The report is required by law (7 USC esult in an order to cease and desist	2143). Failure to report and to be subject to pens	t according to the regular	tions can section 2	See reverse a			Interagency Report Control 1 0180-DOA-AN	No.
UNITED STATES D	EPARTMENT OF AGRICUT HEALTH INSPECTION	ILTURE	/i. ce	ERTIFICATION NUMBER: 10 SUSTEROMER NUMBER 4			FORM APPROVED OMB NO. 0579-0036	Opr
	r of research f PE or Print)	FACILITY	U U	S. Department of the last S. Geological Survey 2201 Sunrise Valley Deston, VA 20191	Biological Re	sources Di	scipline	,
REPORTING FACILITY	List all locations where	animals were housed or	used in a	cutal research, testing,	teaching, or e	experimenta	tion, or held for these purpose	es. Attach additiona
heets if necessary.)	ITY LOCATIONS (Si	tes)						
A. Field locations. See attached k	•	•		C.				
В.				D.				
EPORT OF ANIMALS USED B	Y OR UNDER CONTI	ROL OF RESEARCH	FACILI	TY (Attach additiona	ll sheets if nec	essary or u	e AOHIS FORM 7023A).	
A. Animals Covered by the Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain relieving drugs.	upon teachi surger condu accordistre: for will anesth	mber of animals which experiments, ing, research, ry, or tests were ceted involving apanying pain or ss to the animals and aich appropriate actic, analgesic, or aillzing drugs were	experiments conducted it distress to the appropriate drugs would procedures, teaching, re (An explan- or distress it	s, research, involving as the animals anesthetic, d have advo , results, or search, exp ation of the in these ani	upon which teaching, surgery or tests were except or tests were companying pain or and for which the use of analgestic, or tranquilizing ersely affected the interpretation of the eriments, surgery, or tests. procedures producing pain mals and the reasons such ust be attached to this	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs								
5. Cats		33						33 (E)
6. Guinea Pigs								
7. Hamsters								
8. Rabbits	2							2 (B) —
9. Non-human Primates								
10. Sheep								
11. Pigs								
12. Other Farm Animals								
13. Other Animals								
drugs, prior to, during Each principal invest This facility is adhericated by the principal to this annuals the species and nuals.	able standards govern g, and following actual igator has considered ing to the standards are cipal investigator and al report. In addition imber of animals affectarian for this research	Il research, teaching, talternatives to painful differentiations under talternatived by the Institute identifying the IAC etc.	testing, I proced the Act, tutional UC-ap	surgery, or experim iures. and it has required a l Animal Care and U proved exceptions, t	that exception Use Committhis summary	re followe ons to the tee (IACU y includes	of anesthetic, analgesic, and by this research facility. standards and regulations of the abrief explanation of the veterinary care and to over	be specified and th exceptions is exceptions, as we
CERTIFICATION BY HEA (Chief Executive Officer or I I certify that the above is true,	egally Responsible	Institutional Official)	CIAL				
		(b)(6), (l	b)(7)c	. E. trans construction Will A. VIII.	0 m / 0 m v		TANIT ARRANIA	DATE SIGNED 12/12/08
		,,	,					-

See reverse side for additional information. Interagency Report Control No. 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO. CUSTOMER NO. 10-F-008 431

FORM APPROVED DMB NO. 0579-0036

CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY

include Zip Code) U.S. Department of the Interior, U.S. Geological Survey I Resources Discipline, 12201 Sunrise Valley Drive, MS 30, Reston, VA 20191

