

STATISTICS OF ANIMAL USE IN RESEARCH AND TEACHING

VICTORIA

REPORT NUMBER 27

1 January, 2009 to 31 December, 2009

compiled by:

**BUREAU OF ANIMAL WELFARE
BIOSECURITY VICTORIA
DEPARTMENT OF PRIMARY INDUSTRIES**

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There is a regulatory requirement for returns on the use of animals in licensed scientific institutions to be made to the Secretary of the Department of Primary Industries on a yearly basis. Details for the Return are based on Regulation 100 of the Prevention of Cruelty to Animals Regulations.

The Statistics of Animal Use in Research and Teaching Victoria Number 27 represents a compilation of the returns for 1 January to 31 December 2009. Animals used in Victoria only are reported.

Tables 1 to 12 of this report present data for animals used in scientific procedures.

The production of ‘specified animals’* for scientific procedures must be licensed under Part 3 of the Act. These data are presented in table 13 of this report. Only specified animals that were produced or involved in production but were not used for scientific procedures are reported in table 13.

For further information on the data collected for this report, refer to the attached 2009 Return document.

*Specified animals means – guinea pig; and rat, mouse, or rabbit, other than a rat, mouse, or rabbit bred in it’s native habitat; and non-human primate.

The Bureau of Animal Welfare oversees the administration of Part 3 of the “Prevention of Cruelty to Animal Act 1986” and Part 4 of the “Prevention of Cruelty to Animals Regulations 2008”, which refer to scientific procedures.

TABLE 1: NUMBERS OF ANIMALS USED BY TYPE OF ANIMAL AND PROJECT PURPOSE

Animal type	Education	Environment	Animal management/production	Improve human/animal health/welfare	Understand human/animal biology	Total
Amphibians	1,248	202		905	1,933	4,288
Baboons				2		2
Bird exotic wild	50	8			70	128
Bird native captive	110	1	6	5	225	347
Bird native wild	595	38,656		390	1,190	40,831
Bird other					24	24
Cats non-wild	41			123	71	235
Cats wild		101				101
Cattle domestic	1,217	250	6,908	13,859	202	22,436
Cephalopods	3	1,687	458		164	2,312
Crustaceans	486	39,675	2,499			42,660
Dasyurids	21	585		31	281	918
Dogs non-wild	663	30	50	979	219	1,941
Dogs, foxes wild		91		1		92
Domestic mammals other	454		81	85		620
Exotic feral mammal other	8	10				18
Exotic Zoo mammal			30	19	8	57
Ferret lab				1,606		1,606
Fish	10,991	544,449	463,124	1,531	354,532	1,374,627
Goats domestic	2		542	1,735	7	2,286
Guinea pig	206			508	744	1,458
Horses domestic	448		53	364	12	877
Koalas	59	14	99		9	181
Laboratory mammal other				27	269	296
Lizards	143	1,523	39	8	590	2,303
Macaques				5	79	84
Macropods		148	175		756	1,079
Marmosets				33	67	100
Mice wild	342	914	396	3	6	1,661
Monotremes	1	166		6	4	177
Mouse	4,286		5,480	99,734	357,597	467,097
Native mammal other	129	383	56	20	29	617
Native Rats, Mice	51	1,548			64	1,663
Pigs domestic	141		865	4,251	242	5,499
Possums, Gliders	34	830		91	75	1,030
Poultry	358		35,234	56,473	10,346	102,411
Rabbit	81			185	1,048	1,314
Rabbits wild		5				5
Rat	1,522			9,336	24,451	35,309
Rats wild	1	96		13		110
Reptile other		21				21
Seals, Sealions		2,142			5,013	7,155
Sheep domestic	59,216	840	18,082	49,803	922	128,863
Snakes	10	41			13	64
Tortoises/ turtle	19	41		1		61
Whales, Dolphins		100			11	111
Wombats					1	1
Total	82,936	634,557	534,177	242,132	761,274	2,255,076

TABLE 2: NUMBERS OF ANIMALS USED BY TYPE OF ANIMAL AND SOURCE

Animal type	Specified animal supplier	Other specified animal source	Animals in their natural habitat	Colony /zoo	Commercial supplier	Municipal pound	Own derivation	Private donation	Private animals on farm	Removed from natural habitat	Other	Total
Amphibians			809	60	1,207		3			2,158	51	4,288
Baboons	2											2
Bird exotic wild			78							50		128
Bird native captive				1	68		273		4		1	347
Bird native wild			38,338				1,921			572		40,831
Bird other			24									24
Cats non-wild					41		50	46			98	235
Cats wild			57								44	101
Cattle domestic					1,470		2,023	58	18,885			22,436
Cephalopods			1,689							623		2,312
Crustaceans			39,976		4					2,680		42,660
Dasyurids			754				149			15		918
Dogs non-wild					343	50	37	288	251		972	1,941
Dogs, foxes wild			70							22		92
Domestic mammals other							21	33	566			620
Exotic feral mammal other			10				8					18
Exotic Zoo mammal				57								57
Ferret lab					1,603						3	1,606
Fish			698,857	40	293,863		221,459	6,900	53	153,135	320	1,374,627
Goats domestic								2	2,277		7	2,286
Guinea pig	1,452	6										1,458
Horses domestic					386		94	13	257		127	877
Koalas			123				58					181
Laboratory mammal other							296					296
Lizards			1,664	84	5		116			434		2,303
Macaques	84											84
Macropods			597	25			234			223		1,079
Marmosets	100											100
Mice wild			1,129	149	6		329			48		1,661
Monotremes			167	10								177
Mouse	392,876	74,221										467,097
Native mammal other			546	13			3			55		617
Native Rats, Mice			1,570				73			20		1,663
Pigs domestic					4,510		889	2	76		22	5,499
Possums, Gliders			896	1			87			46		1,030
Poultry					99,518		2,664	75	154			102,411
Rabbit	1,311	3										1,314
Rabbits wild			5									5
Rat	35,099	210										35,309
Rats wild			96				1			13		110
Reptile other			21									21
Seals, Sealions			7,155									7,155
Sheep domestic					3,856		8,463	9	116,248		287	128,863
Snakes			52	5				1			6	64
Tortoises/ turtle			54				2	1		4		61
Whales, Dolphins			111									111
Wombats				1								1
Total	430,924	74,440	794,848	446	406,880	50	239,253	7,428	138,771	160,098	1,938	2,255,076

TABLE 3: NUMBERS OF ANIMALS USED BY TYPE OF ANIMAL AND PARTICULAR PROCEDURE

Potentially impacting, invasive, or controversial procedures are listed. If none of these procedures have been used, 'Other procedure' is indicated

