

This 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. 48-R-0001  
CUSTOMER NO. 1494

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

KANSAS STATE UNIVERSITY  
1 FAIRCHILD HALL  
MANHATTAN, KS 66506-110

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)

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

**COPY**

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS FORM 7023A)

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, 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	81	208	301		509
5. Cats	42	53	2		55
6. Guinea Pigs					
7. Hamsters		52	200	10	262
8. Rabbits			79		79
9. Non-Human Primates					
10. Sheep		172			172
11. Pigs	2	4304	58		4362
12. Other Farm Animals					
Cattle (Beef Stockers)		270	28		298
13. Other Animals					
Eastern Woodrat		45			45
Prarie Vole		112			112
Thirteen-lined Ground Squirrel		7			7

ASSURANCE STATEMENTS

- 1) 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.
- 3) 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 the 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.
- 4) 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 OFFICIAL  (b)(6), (6)(7)(C)	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED  11/02/2005
--	--	-------------------------------

This 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. 48-R-0001  
CUSTOMER NO. 1494

FORM APPROVED  
OMB NO. 0579-0036

**CONTINUATION SHEET FOR ANNUAL REPORT  
OF RESEARCH FACILITY  
(TYPE OR PRINT)**

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

KANSAS STATE UNIVERSITY  
1 FAIRCHILD HALL  
MANHATTAN, KS 66506-110

**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.	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)
Cow		61			61
Horse	51	111	54		165
Calves		2	7		9
Chicken Embryos		348			348
Goats		12	8		20
Chickens		3800	35		3835
Bulls		30			30
Least Shrew		1			1
Gerbil			6		6
Pigeons			50		50
Elk			16		16
Northern Bobwhite		55			55
Turkeys	80	140			140
Bella Viceo		5			5
Brown Headed Cow Bird		268			268
Upland Sandpiper		104			104
Night Hawk	5				
Deer	12				
Prarie Chicken		62			62

**ASSURANCE STATEMENTS**

- 1) 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.
- 3) 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 the 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.
- 4) 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 OFFICIAL  (b)(6), (6)(7)(C)	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED  11/02/2005
--	--	-------------------------------



APHIS Form 7023 Additional Reported Sites

The following additional sites have been reported by the facility. The reported sites have not been verified by APHIS and have been provided by the facility solely for completeness of the APHIS Form 7023 Annual Reporting submission.

---

Registration Number: 48-R-0001  
Customer Number: 1494  
Facility: KANSAS STATE UNIVERSITY  
1 FAIRCHILD HALL  
MANHATTAN, KS 66506-110

---



(b)(2)High, (b)(7)(F)

COPY

1. Registration Number: 48-R-0001 / 1494

2/3. Species (common name) & Number of animals used in this study:

Hamsters (10)

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

Hamsters were intraperitoneally inoculated with a highly pathogenic strain of Babesia sp. (cryopreserved vials). Blood samples were collected 10 days after inoculation for evidence of parasitemia. If animals are positive, they are monitored daily until parasitemia level reaches ~60%. At this stage, clinical signs develop (diarrhea, incoordination, and tremors). Euthanasia is performed at this stage to reduce any pain or suffering.

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)

No drugs, tranquilizers are utilized because blood is collected and Babesial antigen is isolated and purified. The presence of any other drug/residue may affect the results or interpretation when this preparation is later utilized for in vitro stimulation of cells.

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:

CFR:

Approval Status:

Approved/Disapproved By:

Date:

Disapproved Reason:

COPY

1. Registration Number: 48-R-0001 / 1494

2/3. Species (common name) & Number of animals used in this study:

Frogs (50)

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

Frog muscle cells are used by students to study cellular respiration. Muscle cells are placed in a solution containing methylene blue. The chemical reactions of cellular respiration produce electrons that then bond with methylene blue, causing it to clear. Before the students obtain the muscle cells, instructors pith the frogs. The frogs have one short moment of pain.

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)

We tried using anesthetic so they wouldn't have even that short painful moment. Unfortunately, the anesthetic affected the chemical reactions of cellular respiration and the methylene blue never cleared.

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:

CFR:

Approval Status:

Approved/Disapproved By:

Date:

Disapproved Reason: