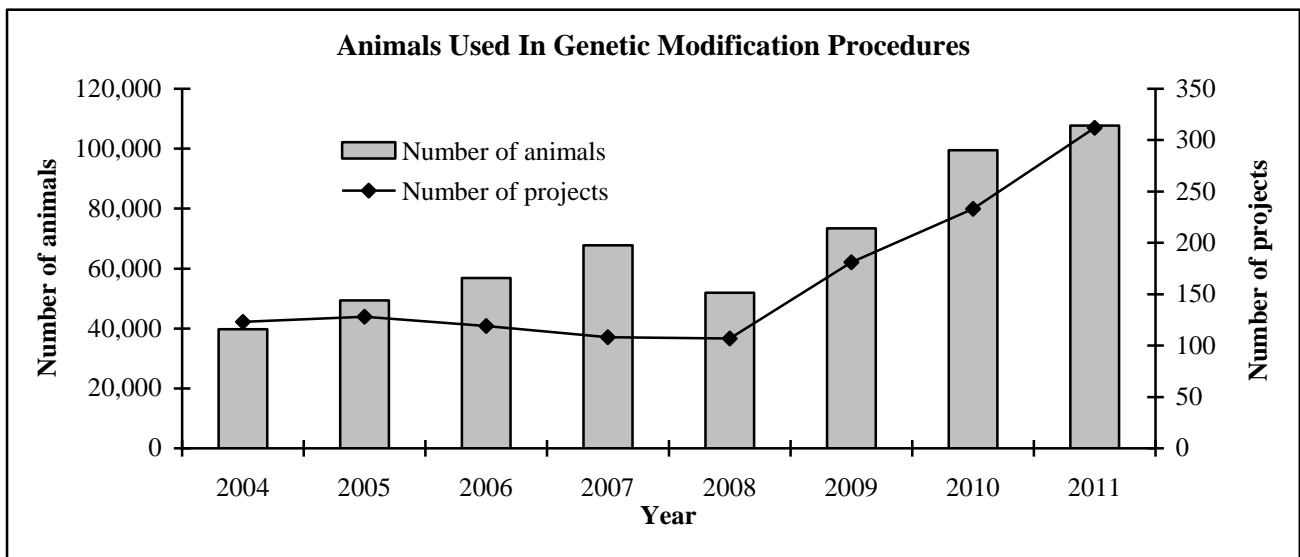


Graph 4. Primate use, 2002 to 2011. Three hundred and thirteen non-human primates were used in 2011, compared to a long-term average of 128. These were composed of 244 marmosets (average of 71), and 69 macaques (average of 55). One 'Other primate' was used in 2002 that is not represented here. The above average number of marmosets in 2011 is due to 2 projects using 145 animals in studies of social behaviour.