Animal type	Aversive stim.	CNS	GM	Immuno-mod	Infection	Ionising radiation	Long attach /insert	Monoclonal a/b prod	Neoplasia	Neuromus c block, electro-immob	Other disease	Polyclonal a/b prod	Skin irritancy	Toxicity	Other procedure	Total
Amphibians															4,288	4,288
Baboons															2	2
Bird exotic wild							50								78	128
Bird native captive							4								343	347
Bird native wild	580						2,563							80	37,608	40,831
Bird other															24	24
Cats non-wild		22		38			30			3					142	235
Cats wild														44	57	101
Cattle domestic	157			1,706	30		50					12			20,481	22,436
Cephalopods															2,312	2,312
Crustaceans							5,351								37,309	42,660
Dasyurids							137								781	918
Dogs non-wild				270											1,671	1,941
Dogs, foxes wild															92	92
Domestic mammals other															620	620
Exotic feral mammal other															18	18
Exotic Zoo mammal															57	57
Ferret lab					1,515			88							3	1,606
Fish	42		7,465	25	748	1	94,907							648	1,270,791	1,374,627
Goats domestic												7			2,279	2,286
Guinea pig		37	48	10			102	260			142	74			785	1,458
Horses domestic												50			827	877
Koalas															73	181
Laboratory mammal other		169													127	296
Lizards							1								2,302	2,303
Macaques				73			6								5	84
Macropods							358								721	1,079
Marmosets		28	4								3				65	100
Mice wild															1,661	1,661
Monotremes							138								39	177
Mouse	1,004	3,769	63,389	32,268	32,680	11,164	698	1,536	34,264		37,126	686	40	555	247,918	467,097
Native mammal other					12		53								552	617
Native Rats, Mice							12								1,651	1,663
Pigs domestic				72	102		180				17				5,128	5,499
Possums, Gliders							128					119			783	1,030
Poultry	8,416	58	2,510	3,288	72,744						586	120			14,689	102,411
Rabbit					29		79	43			102	264	4	25	768	1,314
Rabbits wild															5	5
Rat	3,018	2,453		40	17	9	1,962	38	655		5,246	6		452	21,413	35,309
Rats wild															110	110
Reptile other															21	21
Seals, Sealions							7								7,148	7,155
Sheep domestic		23		278	121		553	10			274	46			127,558	128,863
Snakes															64	64
Tortoises/ turtle															61	61
Whales, Dolphins															111	111
Wombats															1	1
Total	13,217	6,559	73,416	38,068	107,998	11,174	107,477	1,975	34,919	3	43,496	1,384	44	1,804	1,813,542	2,255,076

TABLE 4: NUMBERS OF ANIMALS USED BY TYPE OF ANIMAL AND IMPACT OF PROCEDURE

Animal type	Animal unconscious without recovery	Observational study minor interference	Minor intervention, no anaesthesia	Minor physiological challenge	Minor operative procedures recovery	Surgery with recovery	Major physiological challenge	Death as an end point	Total
Amphibians	1,311	404	1,361	905	65	2	185	55	4,288
Baboons						2			2
Bird exotic wild		78				50			128
Bird native captive		339	8						347
Bird native wild		34,134	6,617	4				76	40,831
Bird other			24						24
Cats non-wild	21	42	112		45	15			235
Cats wild			57					44	101
Cattle domestic	6	9,998	12,390	26		4	12		22,436
Cephalopods		438			34		1,840		2,312
Crustaceans	4	33,383	6,557				2,716		42,660
Dasyurids	132	373	413						918
Dogs non-wild	254	1,008	638		16	25			1,941
Dogs, foxes wild	1	32	54					5	92
Domestic mammals other		510	25		85				620
Exotic feral mammal other		18							18
Exotic Zoo mammal		41	16						57
Ferret lab			1	1,437		2	166		1,606
Fish	11,378	383,963	473,963	857	2,966	249	501,245	6	1,374,627
Goats domestic		2,279	7						2,286
Guinea pig	639	96	69	4	262	388			1,458
Horses domestic		370	366	91	50				877
Koalas		58	73		50				181
Laboratory mammal other	16		111			169			296
Lizards	58	1,185	651			407	2		2,303
Macaques	1					77	6		84
Macropods	429	24	194		432				1,079
Marmosets	20			7		73			100
Mice wild	6	1,323	277					55	1,661
Monotremes		6	171						177
Mouse	153,677	41,102	108,464	49,504	44,330	22,632	47,302	86	467,097
Native mammal other	14	157	431	12	3				617
Native Rats, Mice	42	937	651		33				1,663
Pigs domestic	118	955	4,324	102					5,499
Possums, Gliders	62	539	312	10	107				1,030
Poultry	73,153	17,503	7,732	3,711	58		254		102,411
Rabbit	736	58	149	126	38	77	130		1,314
Rabbits wild			5						5
Rat	14,784	1,562	3,552	2,703	5,319	5,858	1,531		35,309
Rats wild	13	97							110
Reptile other		21							21
Seals, Sealions		7,138	17						7,155
Sheep domestic	630	118,142	7,164	402	1,654	863	8		128,863
Snakes	8	34	22						64
Tortoises/ turtle		22	39						61
Whales, Dolphins		100		11					111
Wombats			1						1
Total	257,513	658,469	637,018	59,912	56,031	30,417	555,389	327	2,255,076

TABLE 5: NUMBERS OF ANIMALS USED BY TYPE OF ANIMAL AND PROJECT BENEFIT

Animal type	Biological products	Biology/physiology	Demonstration	Diseases animal	Diseases human	Diseases zoonotic	Dom. animal manage	Environmental	Pest manage	Regulatory testing	Technique develop.	Training	Wildlife manage	Xenotransplantation	Total
Amphibians		915	396	900	5			58				311	1,703		4,288
Baboons														2	2
Bird exotic wild			50					20					58		128
Bird native captive		225	45					4				66	7		347
Bird native wild		857	457					2,811		580		138	35,988		40,831
Bird other		24													24
Cats non-wild		39	3	83	16					38	7	49			235
Cats wild								57	44						101
Cattle domestic	6	39	914	9,086	12		7,895			3,637		847			22,436
Cephalopods		164	3					2,145							2,312
Crustaceans			486					41,984					190		42,660
Dasyurids		132						197			1	5	583		918
Dogs non-wild		68	105	563	4		264			277	22	638			1,941
Dogs, foxes wild				1				54	37						92
Domestic mammals other			433				166					21			620
Exotic feral mammal other												8	10		18
Exotic Zoo mammal		5		12							4		36		57
Ferret lab					1,479	124						3			1,606
Fish		191,999	9,488		1,687	25	227,142	845,834	744		90,404	1,533	5,771		1,374,627
Goats domestic		7	2				2,277								2,286
Guinea pig		703	29	30	501						10	185			1,458
Horses domestic		47	8	164	52		115			38		453			877
Koalas		9						7				59	106		181
Laboratory mammal other		269				27									296
Lizards		619	25					475			9	83	1,092		2,303
Macaques	4	6			74										84
Macropods		724						127					223		1,079
Marmosets		92			8										100
Mice wild					6			6	212			329	1,108		1,661
Monotremes								9			4	1	163		177
Mouse	2,351	202,387	377	2,299	249,961	511	415			1,134	4,797	2,010		855	467,097
Native mammal other		21		3		14		227			1	65	286		617
Native Rats, Mice		42						566				31	1,024		1,663
Pigs domestic	2		87	3,493	599	8	865			332	3	64		46	5,499
Possums, Gliders						37		233	119		13	22	606		1,030
Poultry	69,045	8,807	88	16,676	2,863	316	395			3,938		283			102,411
Rabbit	125	667	6	2	279						154	81			1,314
Rabbits wild								5							5
Rat	53	12,285	861	678	17,201					2,950	369	912			35,309
Rats wild						13						1	96		110
Reptile other								21							21
Seals, Sealions		13						2,125					5,017		7,155
Sheep domestic	537	1,029	58,121	8,816	470		55,743			1,812	51	2,284			128,863
Snakes		5						26			2	7	24		64
Tortoises/ turtle			15					44				2			61
Whales, Dolphins								11					100		111
Wombats											1				1
Total	72,123	422,199	71,999	42,806	275,244	1,048	295,277	897,046	1,156	14,736	95,857	10,491	54,191	903	2,255,076

TABLE 6: NUMBERS OF ANIMALS USED BY TYPE OF ANIMAL AND DEATHS

Animal type	Death as an endpoint	Other death	Total death	Total in project
Amphibians	55	1,958	2,013	4,288
Baboons		2	2	2
Bird exotic wild		50	50	128
Bird native captive		39	39	347
Bird native wild	76	46	122	40,831
Bird other				24
Cats non-wild		69	69	235
Cats wild	44		44	101
Cattle		153	153	22,436
Cephalopods		2,236	2,236	2,312
Crustaceans		4,227	4,227	42,660
Dasyurids		137	137	918
Dogs non-wild		282	282	1,941
Dogs, foxes wild	5	23	28	92
Domestic mammals other		5	5	620
Exotic feral mammal other				18
Exotic Zoo mammal				57
Ferret lab		601	601	1,606
Fish	6	682,367	682,373	1,374,627
Goats		18	18	2,286
Guinea pig		1,025	1,025	1,458
Horses		18	18	877
Koalas		1	1	181
Laboratory mammal other		295	295	296
Lizards		164	164	2,303
Macaques		25	25	84
Macropods		468	468	1,079
Marmosets		41	41	100
Mice wild	55	89	144	1,661
Monotremes		1	1	177
Mouse	86	345,701	345,787	467,097
Native mammal other		29	29	617
Native Rats, Mice		60	60	1,663
Pigs		323	323	5,499
Possums, Gliders		74	74	1,030
Poultry		89,894	89,894	102,411
Rabbit		1,144	1,144	1,314
Rabbits wild				5
Rat		30,572	30,572	35,309
Rats wild		13	13	110
Reptile other				21
Seals, Sealions				7,155
Sheep		3,519	3,519	128,863
Snakes		8	8	64
Tortoises/ turtle		1	1	61
Whales, Dolphins				111
Wombats				1
Total	327	1,165,678	1,166,005	2,255,076

TABLE 7: NUMBERS OF ANIMALS USED BY PROJECT PURPOSE AND PROJECT BENEFIT

Overall purpose	Biological products	Biology/physiology	Demonstration	Diseases animal	Diseases human	Diseases zoonotic	Domestic animal management	Environmental	Pest management	Regulatory product testing	Technique development	Training	Wildlife management	Xenotransplantation	Total
Educational objectives		716	70,213	32	98			42			1,867	9,868	100		82,936
Environmental objectives		40	1,120					588,242	610	580			43,965		634,557
Improve animal management/production	35,930	6,376	391	7,081		94	246,608	145,386	212		90,674	185	1,240		534,177
Improve human/animal health/welfare	35,028	10,473	22	33,557	100,376	471	48,400	167		10,107	1,122	262	1,600	547	242,132
Understand human/animal biology	1,165	404,594	253	2,136	174,770	483	269	163,209	334	4,049	2,194	176	7,286	356	761,274
Total	72,123	422,199	71,999	42,806	275,244	1,048	295,277	897,046	1,156	14,736	95,857	10,491	54,191	903	2,255,076

TABLE 8: NUMBERS OF ANIMALS USED BY PROJECT PURPOSE AND PROJECT IMPACT

Overall purpose	Animal unconscious without recovery	Observational study minor interference	Minor intervention, no anaesthesia	Minor operative procedures recovery	Minor physiological challenge	Surgery with recovery	Major physiological challenge	Death as an end point	Total
Educational objectives	6,352	67,695	6,510	1,784	344	251			82,936
Environmental objectives	3,743	77,921	189,364	2,587	237	209	360,371	125	634,557
Improve animal management/production	38,194	211,553	134,376	3,488	635	765	145,111	55	534,177
Improve human/animal health/welfare	58,905	73,388	45,082	24,513	21,148	5,575	13,507	14	242,132
Understand human/animal biology	150,319	227,912	261,686	23,659	37,548	23,617	36,400	133	761,274
Total	257,513	658,469	637,018	56,031	59,912	30,417	555,389	327	2,255,076

TABLE 9: NUMBERS OF ANIMALS USED BY PROJECT PURPOSE AND PARTICULAR PROCEDURE

Potentially impacting, invasive, or controversial procedures are listed. If none of these procedures have been used, ‘Other procedure’ is indicated.

Overall purpose	Aversive stimuli	CNS	GM	Immuno modulatory methods	Infection induction	Ionising radiation	Long term attach /insert	Monoclonal antibody production	Neoplasia	Neuromusc block, electro-immob	Other disease	Polyclonal antibody production	Skin irritancy	Toxicity	Other	Total
Educational objectives					96						58				82,782	82,936
Environmental objectives	622				323		102,062					119		144	531,287	634,557
Improve animal management/production					35,609		286								498,282	534,177
Maintenance/improvement human/animal health/welfare	108	431	24,347	17,887	51,920	2,165	585	473	9,676		14,331	538	4	985	118,682	242,132
Understand human/animal biology	12,487	6,128	49,069	20,181	20,050	9,009	4,544	1,502	25,243	3	29,107	727	40	675	582,509	761,274
Total	13,217	6,559	73,416	38,068	107,998	11,174	107,477	1,975	34,919	3	43,496	1,384	44	1,804	1,813,542	2,255,076

TABLE 10: NUMBERS OF ANIMALS USED BY PROJECT PURPOSE AND SOURCE

Overall purpose	Specified animal supplier	Other specified animal source	Animals in their natural habitat	Colony /zoo	Commercial supplier	Municipal pound	Own derivation	Private donation	Private animals on farm	Removed from natural habitat	Other	Total
Educational objectives	6,072	23	2,206	1	11,752		2,983	220	58,285	641	753	82,936
Environmental objectives			617,826	61	323		2,302		1,120	12,877	48	634,557
Improve animal management/production	5,480		4,684	230	139,124		226,139		16,750	141,720	50	534,177
Maintenance/improvement human/animal health/welfare	108,410	1,393	605	27	61,193	50	5,020	308	62,406	2,106	614	242,132
Understand human/animal biology	310,962	73,114	169,527	127	194,488		2,809	6,900	210	2,754	383	761,274
Total	430,924	74,530	794,848	446	406,880	50	239,253	7,428	138,771	160,098	1,848	2,255,076

TABLE 11: NUMBERS OF ANIMALS USED BY IMPACT OF PROCEDURES AND PROJECT BENEFIT

Impact on animal	Biological products	Biology/ physiology	Demonstration	Diseases animal	Diseases human	Diseases zoonotic	Domestic animal management	Environmental	Pest management	Regulatory product testing	Technique development	Training	Wildlife management	Xenotransplantation	Total
Animal unconscious without recovery	69,308	123,620	4,653	805	47,819	27	204	3,563	62	3,266	1,820	1,266	908	192	257,513
Observational study involving minor interference		207,818	62,747	21,043	25,716	140	159,217	41,584	666	2,143	90,024	6,552	40,780	39	658,469
Minor conscious intervention, no anaesthesia	132	38,799	4,448	16,944	79,954	155	133,390	346,149	204	5,959	243	2,197	8,003	441	637,018
Minor operative procedures with recovery	1,424	10,295		824	33,452	37	2,019			3,134	1,835	25	2,983	3	56,031
Minor physiological challenge	625	21,563	61	3,052	32,340	125	219	434	20	227		187	1,059		59,912
Surgery with recovery	46	9,207	90		19,824		228	159		7	336	264	102	154	30,417
Major physiological challenge	588	10,811		138	36,139	564		505,157	100		1,599		219	74	555,389
Death as an end point		86							104				137		327
Total	72,123	422,199	71,999	42,806	275,244	1,048	295,277	897,046	1,156	14,736	95,857	10,491	54,191	903	2,255,076

TABLE 12: NUMBERS OF ANIMALS USED BY IMPACT OF PROCEDURES AND PARTICULAR PROCEDURES

Potentially impacting, invasive, or controversial procedures are listed. If none of these procedures have been used, 'Other procedure' is indicated.