2. HEADQUARTERS RESEARCH FACILITY (Name/Address, as registered with USDA, U.S. Geological Survey Biological

REPORT OF ANIMALS USED I	BY OR UNDER CON'	TROL OF RESEA	RCH FACILITY (Attach a	dditional sheets if nec	essary or use this form).	
A. Animals Covered by the Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals experiments, research conducted involving a distress to the animals appropriate anesthetic tranquilizing drugs we affected the procedure interpretation of the texperiments, surgery, of the procedures pro in these animals and	upon which teaching, surgery or tests were ecompanying pain or and for which the use of analgestic, or ald have adversely as, results, or	F. TOTAL NO. OF ANIMALS (Cols. C+ D+E)
Bat, Big Brown		12				12 (J)
Bat, Hoary		13				13 (J) -
Bat, Pacific Sheath-tailed		13				13 (J)
Bear, Black		21 (B)	33 (B) + 18 (D)			54 (B) + 18 (D) = 72
Bear, Grizzly			34			34 (D)
Bear, Polar			111			111 (I)
Bobcat		6				6 (G)
Caribou			54			54 (I)
Coyote		10				10 (G)
Chipmunk, Least		168				. 168 (J)
Chipmunk, Palmer's		600 ·				600 (G)
Chipmunk, Townsend's	1	750				750 (F)
Deer, Mule		22				22 (G)
Deer, White-tailed		11				11 (C)
Elk, Roosevelt			12			12 (F)
Elk		4 (J)	45 (C) + 30 (D)			4 (J) + 45 (C) + 30 (D) = 79
Ermine	 	2				2 (F)
Fox, Arctic	 	25				25 (Ī)

Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.

Each principal investigator has considered alternatives to painful procedures.

This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

į	CERTIFICATION BY HEADQUARTERS RESEARCH FAC	ILITY OFFICI	AL
ı	(Chief Executive Officer or Legally Responsible Institutional O	fficial)	

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

(b)(6), (b)(7)c

DATE SIGNED

AFRIS FORM /UZ3 (Replaces VS FUHII 10-Z3 (OC1 00), WHICH IS UDSULED.)

Interagency Report Control No. 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO. CUSTOMER NO. 10-2-008 431

FORM APPROVED OMB NO. 0579-0036

CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY

2. HEADQUARTERS RESEARCH FACILITY (Name/Address, as registered with USDA, include Zip Code) U.S. Department of the Interior, U.S. Geological Survey Biological Resources Discipline, 12201 Sunrise Valley Drive, MS 30, Reston, VA 20191

REPORT OF ANIMALS USED BY	OR UNDER CONT	ROL OF RESEAR	CH FACILITY (At	ttach additional shee	ts if necessary or use	this form).	
	1	Ţ			<u> </u>	· · _	

A. Animals Covered by the Animal Welfare Regulations B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes. B. Number of animals upon which experiments, research, experiments, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research conducted involving abcompanying pain or distress to the animals and for which the use of appropriate anesthetic tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report.)	F. TOTAL NO. OF ANIMALS (Cols. C+ D+E)
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			were not used must be disdened to this report.		
Gopher, Botta's Pocket	70			70(G)	7
Horse, (feral)	3 3	1		33 (J)	7
Jackrabbit	7			7 (G)	7
Kangaroo Rat spp.	2			2 (G)	7
Kangaroo Rat, Dulzura	409			409 (G)	7
Kangaroo Rat, Pacific	2			2 (G)	7
Kangaroo Rat, Stephen's		219		219 (G)	7
Mammal, unknown	1			1 (G)	구
Manatee	250			250 (L)	구
Mole, Coast	3			3 (F)	7
Mole, Shrew	1			1 (F)	7
Moose		21		21 (I)	7
Mouse spp, Unknown	4			4 (J)	7
Mouse, Brush	21			21 (G)	7
Mouse, California	209	4		213 (G)	7
Mouse, Cactus	894	Ī -		894 (G)	7
Mouse, Deer	2834 (J) +420 (F) + 1042 (G)	48 (D) + 2 (G)		2834 (J) + 48(A) + 420 + (G) = 4344	(F)
Mouse, House	1 (J) + 58(G)	2		1 (J) + 60 (G 61	i) = -

Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.

Each principal investigator has considered alternatives to painful procedures.

This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer or Legally Responsible Institutional Official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

NAME AND THE E OF CEA OF INSTITUTIONAL OFFICIAL CONTRIBE OF CE O OR INSTITUTIONAL OFFICIAL

DATE SIGNED

(b)(6), (b)(7)c

APHIS FORM 7023 (Replaces VS Form 18-23 (OCT 88), which is obsolete.)

See reverse side for additional information. Interagency Report Control No. 0180-DOA-AN

UNITED	STATES	DEPAI	RTMENT	r of a	GRICU	LTURE
ANIMAL.	AND PLA	INT HE	ALTH II	NSPEC	TION S	ERVIÇE

1. REGISTRATION NO. CUSTOMER NO. 10-F-008 431

FORM APPROVED OMB NO. 0579-0036

CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY

2. HEADQUARTERS RESEARCH FACILITY (Name/Address, as registered with USDA, include Zip Code) U.S. Department of the Interior. U.S. Geological Survey! Resources Discipline, 12201 Sunrise Valley Drive, MS 30, Reston, VA 20191

U.S. Geological Survey Biological

					, , , , , , , , , , , , , , , , , , , ,	
EPORT OF ANIMALS USED B	Y OR UNDER CON	TROL OF RESEA	RCH FACILITY (Attach a	dditional sheets if nec	essary or use this form).	
A. Animals Covered by the Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	conducted involving a distress to the animals appropriate anesthetic tranquilizing drugs we affected the procedure interpretation of the te experiments, surgery, of the procedures pro in these animals and it	surgery or tests were ecompanying pain or and for which the use of analgestic, or uld have adversely s, results, or	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
Mouse, Meadow Jumping		1	1	1		1 (1)
Mouse, Northern grasshopper	ļ	48				48 (J)
Mouse, Pocket	<u> </u>	1				1 (J)
Mouse, unknown	 	13				13 (G)
Mouse, Western Harvest	 	213	13			226 (G)
Mouse, White-footed	+	213	30 (A) + 84 (G)	<u> </u>		30(A) + 84 =
Widuse, Willie-looked			30 (A) + 84 (C)			114
Nutria			10			10 (K)
Opossum		5				5 (J)
Otter, Sea		20 (G) + 51 (J)	10			30 (G) + 51 (I) = 81
Pocket Mouse spp.			9			9 (G)
Pocket Mouse, California		631	16			647 (G)
Pocket Mouse, Pacific		77				77 (G)
Pocket Mouse, San Diego		109				109 (G)
Prairie Dog, Black-tailed		47	269	59 (A)		316 (J) = 59 (A) = 375
Raccoon		1				1(J)
Rabbit, Brush	,	1 (F) + 6 (G)				1 (F) + 6 (G) =
Rabbit, Desert Cottontail			3			3 (G)
Rabbit, unknown	7	1				1 (G)
Rat, Malaysian House		5				5 (J)

Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.

Each principal investigator has considered alternatives to painful procedures.

This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL

(Chief Executive Officer or Legally Responsible Institutional Official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

STONATURE OF CEO OF INSTITUTIONAL OFFICIAL NAME AND TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL,

DATE SIGNED

(b)(6), (b)(7)c

APHIS FORM /023 (Replaces VS Form 46-23 (OC1 88), which is obsolete.)

See reverse side for additional information. Interagency Report Control No. 0180-DOA-AN

UNITED	STATES	S DEPA	RTMENT	r of ac	RICUL	TURE
ANIMAL	AND PL	ANT HE	ALTH II	NSPECT	TION SE	RVICE

1. REGISTRATION NO. CUSTOMER NO. 10-F-003 431

FORM APPROVED OMB NO. 0579-0036

CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY

include Zip Code) U.S. Department of the Interior U.S. Geological Survey Biological Resources Discipline, 12201 Sumise Valley Drive, MS 30, Reston, VA 20191