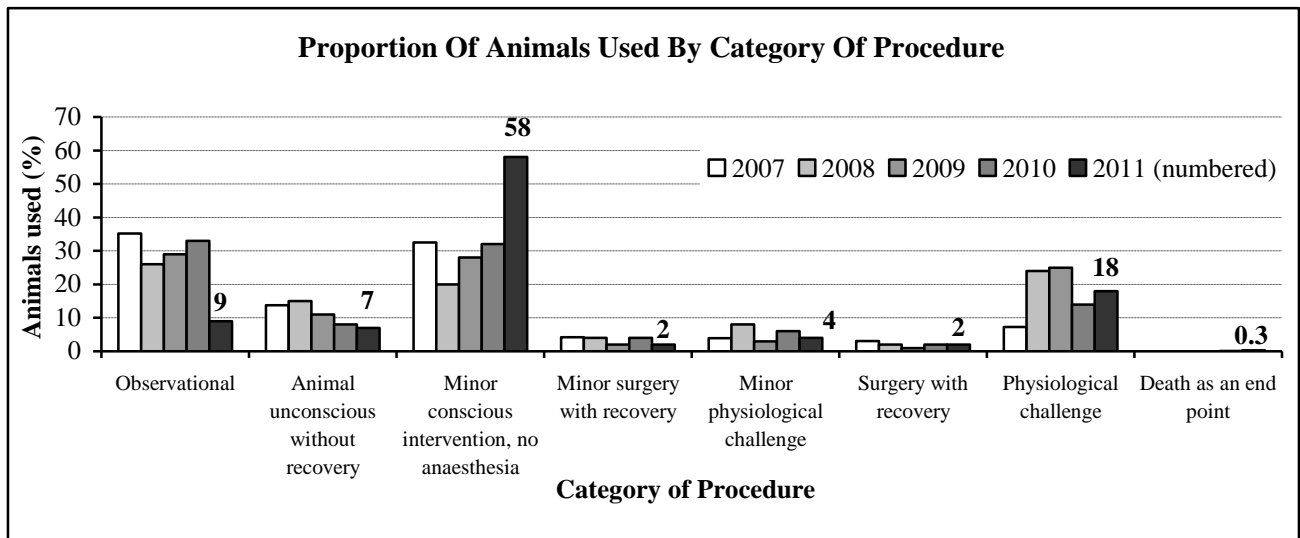
3. SELECTED ASPECTS OF ANIMAL USAGE



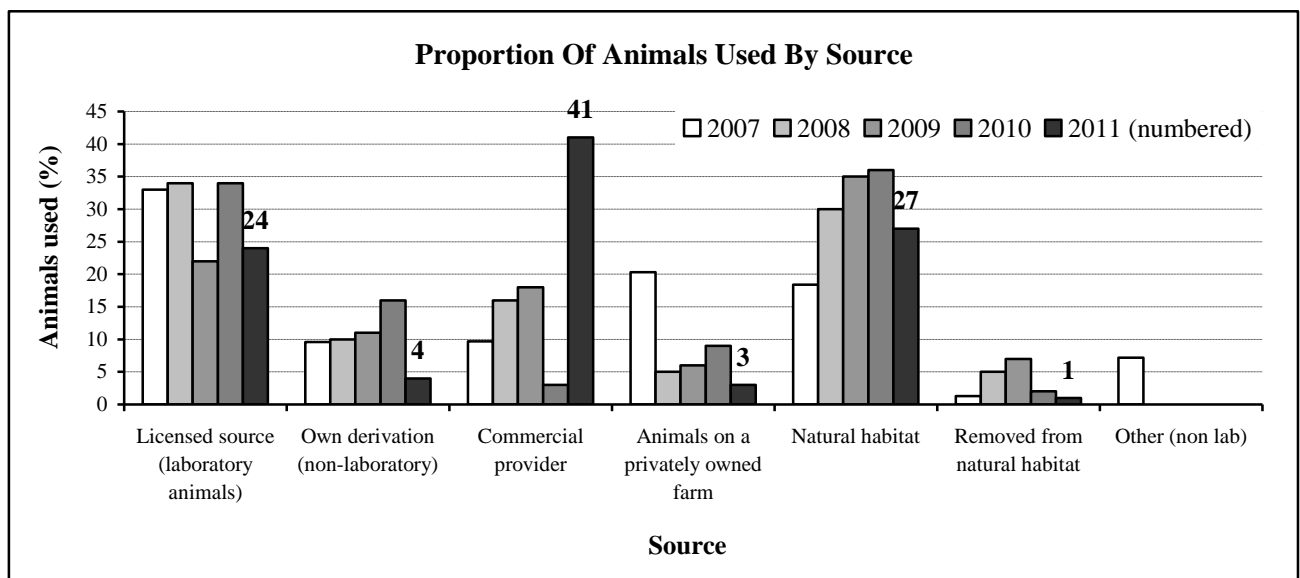
Graph 5. Animal use by project mission for the last 5 years (rounded).



Graph 6. Animals used in genetic modification procedures, 2004 to 2011. Three hundred and twelve projects used 107,729 animals in genetic modification in 2011. 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 commercial provider figure is skewed by a single project using 1 million poultry

	Year							
	2004	2005	2006	2007	2008	2009	2010	2011
Number of animals in death as an end-point procedures	6,280	799	360	251	471	327	2,315	6,935
Number of projects using death as an endpoint procedures	9	6	3	4	10	9	8	29

Table 1. Numbers of animals used in death as an end-point procedures and projects with death as an end-point procedures, 2004 and 2011. Twenty nine projects used 6,935 animals in death as an end-point procedures in 2011. Data on this procedure type prior to 2004 are inaccurate due to inappropriate application of the “death as an end-point” term by licences.

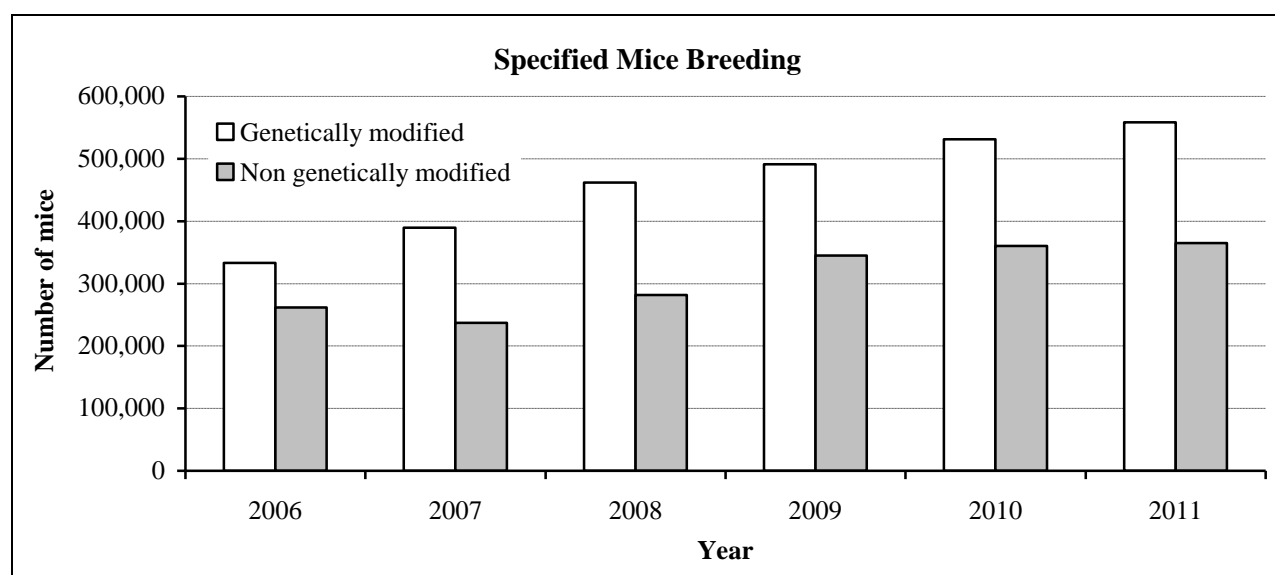
4. SPECIFIED ANIMALS IN BREEDING COLONIES

Type of Animal (non-GM)	Year					
	2006	2007	2008	2009	2010	2011
Guinea pigs	2,604	3,638	1,142	1,087	1,153	388
Macaques	159	203	341	225	243	250
Marmosets	173	159	135	166	177	156
Mice	261,697	237,246	281,875	344,823	360,185	365,009
Rabbits	638	527	504	515	445	489
Rats	31,391	33,407	42,558	56,993	52,786	48,543
Total	296,662	275,180	326,555	403,809	414,989	414,835

Table 2: Specified animals in breeding colonies for scientific procedures, 2006 to 2011 (non genetically modified). Numbers not included in Graphs 1, 2, 3 or 4.

Type of Animal (GM)	Year					
	2006	2007	2008	2009	2010	2011
Mice	333,266	389,632	461,745	490,962	531,098	558,293
Rats	1,031	13,120	9,304	1,923	1,146	1,744
Total	334,297	394,201	471,049	492,885	532,244	560,037

Table 3: Specified animals in breeding colonies for scientific procedures, 2006 to 2011 (genetically modified). Numbers not included in Graphs 1, 2, 3, or 6.



Graph 9. Breeding of specified mice, 2006 to 2011. Numbers not included in Graphs 1, 2 or 6.

5. DETAILS OF SCIENTIFIC PROCEDURE LICENCES AND PROJECTS

	Year									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Number of projects	2,078	2,030	2,176	2,458	2,386	2,358	2,455	2,673	2,931	3,010
Number of licences using animals	105	107	97	99	104	110	107	111	115	123
Number of projects per licence	20	19	22	25	23	21	23	24	25	24

Table 4. Number of projects and number of licences, 2002 to 2011 licences and projects included only where animals were used).

	Year								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Number of animals used	488,808	2,780,290 (603,043)	1,560,340	1,125,487	1,207,360	1,216,393	2,255,076	1,595,375	2,614,472 (1,614,472)
Number of licences using animals	107	97	99	104	110	107	111	115	123
Number of animals per licence	4,568	28,663 (6,217)	15,761	12,066	10,976	11,368	20,316	13,873	21,256 (13,126)

Table 5. Number of project animals used and number of licences, 2003 to 2011 (licences included only where animals were used). Figures in parentheses exclude the aberrant poultry projects in 2004 and 2011.

	Year								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Number of animals used	488,808	2,780,290 (603,043)	1,560,340	1,125,487	1,207,360	1,216,393	2,255,076	1,595,375	2,614,472 (1,614,472)
Number of projects	2,030	2,176 (2,175)	2,458	2,386	2,358	2,455	2,673	2,931	3,010 (3,009)
Number of animals per project	241	1,278 (277)	635	472	512	495	844	544	869 (537)

Table 6. Number of project animals used and number of projects, 2003 to 2011 (projects included only where animals were used). Figures in parentheses exclude the aberrant poultry projects in 2004 and 2011.