Impact on animal	Aversive stimuli	CNS	GM	Immuno modulatory methods	Infection induction	Ionising radiation	Long term attach /insert	Monoclonal antibody production	Neoplasia	Neuromusc block, electro-immob	Other disease	Polyclonal antibody production	Skin irritancy	Toxicity	Other	Total
Animal unconscious without recovery	278	386	11,019	4,390	69,171	748	166		2,135	3	4,397	90		470	164,260	257,513
Observational study minor interference	4,940	99	22,379	1,004	836	86	569		1,762		3,992				622,802	658,469
Minor intervention, no anaesthesia	4,860	552	15,780	16,782	1,298	1,056	102,692	95	1,544		4,079	224	4	213	487,839	637,018
Minor operative procedures recovery	2,950	405	18,402	5,745	4,065	32	918	297	3,531		4,190	309	40		15,147	56,031
Minor physiological challenge	189	315	123	9,260	22,460	171	678	512	6,113		12,144	631		766	6,550	59,912
Surgery with recovery		3,606	4,419	46	65		2,454		710		8,849				10,268	30,417
Major physiological challenge		1,196	1,294	841	10,103	9,081		1,071	19,124		5,759	130		235	506,555	555,389
Death as an end point											86			120	121	327
Total	13,217	6,559	73,416	38,068	107,998	11,174	107,477	1,975	34,919	3	43,496	1,384	44	1,804	1,813,542	2,255,076

TABLE 13: SPECIFIED ANIMALS USED IN BREEDING COLONIES

Animal type	Breeding of non-GM animals	Breeding of GM animals	Euthanasia, humane killing, or unexpected death	Total
Guinea pig	1,087		389	1,087
Macaques	225		15	225
Marmosets	166		15	166
Mouse	344,823	490,962	639,771	835,785
Rabbit	515		328	515
Rat	56,993	1,923	20,447	58,916
Total	403,809	492,885	660,965	896,694

VICTORIAN BUREAU OF ANIMAL WELFARE

ANIMAL USE RETURN GUIDELINES 2009

An Animal Use Return must be submitted for all Scientific Procedures Premises, Scientific Procedures Fieldwork, and Specified Animals Breeding Licences held for any period during 2009, regardless of whether animals were used or not. The Return is to be composed of up to 3 parts that together provide the required information on animal use under a licence (Parts A, B, and C).

1. Part A details animals assigned to or used in projects, and Specified Animal Breeding Colonies. It is composed of an Excel spreadsheet incorporating drop down boxes. Part A is to be completed only if animals were used or specified animals were kept in a breeding colony in 2009.
2. Part B is a form that incorporates a declaration by the institution that the details of the Return are correct, summarises animal use by the licence, and details compliance with the principles of the “3 Rs”. One form is to be completed for each licence. Part B must be completed whether or not animals were used in 2009.
3. Part C is a form that must be completed to report any Death as an Endpoint Procedures (DAEP) conducted under the licence in 2009. Death as an end point refers to procedures where death is the deliberate measure for evaluating biological or chemical processes, responses or effects - that is, where the researcher or teacher will not intervene to kill the animal humanely (Refer to the Australian Code of Practice for the Use and Care of Animals For Scientific Purposes). Any DAEP projects must also be detailed in Part A.

The deadline for submission of all required parts of the Return is 31 March 2010. Part B must not be submitted before a Part A. Given that in the majority of cases Part A is incorrectly completed, it is strongly recommended that the Return be submitted well before the deadline.

A penalty infringement notice and fine may be issued to a licence that fails to submit correct versions of all parts prior to the deadline.

Note that this document has bookmarks (in blue) for electronic use. It is available with the Part A spreadsheet and list of Part A drop-down box options at: <http://www.dpi.vic.gov.au/animalwelfare/procedures> on the “Forms” page.

1. ANIMALS TO BE REPORTED IN PART A OF THE RETURN

1.1. Animals used in scientific procedures

1.1.i. Types of use.

All animals assigned to an AEC-approved project in 2009 must be reported, unless the animals were not used and were returned to the animal house. Animals used for breeding within an AEC-approved project are considered to be project animals and are to be reported as such. Projects that did not have any animals assigned to them during the 2009 are not to be reported in the spreadsheet.

Scientific procedures projects include the breeding and/or use of any new-line genetically modified (GM) animals (ie. a GM line new to the institution – refer to the Australian Code of Practice for the Use and Care of Animals For Scientific Purposes for definition of GM animals), congenics, mutants (whether naturally occurring or not) and cloned animals. These must all be assigned to a project and have AEC approval, and be reported in the Part A worksheet.

1.1.ii. Animal types

All vertebrates (including fish); cephalopods including octopus, squid, cuttlefish, and nautilus; and the decapod crustaceans lobster, crabs, and crayfish.

1.1.iii. Stage of development

Animals of the following stages of development are to be reported:

- Mammals - From half-gestation onwards (ex-utero);
- Birds - From half-incubation onwards;
- Reptiles - From half-incubation onwards;
- Amphibians - Capable of independent feeding;
- Fish - Capable of independent feeding;
- Cephalopod - Adult
- Crustacean - Adult

1.1.iv. Degree of participation in protocols

All animals assigned to a project for any period in 2009 must be reported, unless they are specified animals returned unused to the animal house and will be reported in a Specified Animal Breeding Colony. Excess animals that are held-over or euthanased while under the control of a project must still be reported for that project.

1.1.v. Animals reported in a previous year

An animal must be reported for each year in which it is assigned to a project, regardless of any reporting in previous years.

1.1.vi. Animals used in more than one project (repeat use)

An animal must be reported for each project in which it is used during 2009. This may result in an animal being reported more than once if it is assigned to more than one project.

1.1.vii. Alive or dead:

Only live animals used or live animals acquired by the licence and killed for use in a project are to be reported. The use of acquired carcasses or animal parts (ie scavenging) must not be reported in Part A.

1.1.viii. Location

Animals participating in projects conducted in Victoria or Victorian waters only are to be reported.

1.1.ix. Co-operative projects

To prevent duplication of project reporting, animal use must be reported only by the licence under which the principal investigator for that project is working.

1.2. Which breeding colony animals are to be reported?

1.2.i. Types of animals.

Specified Animal Breeding Colony animals only are to be reported. Specified animals are guinea pig; and rat, mouse or rabbit other than a rat, mouse or rabbit bred in the wild; and non-human primates.

1.2.ii. Definition of routine breeding or production

Specified animals held for stock maintenance and/or routine breeding under a SAB or SPP Licence and not assigned to a project, or that are returned unused from a project, must be reported as Specified Animal Breeding Colony breeding animals. This includes animals that have not undergone genetic modification, and those animals with established GM lines that have been bred according to AEC-approved SOPs. Specified animals used to produce progeny and any breeders or progeny culled in the process must be included.

Animals used for breeding within an AEC-approved project are not considered to be part of a Specified Animal Breeding Colony and must be reported as Project animals.

1.2.iii. Stage of development of animal

From half-gestation onwards (ex-utero only) to be reported.