2. HEADQUARTERS RESEARCH FACILITY (Name/Address, as registered with USDA,

			Resources Discipline, 122	of Sumise valley Drive, wis 30, Resion, VA 2019	1
EPORT OF ANIMALS USED I	BY OR UNDER CON	TROL OF RESEA	RCH FACILITY (Attach a	dditional sheets if necessary or use this form)	
A. Animals Covered by the Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research surgery or tests were conducted involving ecompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgestic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report.)	F. TOTAL NO. OF ANIMALS (Cols. C + D+E)
Rat, unspecified species	1	8	<u> </u>	<u> </u>	8 (J) -
Rat, Polynesian		48			48 (J)
Rodent, unknown		3			3 (G)
Skunk, Western Spotted		4			4 (F)
Shrew, Fog		20			20 (F)
Shrew, Grey		64			64 (G)
Shrew, Musk		9			9 (J)
Shrew, Ornate		4			4 (G)
Shrew, Pacific		24			24 (F)
Shrew, Trowbridge's		150			150 (F)
Shrew, unknown					
Shrew, Vagrant		4			4 (F)
Shrew, Omate		4			4 (G)
Shrew, Pacific		24			24 (F) -
Shrew, Trowbridge's		150			150 (F)
Shrew, unknown					
Shrew, Vagrant		4			4 (F) .
Squirrel, California Ground		1 (F) + 14 (G)	1 (G)		1 (F) + 15 (G) = 15
Squirrel, Douglas'		35			35 (F) -

Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.

Each principal investigator has considered alternatives to painful procedures.

This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of

animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL

(Chief Executive Officer or Legally Responsible Institutional Official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

DATE SIGNED

(b)(6), (b)(7)c

APHIS FORM 7023 (Replaces VS Form 18323 (OCT 88), which is obsolete.)

The report is required by law (7 USC 2143). Failure to report according to the regulations can result in an order to cease and desist and to be subject to penalties as provided for in Section 2150. See reverse side for additional information. Interagency Report Control No.

0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE

1. REGISTRATION NO.

FORM APPROVED OMB NO. 0579-0036

ANIMAL AND PLANT HEALTH INSPECTION SERVICE CONTINUATION SHEET FOR ANNUAL REPORT OF

RESEARCH	FACILITY

(b)(2)High, (b)(7)f

2. HEADQUARTERS RESEARCH FACILITY	Y (Name/Address, as registered with USI	DA
include Zip Code)		

USGS/ (b)(2)High, (b)(7)f

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use this form).

A. Animals Covered by the Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	experiments, research conducted involving a distress to the animals appropriate anesthetic drugs would have adv procedures, results, or teaching, research, ex (An explanation of the or distress in these an	and for which the use of analgestic, or tranquilizing ersely affected the	F, TOTAL NO. OF ANIMALS (Cols. C+D+ E)
Shrew, Ornate		4				4 (G)
Shrew, Pacific		24				24 (F)
Shrew, Trowbridge's		150				150 (F)
Shrew, unknown						
Shrew, Vagrant		4				4 (F)
Squirrel, California Ground		1 (F) + 14 (G)	1 (G)			1 (F) + 15 (G) = 15
Squirrel, Douglas'		35				35 (F) -
Squirrel, Northern flying		140				140 (F)
Squirrel, Wyoming Ground	,	8				8 (J) _
Squirrel, Thirteen-lined Ground		8				8 (J)
Vole, California		41				41 (G) -
Vole, Creeping		30				30 (F)
Vole, Long-tailed		4				4 (J) -

Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.

