

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> (TYPE OR PRINT)	1. CERTIFICATION NUMBER: 10-F-0008 CUSTOMER NUMBER: 431	FORM APPROVED OMB NO. 0579-0036
	2. U.S. Department of the Interior U.S. Geological Survey Biological Resources Discipline 12201 Sunrise Valley Drive, MS 301 Reston, VA 20191	

3. **REPORTING FACILITY** (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS (Sites)	
A. Field locations. See attached key for USGS Science Centers	C.
B.	D.

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY** (Attach additional sheets if necessary or use 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.	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 accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, 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)
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					

#### ASSURANCE STATEMENTS

- 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).

(b)(6), (b)(7)c	DATE SIGNED 12/12/08
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<b>UNITED STATES DEPARTMENT OF AGRICULTURE</b> <b>ANIMAL AND PLANT HEALTH INSPECTION SERVICE</b>  <b>CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY</b>	1. REGISTRATION NO. 10-F-008	CUSTOMER NO. 431	FORM APPROVED OMB NO. 0579-0036
	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		

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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 (I)
Chipmunk, Palmer's		600			600 (G)
Chipmunk, Townsend's		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 (I)

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(b)(6), (b)(7)c	DATE SIGNED 12/12/08
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(AUG 91) 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  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. CUSTOMER NO.  
10-P-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

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Gopher, Botta's Pocket	70			70(G)
Horse, (feral)	33			33 (J)
Jackrabbit	7			7 (G)
Kangaroo Rat spp.	2			2 (G)
Kangaroo Rat, Dulzura	409			409 (G)
Kangaroo Rat, Pacific	2			2 (G)
Kangaroo Rat, Stephen's		219		219 (G)
Mammal, unknown	1			1 (G)
Manatee	250			250 (L)
Mole, Coast	3			3 (F)
Mole, Shrew	1			1 (F)
Moose		21		21 (I)
Mouse spp, Unknown	4			4 (J)
Mouse, Brush	21			21 (G)
Mouse, California	209	4		213 (G)
Mouse, Cactus	894			894 (G)
Mouse, Deer	2834 (J) + 420 (F) + 1042 (G)	48 (D) + 2 (G)		2834 (J) + 48(A) + 420 (F) + (G) = 4344
Mouse, House	1 (J) + 58(G)	2		1 (J) + 60 (G) = 61

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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 CEO OR INSTITUTIONAL OFFICIAL

NAME AND TITLE OF CEO OR INSTITUTIONAL OFFICIAL

DATE  
SIGNED

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

12/12/08

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<b>UNITED STATES DEPARTMENT OF AGRICULTURE</b> <b>ANIMAL AND PLANT HEALTH INSPECTION SERVICE</b>  <b>CONTINUATION SHEET FOR ANNUAL REPORT OF</b> <b>RESEARCH FACILITY</b>	1. REGISTRATION NO. 10-F-008	CUSTOMER NO. 431	FORM APPROVED OMB NO. 0579-0036
	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		

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Mouse, Meadow Jumping		1			1 (J)
Mouse, Northern grasshopper		48			48 (J)
Mouse, Pocket		1			1 (J)
Mouse, unknown		13			13 (G)
Mouse, Western Harvest		213	13		226 (G)
Mouse, White-footed			30 (A) + 84 (G)		30(A) + 84 = 114
Nutria			10		10 (K)
Opossum		5			5 (J)
Otter, Sea		20 (G) + 51 (I)	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 (I) = 59 (A) = 375
Raccoon		1			1(I)
* Rabbit, Brush		1 (F) + 6 (G)			1 (F) + 6 (G) = 7
X Rabbit, Desert Cottontail			3		3 (G)
X Rabbit, unknown		1			1 (G)
Rat, Malaysian House		5			5 (J)

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**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 OFFICIAL	NAME AND TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL	DATE SIGNED
(b)(6), (b)(7)c		12/12/08


<b>UNITED STATES DEPARTMENT OF AGRICULTURE</b> <b>ANIMAL AND PLANT HEALTH INSPECTION SERVICE</b>  <b>CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY</b>	1. REGISTRATION NO. 10-F-008	CUSTOMER NO. 431	FORM APPROVED OMB NO. 0579-0036
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Rat, unspecified species	8			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, 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)

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

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

UNITED STATES DEPARTMENT OF AGRICULTURE	1. REGISTRATION NO.	FORM APPROVED OMB NO. 0579-0036
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**ANIMAL AND PLANT HEALTH INSPECTION SERVICE  
CONTINUATION SHEET FOR ANNUAL REPORT OF  
RESEARCH FACILITY**

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

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

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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)

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(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**

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<b>UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY</b> USGS/ (b)(2)High, (b)(7)f [REDACTED]	1. REGISTRATION NO.	FORM APPROVED OMB NO. 0579-0036
	2. HEADQUARTERS RESEARCH FACILITY (Name/Address, as registered with USDA, include Zip Code) USGS/ (b)(2)High, (b)(7)f [REDACTED]	

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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 (I)
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)

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[REDACTED] (b)(6), (b)(7)c	DATE SIGNED 12/12/08 S

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## 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 care programs, and the like, are not required as part of an explanation. A Column E explanation must be written so as to 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 used in the study.

4. Explain the procedure producing pain and/or distress.

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 agency, the code of Federal Regulations (CFR) title number and the specific section number (e.g., APHIS, 9 CFR 113.102):

Agency N/A CFR N/A

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