1.2.iv. Degree of participation in breeding

Specified animals not assigned to a project, or returned by a project unused, that were held in the SAB or SPP licence for any period in 2009 must be reported as part of the Specified Animal Breeding Colony. This is regardless of any reporting in previous years.

Final progeny assigned to a project in 2009 are not to be counted in Specified Animal Breeding Colony numbers, as these will be counted under the project to which they are assigned. Final progeny held for supply and unassigned to a project are to be reported.

In summary, the specified animals breeding group animals to be described are those in the colony at 1 January, plus any added to the colony between 1 January and 31 December (including reproduction and acquisitions), excluding animals distributed to projects and not returned unused for re-issue.

2. DATA ENTRY FOR ANIMAL USE RETURN PART A

2.1. The Part A spreadsheet

An Excel worksheet is provided to complete Part A of the Return. Where pre-set options are to be used, drop-down boxes are provided with the available selections. Options provided in the drop-down boxes only will be accepted. Other entries will be returned for correction.

Dialogue boxes are also present that help with the information to be entered for each cell. These may be dragged using the mouse if they are obscuring cells. The title cell of each column may be used to access a help document on the second worksheet of the Excel document. To return to the data entry worksheet, click on the 'Data entry' tag on the left hand side of the bottom scroll bar.

As a line in the worksheet is completed for each project group or breeding group, the entries are tested for internal consistency. When an entry is made that is inconsistent with an entry in an earlier column, it is outlined in red and crossed-through. Pasting of entries may disable the testing macro and internally inconsistent or non-standard entries may occur. Spreadsheets with these incorrect entries will be returned for correction.

The spreadsheet is designed for use with Office 2003. There may be some formatting problems encountered if Office 2007 is used.

2.2. Grouping of animals for data entry

Project animals are to be reported in groups. Each project is to be broken down into groups by:

- Animal type;
- Animal source;
- Particular procedure; and
- Impact of different types of procedure on animal (eg test group, control group, group for any animals assigned to a project but not used in a procedure etc).

A line is to be used to describe each group.

Specified Animal Breeding Colony animals are to be reported as breeding groups by:

- Animal type;
- Source; and

- Whether the animals are non-GM or are involved in breeding established GM lines.

2.3. Category descriptions and examples

Following is a description of the entries for each column of the data entry worksheet. A flow-chart is provided in Appendix 1 to aid completion of the table. The total list of options in the drop-down boxes are in Appendix 2, and a sample completed form is in Appendix 3.

2.3.i. Column A. Year

Enter the reporting period year in four-figure format (2009).

2.3.ii. Column B. Licence number

The licence number with the four-letter prefix omitted. For example, for licence SPPL145 only 145 should be entered. The licence number is in the text box at the top of the licence.

2.3.iii. Column C. Animals assigned to an AEC-approved project, or animals in a Specified Animal Breeding Colony

Indicate if the animals were part of an AEC-approved project or part of a Specified Animal Breeding Colony. Note that animals bred within an AEC approved project are considered to be Project animals.

2.3.iv. Column D. AEC approval designation

The project designation assigned by the AEC. For Specified Animal Breeding Colony animals enter "SABC" (Specified Animal Breeding Colony).

2.3.v. Column E. AEC Approval Date

The date when final approval was received for the project in short, Australian format (e.g. 12 November 2009 is to be entered as 12/11/2009. For Specified Animal Breeding Colony animals leave blank.

2.3.vi. Column F. Type of animal in group

Choose the animal type of each project group or Specified Animal Breeding Colony group. Note that "Specified Animals" are guinea pig; and rat, mouse or rabbit other than a rat, mouse or rabbit bred in the wild, and non-human primates. These animals are asterisked in the drop-down box.

2.3.vii. Column G. Source of group

Choose the appropriate source. Note that for all specified animals, a source marked with an asterisk must be chosen. For non-specified animals, a non-asterisked source must be chosen.

2.3.viii. Column H. Project purpose or Specified Animal Breeding Colony group.

For AEC-approved project animals, select the most appropriate option that describes the primary purpose of the project as a whole, or the purpose of the project for which new-line GM animals are being produced. Because this option applies to the project as a whole, it must be identical for all groups that are part of the same project. The Specified Animal Breeding Colony option must not be chosen for project animals.

For Specified Animal Breeding Colonies, the Specified Animal Breeding Colony option must be chosen.

"The understanding of human or animal biology": projects that aim to increase the basic understanding of the structure, function and behaviour of animals, including humans, and processes involved in physiology, biochemistry and pathology.

"The maintenance and improvement of human or animal health and welfare": projects that aim to produce improvements in the health and welfare of animals, including humans.

Examples

- *Use of a sheep flock to donate blood to produce microbiological media*
- *Production of commercial anti-serum, antivenine*

“The improvement of animal management or production”: projects that aim to produce improvements in domestic or captive animal management or production.

“The achievement of education objectives”: the purpose of the project is not to acquire new knowledge, rather to pass on established knowledge or training to others. This includes interactive or demonstration classes in methods of animal husbandry, management, examination and treatment.

Examples

- *Animals used by veterinary schools to teach examination procedures such as pregnancy diagnosis*

“Environmental objectives”: projects that aim to increase the understanding of the animals’ environment or its role in it, or aim to manage wild or feral populations. These include studies to determine population levels and diversity and may involve techniques such as radio tracking.

“Specified Animal Breeding Colony group”: for Specified Animal Breeding Colony animals ONLY.

2.3.ix. Column I. Project benefit or Specified Animal Breeding Colony group:

For AEC-approved project animals, select the option that best describes the benefit of the project as a whole, or the benefit of the project for which new-line GM animals are being produced. Because this option applies to the project as a whole, it must be identical for all groups that are part of the same project. The Specified Animal Breeding Colony option must not be chosen for project animals.

For Specified Animal Breeding Colonies, the Specified Animal Breeding Colony group option must be chosen.

2.3.x. Column J. Particular procedure applied to project group or Specified Animal Breeding Colony group indicator

For AEC-approved project animals this column describes some particularly impacting, invasive, or controversial procedures that may have been undertaken on the group. If one of these has been conducted, select that option. If none of these procedures have been used, select the ‘Other procedure’ option. The Specified Animal Breeding Colony option must not be chosen for project animals.

For Specified Animal Breeding Colony animals, the Specified Animal Breeding Colony group option must be chosen.

2.3.xi. Column K. Impact of activities on project group or GM status of Specified Animal Breeding Colony group

For AEC-approved project animals, this describes the impact of any project activities on the welfare of the animals in the group. This includes the process of acquiring the animals if stress is likely to be involved (e.g. the capture of wild animals). Select the option reflecting the greatest impact of the procedure carried out on the group. The Specified Animal Breeding Colony group option must not be chosen for project animals.

Where an animal is euthanased, the code representing the highest-impact activity that the animal is subjected to prior to euthanasia should be chosen.

For Specified Animal Breeding Colony animals select one of the two GM status options for the Specified Animal Breeding Colony group.

“Observation Involving Minor Interference”: studies in which the normal activities of animals are minimally impacted on.

Examples

- *Laboratory animals in cages*
- *Feeding trial, such as Digestible Energy determination of feed in a balanced diet*
- *Behavioural or growth study with minor environmental manipulation*
- *Teaching of normal, non-invasive husbandry such as handling, grooming, etc*
- *Production of products, such as hormones or drugs, in milk or eggs from genetically modified animals that are subject to normal husbandry procedures only*
- *Any of the above where the animal is euthanased at the culmination of its use.*

“Animal Unconscious Without Recovery”: the animals are rendered unconscious under controlled circumstances (i.e. not in a field situation) with as little pain or distress as possible. Capture methods are not required. Any pain is minor and brief and does not require analgesia. Procedures are carried out on the unconscious animal that is then killed without regaining consciousness.