2 Each principal investigator has considered alternatives to painful procedures.

This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and 3 explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of

other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer or Legally Responsible Institutional Official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

SIGNATURE OF C.E.O. OR INSTITUTIONAL	NAME AND TITLE OF C.E.O. OR	DATE
		SIGNED
(b)(6),	(b)(7)c	1412/08

(AUG 91)

result in an order to cease and desist and to be subject to penalties as provided for in Se UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY USGS/ (b)(2)High. (b)(7)f REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEAR			REGISTRATION NO. FORM APPROVED OMB NO. 0579-0036 HEADQUARTERS RESEARCH FACILITY (Name/Address, as registered with USDA, include Zip Code) USGS/ (b)(2)High, (b)(7)f			
A. Animals Covered by the Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals experiments, research conducted involving a distress to the animals appropriate anesthetic drugs would have adversocities, results, o teaching, research, ex (An explanation of the or distress in these and	upon which teaching, surgery or tests were ecompanying pain or and for which the use of , analgestic, or tranquilizing	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
Vole, Meadow	41(A)	2 (J)	114 (A)			2 (J) + 155 (A) = 157
Vole, Montane		10				10 (J)
Vole, Red-backed	33 (A)	60 (F)	14 (A) + 2 (I)			47(A) + 60 (F) + 2 (I) = 109
Vole, Sagebrush		71				71 (J)
Vole, Tundra			9		-	9 (1)
Walrus		38				38 (I)
Wolf, Gray		11				11(C)
Woodrat spp.		1 (J) = 6 (G)				1 (J) + 6 (G) = 7
Woodrat, Bushy-tailed		3				3(F)
Woodrat, Desert		79	3			82 (G)
Woodrat, Dusky-footed		8				8 (G)
Vole, Sagebrush		71				71 (J)
Weasel, Long-tailed Weasel		1				1 (J)
Weasel, Short-tailed	-	1				1 (J)
drugs, prior to, durin Each principal invest This facility is adheri explained by the prin attached to this annu- as the species and nu	g, and following actual igator has considered ing to the standards and cipal investigator and all report. In addition to mber of animals affectarian for this research all care and use.	Il research, teaching, talternatives to painful diregulations under the approved by the Institute identifying the IAC ted. If acility has appropriate the control of the c	testing, surgery, or experim I procedures. The Act, and it has required tutional Animal Care and UC-approved exceptions, the authority to ensure the part of the FACILITY OFF	entation were followed that exceptions to the Jse Committee (IACI his summary include provision of adequate	of anesthetic, analgesic, and by this research facility. standards and regulations but. A summary of all suct a brief explanation of the veterinary care and to over	ne specified and h exceptions is exceptions, as wel

(Chief Executive Officer or Legally Responsible Institutional Official)
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

DATE SIGNED

(b)(6), (b)(7)c

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(AUG 91)

Column E Explanation

This form is intended as an aid to completing the Column E explanation.	It is not an official
form and its use is voluntary. Names, addresses, protocols, veterinary ca	
like, are not required as part of an explanation. A Column E explanation	
be understood by lay persons as well as scientists.	
• • •	

1.	Registration Number: Customer No. 431, Certificate No. 10	-F- 0008
2.	Number 59 of animals used in this study.	
3.	Species (common name) Black-tailed Prairie Dog of animals	ised in the study.
4.	Explain the procedure producing pain and/or distress.	
ma	Is were vaccinated against plague or received a placeho and then c	hallenged with wir

Animals were vaccinated against plague or received a placebo and then challenged with virulent plague to evaluate vaccine efficiency.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see item 6 below)

The purpose of this research is to develop a protective vaccine for both the prairie dog and the ferret. The prairie dogs were utilized to test the efficacy of the plague vaccine. The end point for the experiment is discerning whether or not the control and treated animals have developed the signs and symptoms of the disease and/or if the vaccine has effectively prevented the disease from occurring. Therefore it is critical for the disease process to occur without the confounding effects of tranquilizing, analgesic or anesthetic drugs. Animals were euthanized as soon as the signs and symptoms of an infection were observed and confirmed.

6.	What, if any, federal regulations require this procedure? Cite the Federal Regulations (CFR) title number and the specific section in CFR 113.102):	10 .	9

Agency_