Examples

- *Animals (including fish) in laboratory killed painlessly for dissection, biochemical analysis, etc*
- *Teaching surgical techniques on live, anaesthetised patients that are not allowed to recover following the procedure*

“Minor Conscious Intervention”: the animals are subjected to minor procedures that would normally not require anaesthesia or analgesia. Any pain is minor and analgesia usually unnecessary, although some distress may occur as a result of trapping or handling.

Examples

- *Capture and release (with or without tagging) of animals (including fish) in the wild*
- *Trapping and humane euthanasia for collection of specimens*
- *Ear notching (preferred for reduced impact), tail tipping and toe clipping (discouraged on welfare grounds) for identification of new line GM animals*
- *Injections, blood sampling in conscious animal*
- *Minor dietary or environmental deprivation or manipulation, such as feeding nutrient-deficient diets for short periods*
- *Stomach tubing, branding, disbudding, shearing, etc*

“Minor Operative Procedure With Recovery”: the animals are rendered unconscious, with as little pain or distress as possible. A minor procedure such as cannulation or skin biopsy is carried out and the animals are allowed to recover (although the animal may later be humanely killed). Depending on the procedure, pain may be minor or moderate and post-operative analgesia may be appropriate.

Examples

- *Biopsies or blood sampling under anaesthesia or sedation*
- *Cannulations under anaesthesia or sedation*
- *Sedation/anaesthesia for relocation, examination or injections/blood sampling*
- *Field capture using chemical restraint methods*

“Surgery With Recovery”: generally the animals are rendered unconscious, with as little pain or distress as possible. A major procedure such as abdominal or orthopaedic surgery is carried out and the animals are allowed to recover (although the animal may later be humanely killed). Post operative pain is usually considerable and at a level requiring analgesia.

Examples

- *Orthopaedic surgery*
- *Abdominal or thoracic surgery*
- *Transplant surgery*
- *Mulesing, surgical castration without anaesthesia*
- *Surgery under anaesthesia for implantation of telemetry tags*

“Minor Physiological Challenge”: the animals remain conscious for some or all of the procedure. There is interference with the animals’ physiological or psychological processes. The challenge may cause only a small degree of pain/distress or any pain/distress is quickly and effectively alleviated.

Examples

- *Minor infection, minor or moderate phenotypic modification, early oncogenesis*
- *Arthritis studies with pain alleviation.*
- *Prolonged deficient diets, induction of metabolic disease.*
- *Polyclonal antibody production*
- *Antiserum production*

“Moderate to Major Physiological Challenge”: the animals remain conscious for some or all of the procedure. There is interference with the animals’ physiological or psychological processes. The challenge causes a moderate or large degree of pain/distress that is not quickly or effectively alleviated.

Examples

- *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 (discouraged – alternatives are available)*

“Death As An Endpoint”: this category only applies to those rare cases where a procedure is designed to cause the death of animals with no humane end-point. A Part C form must be completed for each project using this procedure. Death as an endpoint does not include: animals killed for dissection; animals which are euthanased on completion of the project or when predictive signs of death have been determined and alleviated; animals that are killed if something goes wrong; accidental deaths; or death by natural causes.

Examples

- *Toxicity testing (LD50, LC50)*
- *Testing of antivenoms*
- *Fatal disease progression*

“Specified Animal Breeding Colony group: non-GM breeding only”: routinely bred specified animals with no genetic modification.

“Specified Animal Breeding Colony group: established GM line breeding”: specified animals that have undergone genetic modification (or are from lines of animals resulting from genetic modification) according to AEC-approved SOPs.

2.3.xii. Column L. Number of animals in project group or in breeding group in 2009

Enter the total number of animals in the project group or breeding group during 2009. Where a precise measure of the numbers is impractical, such as for very large groups of animals (e.g. fish schools) or for non-captive animals, an estimate is satisfactory.

For Specified Animal Breeding Colony groups, this is the sum of:

- animals at the start of the year;
- animals acquired; and
- animals born,

minus animals assigned to AEC-approved projects and not returned unused for re-issue.

2.3.xiii. Column M. Number of deaths in project group or breeding group in 2009.

Enter the number of animals in the project group or breeding group that die or are culled during the reporting period. This includes animals that are euthanased, animals killed for dissection, accidental deaths, death as an endpoint, or death by other causes. Do not include the deaths of animals that are not being kept for the purpose of the licence, such as wastage deaths of agricultural animals that are

primarily managed for agricultural purposes by commercial operators. Reporting in this column relates to ethical as opposed to welfare considerations.

Note that this entry will often generate an error, indicated by being outlined in red and crossed-through. Options chosen that may generate errors in this cell are:

- Where the options “Animal unconscious without recovery” or “Death as an end-point” are chosen in the Impact column (Column I), that group must have 100% deaths (ie the same numbers in the Number used and Fate columns). If not all the animals were killed, those left alive must be described as a separate group in a new line.
- The number of animals dead from a project group or breeding group may never exceed that used or held. Therefore the cell in Column L (Total used) may never be more than that in Column L (All deaths).

Reminder – For AEC-approved project animals, all lines describing groups from the same project must have the same entry for columns that apply to the project as a whole i.e. Columns C, D, E, H, and I.

3. ONCE THE PART A TABLE HAS BEEN COMPLETED

The institution is responsible for producing a complete, correct Part A table for the licence and submitting it to the Bureau of Animal Welfare. This can be done by (in order of preference):

- E-mailing the spreadsheet as an attachment to: alan.fried@dpi.vic.gov.au Please put the name of the licence in the subject line.
- Putting the spreadsheet onto a CD ROM and mailing to the following address (Not MAC users).

4. COMPLETION OF PARTS B AND C OF THE RETURN

Once the Part A has been forwarded to the Bureau of Animal Welfare, Part B should be completed, including listing any projects using death as an end point procedures under the licence in 2009. A Part C should be completed for each such project. All forms must be submitted by mail 31 March 2010.

5. QUERIES

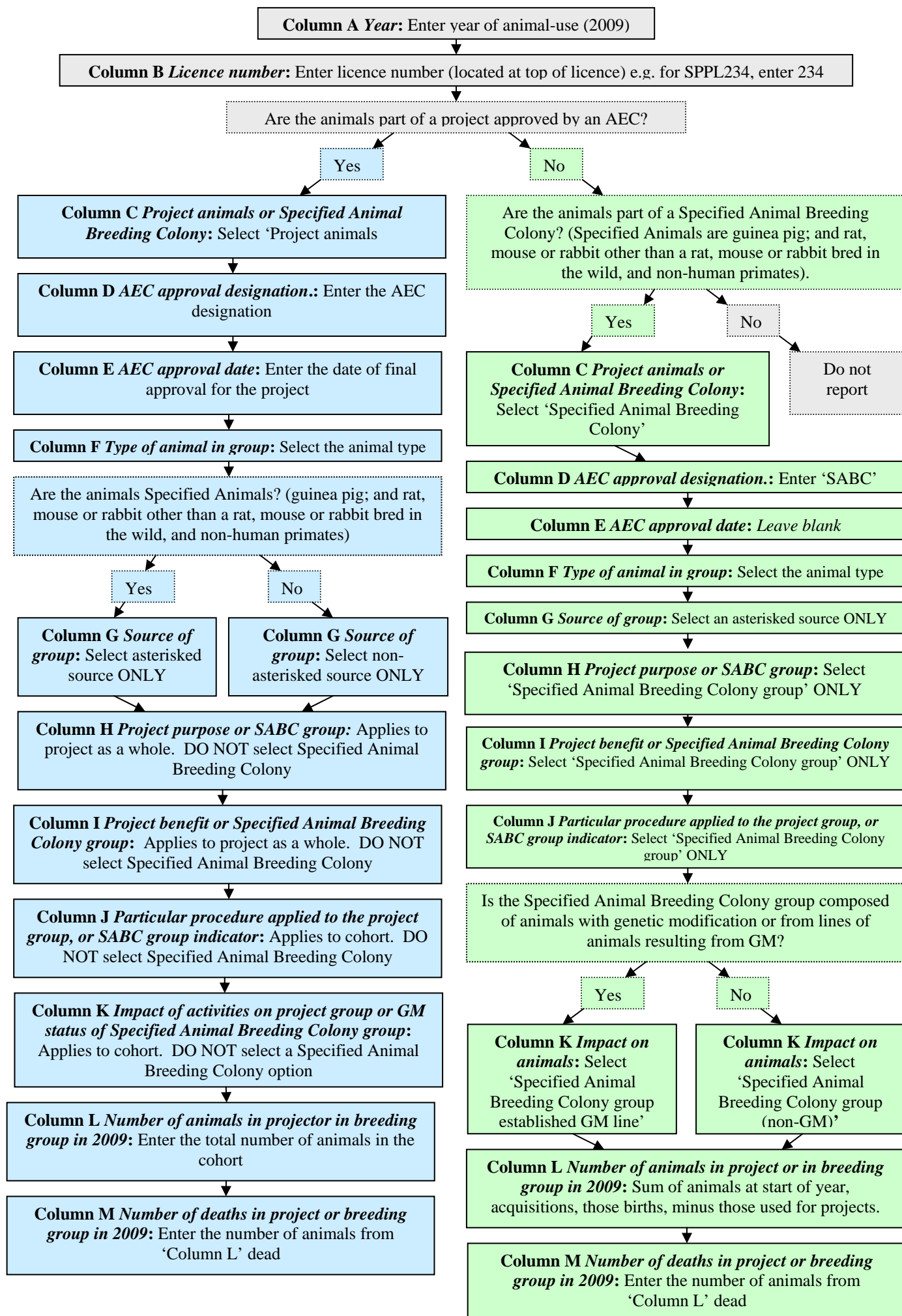
If there are any queries on the Animal Use Return please do not hesitate to contact Alan Fried.

Bureau of Animal Welfare
475 Mickleham Rd
ATTWOOD VIC 3049

Ph: (03) 9217 4425
Fax: (03) 9217 4416

alan.fried@dpi.vic.gov.au

APPENDIX 1 FLOW CHART FOR COMPLETION OF 2009 ANIMAL USE RETURN SPREADSHEET



APPENDIX 2: CATEGORIES FOR COLUMNS C, F, G, H, I, J, K, L AND M

Shaded sections indicate choices exclusive to and compulsory for Specified Animal Breeding Colony animals

Column C. Animals assigned to an AEC-approved project or animals in a Specified Animal Breeding Colony

<ul style="list-style-type: none"> • AEC-approved project (including development of new GM strains, cloning)
<ul style="list-style-type: none"> • Specified Animal Breeding Colony

Column F. Type of animal in group (* Specified animals)

<p>Laboratory</p> <ul style="list-style-type: none"> • Ferrets (lab) • <u>Guinea pigs*</u> (lab) • Hamsters (lab) • <u>Mice*</u> (lab) • <u>Rabbits*</u> (lab) • <u>Rats*</u> (lab) • Other laboratory mammal (not non-human primate) 	<p><i>Domestic (cont)</i></p> <ul style="list-style-type: none"> • Other domestic <p>Birds</p> <ul style="list-style-type: none"> • Exotic captive • Exotic wild • Native captive • Native wild • Poultry • Other birds 	<p><i>Reptiles (cont)</i></p> <ul style="list-style-type: none"> • Turtles, tortoises • Other reptile <p>Primates</p> <ul style="list-style-type: none"> • <u>Baboons*</u> • <u>Macaques*</u> • <u>Marmosets*</u> • <u>Primates other*</u> <p>Native mammal</p> <ul style="list-style-type: none"> • Dasyurids • Koalas • Macropods • Native Rats, Mice • Possums, Gliders • Wombats • Monotremes • Seals and sealions • Whales and dolphins 	<p><i>Native mammals (cont)</i></p> <ul style="list-style-type: none"> • Other native mammals <p>Exotic feral mammals</p> <ul style="list-style-type: none"> • Camels (wild) • Cats (wild) • Cattle (wild) • Goats (wild) • Hares (wild) • Horses (wild) • Mice (wild) • Pigs (wild) • Rabbits (wild) • Rats (wild) • Wild dogs and foxes • Other exotic feral mammal <p>Zoo</p> <ul style="list-style-type: none"> • Exotic zoo mammal
<p>Domestic mammal</p> <ul style="list-style-type: none"> • Cattle (domestic) • Deer (domestic) • Goats (domestic) • Horses (domestic) • Pigs (domestic) • Sheep (domestic) • Cats (non-wild) • Dogs (non-wild) 	<p>Aquatic</p> <ul style="list-style-type: none"> • Cephalopods • Crustaceans • Fish <p>Amphibia</p> <ul style="list-style-type: none"> • Amphibians <p>Reptiles</p> <ul style="list-style-type: none"> • Lizards • Snakes 		

Column G. Source of group

<p>For specified animals (guinea pig; non-wild bred mouse, rat & rabbit; primate)</p> <ul style="list-style-type: none"> • Own derivation, or • Victoria –Specified Animals Breeding Licence, or • Interstate institution authorised to distribute specified animals • Imported from overseas • Other 	<p><i>All other animals cont</i></p> <ul style="list-style-type: none"> • Commercial supplier • Private donation • Municipal pound • Privately owned animals used on a farm • Animals in their natural habitat • Removed from Australian natural habitat for the project • Australian captive colony/zoo • Other source
<p>All other animals</p> <ul style="list-style-type: none"> • Own derivation 	

Column H. Project purpose or Specified Animal Breeding Colony group

<p>Fundamental purpose of project</p> <ul style="list-style-type: none"> • The understanding of human or animal biology • Maintenance and improvement of human or animal health and welfare • Improvement of animal management or production 	<p><i>Project purpose cont</i></p> <ul style="list-style-type: none"> • The achievement of educational objectives • <u>Environmental objectives</u> <p>Specified Animal Breeding Colony (Guinea pig; non-wild bred mouse, rat, rabbit; primate)</p> <ul style="list-style-type: none"> • Specified Animal Breeding Colony group
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Column I. Project benefit or Specified Animal Breeding Colony group

<p>Benefit provided by project</p> <ul style="list-style-type: none"> • Fundamental biology/physiology • Diseases-human • Diseases-animal • Diseases- zoonotic • Environmental monitoring/ecology • Domestic animal management/production • Wildlife management/conservation • Vertebrate pest management • Production of biological products • Xenotransplantation (transplantation of living 	<p><i>Project benefit cont</i></p> <ul style="list-style-type: none"> organs, tissues or cells from one species to another • Development of techniques- remedial, surgical, diagnostic • Education (demonstration) • Training (student use of animals) • Regulatory product testing (e.g. vaccines, chemical, drug evaluation) <p>Specified Animal Breeding Colony animals only (Guineapig, non-wild mouse, rat, rabbit; primate)</p> <ul style="list-style-type: none"> • Specified Animal Breeding Colony group
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Column J. Particular procedure applied to the project group, or Specified Animal Breeding Colony group indicator

<p>Key particular procedures; if not relevant select 'Other'</p> <ul style="list-style-type: none"> • Attachment or insertion of devices for long term direct or telemetric monitoring • Adversive stimuli for behavioural training, or for inducing a state of stress integral to the experiment • Burning or scalding • Induction of other disease model (e.g. diabetes, cardiac disease) • Gene manipulative technology • Immunomodulatory methods • Induction of infection • Induction of neoplasia • Interference with the central nervous system or sensory capacity or brain centres controlling that capacity 	<p><i>Procedure cont</i></p> <ul style="list-style-type: none"> • <i>In vivo</i> production of monoclonal antibody • <i>In vivo</i> production of polyclonal antibody • Ionising radiation exposure • Neuromuscular blocking agents or electro-immobilisation Ocular irritancy testing Skin irritancy testing involving a chemical, or cosmetic, household, or industrial preparation • Toxicity testing • Other procedure <p>Specified Animal Breeding Colony animals only (Guineapig, non-wild mouse, rat, rabbit; primate)</p> <ul style="list-style-type: none"> • Specified Animal Breeding Colony group
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Column K. Impact of activities on project group or GM status of Specified Animal Breeding Colony group

<p>Impact of the procedure on the cohort</p> <ul style="list-style-type: none"> • Observational study involving minor interference • Animal unconscious without recovery • Minor conscious intervention, no anaesthesia • Minor operative procedures with recovery • Surgery with recovery • Minor physiological challenge • Moderate to major physiological challenge 	<p><i>Impact of procedure cont</i></p> <ul style="list-style-type: none"> • Death as an end point - MUST COMPLETE A PART C FORM <p>Specified Animal Breeding Colony animals only (Guineapig; non-wild mouse, rat, rabbit; primate)</p> <ul style="list-style-type: none"> • Specified Animal Breeding Colony group (non-GM) • Specified Animal Breeding Colony group established GM line
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Column L. Number of animals in project or breeding group in 2009

Enter the total number of animals in the cohort or breeding colony during 2009. For Specified Animal Breeding Colony groups, this is the sum of:

- animals at the start of the year;
- animals acquired; and
- animals born,

minus animals assigned to AEC-approved projects and not returned unused for re-issue.

Column M. Number of deaths in project or breeding group in 2009

Indicate number of dead animals in the scientific procedure cohort or breeding group during 2009. (i.e. include death as an endpoint, euthanasia, culled project or breeding stock, or unexpected death)

APPENDIX 3 - EXAMPLE OF A COMPLETED PART A, INCLUDING REPORTING OF SPECIFIED ANIMAL BREEDING STOCK

In 2009 licence SPPL301 used mice and rats (specified animals), and fish in 2 AEC-approved projects (Projects 00061 and 00046). In addition, the licence bred mice and rats (specified animals) for use by the licence.

The following table illustrates how the animal use procedures and the breeding of specified animals is to be described. The inclusion of ‘group numbers’ are illustrative only and should not be included in the submitted worksheet.

	A Year	B Licence no.	C Project or Specified Animal Breeding Colony	D AEC approval no.	E AEC approval date	F Type of animal	G Source	H Purpose of animal use	I Benefit focus of animal use	J Particular procedure	K Impact on animals	L Total used	M All deaths
Group 1	2009	301	AEC-approved project	00061	1/4/2000	Mice	Own derivation	Maintenance human health etc	Diseases human	Other procedure	Animal unconscious without recovery	20	20
Group 2	2009	301	AEC-approved project	00061	1/4/2000	Rats	Own derivation	Maintenance human health etc	Diseases human	Other procedure	Animal unconscious without recovery	75	75
Group 3	2009	301	AEC-approved project	00061	1/4/2000	Rats	Own derivation	Maintenance human health etc	Diseases human	Other procedure	Observational study etc	10	0
Group 1	2009	301	AEC-approved project	00046	27/6/2000	Fish	Commercial supplier	Understanding biology etc	Fundamental biology etc	Other procedure	Animal unconscious without recovery	19	19
Group 2	2009	301	AEC-approved project	00046	27/6/2000	Fish	Commercial supplier	Understanding biology etc	Fundamental biology etc	Other procedure	Minor Physiological challenge	5	0
Group 3	2009	301	AEC-approved project	00046	27/6/2000	Mice	Own derivation	Understanding biology etc	Fundamental biology etc	Other procedure	Animal unconscious without recovery	5	5
Group 1	2009	301	Specified Animal Breeding Colony	SABC	N/A	Mice	Own derivation	Specified Animal Breeding Colony	Specified Animal Breeding Colony	Specified Animal Breeding Colony	Specified Animal Breeding Colony (non-GM)	5,235	293
Group 2	2009	301	Specified Animal Breeding Colony	SABC	N/A	Mice	Own derivation	Specified Animal Breeding Colony	Specified Animal Breeding Colony	Specified Animal Breeding Colony	Specified Animal Breeding Colony established GM line	1,987	183
Group 3	2009	301	Specified Animal Breeding Colony	SABC	N/A	Rats	Own derivation	Specified Animal Breeding Colony	Specified Animal Breeding Colony	Specified Animal Breeding Colony	Specified Animal Breeding Colony established GM line	3,896	221

Procedure animals

- Project 00061 was assigned rats and mice, with similar procedures on all the animals. As such, the project was broken down into 2 groups, one for the mice and one for the rats. However, 10 rats were assigned to but did not undergo procedures. A third line was used to describe these animals with zero in the fate column as these rats was carried-over for future procedures under the project (Group 3).
- Project 00046 was assigned laboratory mice and fish, forming 2 initial groups. In addition 19 fish were killed and 5 recovered from minor operative procedures. To describe this variability the fish group was further split into 2 and ultimately 3 groups and lines described the project. A zero was entered under the ‘All deaths’ Column M for cohort 2, to indicate that no animals died or were killed in this cohort.

Specified Animal Breeding Colony groups

The licence bred and used for breeding non-GM mice, and mice and rats from established GM strains:

Project or Specified Animal Breeding Colony Column C, ‘Specified Animal Breeding Colony’ is selected indicating specified animals kept as a general breeding colony for stock animals, rather than animals used in a project of scientific procedures.

AEC approval Columns D and E: in place of the AEC approval number “SABC” was entered. N/A was included in the Date of approval column.

Source Column G: Own derivation (specified animals) is entered for all lines.

Purpose, Benefit and Particular procedure Columns H, I, and J: “Specified Animal Breeding Colony” is selected in each. These are the only choices available to breeding stock animals for these columns.

Impact column K: One group of mice and the rats produced by SABL301 were breeding from established GM animals. “Specified Animal Breeding Colony established GM line” has been selected for these. ‘Specified Animal Breeding Colony (non-GM)’ was selected for the non-GM strain mice group.

Total used Column L: numbers entered refer to the breeding-stock animals. Progeny assigned to scientific procedure projects are not included in the Specified Animal Breeding Colony numbers.

All deaths Column M: the number of animals culled or died while in the breeding program is indicated for each of the 3 groups (i.e. of the numbers in Column L). This does not include the fate of animals once they have left the breeding colony and are assigned to scientific procedures projects.

