VIII. Membership of the IACUC

Date: June 31, 2018				
Name of Institution: U	niversity of Alaska F	airbanks		
Assurance Number: D	16-00482 (A3837-0	01)		
IACUC Chairperson				
Name*: Milan Shipka				
Title*: Professor			Degree/Cred	entials*: PhD
P.O. Box 757200 University of Alaska F Fairbanks, Alaska 99	airbanks 775-7200			
E-mail*: mpshipka@alas				
Phone*: (b) (6)		Fax*:		
IACUC Roster				
Name of Member/ Code**	Degree/ Credentials	Position Tit	le***	PHS Policy Membership Requirements****
John Blake	DVM, MVetSc	Attending	Veterinarian	V
			(b) (6)	S
				S
				S
				S
				S
				S
				NA/NS
				NA/S
				V alternate
				S alternate

^{*} This information is mandatory.

^{**} Names of members, other than the chairperson and veterinarian, may be represented by a number or symbol in this submission to OLAW. Sufficient information to determine that all appointees are appropriately qualified must be provided and the identity of each member must be readily ascertainable by the institution and available to authorized OLAW or other PHS

representatives upon request.

*** List specific position titles for all members, including nonaffiliated (e.g., banker, teacher, volunteer fireman; not "community member" or "retired").

**** PHS Policy Membership Requirements:

Veterinarian with training or experience in laboratory animal science and

medicine or in the use of the species at the institution, who has direct or delegated program authority and responsibility for activities involving animals

at the institution.

Scientist practicing scientist experienced in research involving animals.

Nonscientist member whose primary concerns are in a nonscientific area (e.g., ethicist,

lawyer, member of the clergy).

Nonaffiliated individual who is not affiliated with the institution in any way other than as a

member of the IACUC, and is not a member of the immediate family of a person who is affiliated with the institution. This member is expected to represent general community interests in the proper care and use of animals and should not be a laboratory animal user. A consulting veterinarian may not

be considered nonaffiliated.

[Note: all members must be appointed by the CEO (or individual with specific written delegation to appoint members) and must be voting members. Non-voting members and alternate members must be so identified.]

X. Facility and Species Inventory

aboratory, Unit, or	D16-00482		
aboratory, Unit, or			
Building*	Gross Square Feet [include service areas]	Species Housed [use common names, e.g., mouse, rat, rhesus, baboon, zebrafish, African clawed frog]	Approximate Average Daily Inventory
(b)	(4) 40,464 ft² - total square footage including office and mechanical space. This facility houses the UAF Veterinary Services Facilities (necropsy, surgical suite, diagnostic labs, etc.) in addition to providing animal procedure and housing rooms	Laboratory Rat Laboratory Mouse Arctic Ground Squirrel African clawed frog	38 cages 168 cages 7 cages 6 tanks
	621 ft ²	Coho Broad whitefish	90 40
	125 acres total with 5,500 ft² service area	Beef Cattle Reindeer Muskoxen	4 43 31
	210 acres total with 26,615 ft ² service area. 11 pens totaling approximately 43 acres are currently set aside for reindeer housing	Reindeer	44
	875 acres with 85,600 ft ² service area.	Moose Caribou	4 4
		Lake chub	2
	1,280 ft ²	None at this time	
	various	Arctic Ground Squirrels	Field caught animals until transport to UAF
	1,134 ft²	None at this time	

^{*}Institutions may identify animal areas (buildings/rooms) by a number or symbol in this submission to OLAW. However, the name and location must be provided to OLAW upon request.



Larry D. Hinzman
Vice Chancellor for Research
(907) 474-7800
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www.uaf.edu/iacuc

A

Institutional Animal Care and Use Committee

909 N Koyukuk Dr. Suite 212, P.O. Box 757270, Fairbanks, Alaska 99775-7270

Marc	h	31	0.	2	0	1	8

To:

Larry Hinzman, Vice Chancellor for Research (Institutional Official)

From:

Institutional Animal Care and Use Committee

Subject:

Semi-Annual Evaluation of Animal Care and Use Program

The IACUC conducted a semiannual evaluation of the institution's animal care and use program on March 30, 2018 using the Guide for the Care and Use of Laboratory Animals (Guide) and as applicable, 9 CFR Chapter I, 2.31.

Budget Cuts:

Institutional Official

* During the Spring 2018 evaluation items were identified as areas potentially impacted by budget cuts to the animal care program. These were not deficient at the time of the review, but the IACUC identified these areas as most susceptible to budget cuts. If these are impacted by future budget cuts, many will become significant deficiencies in FY19. During the Spring 2018 evaluation the IACUC has determined that some of the items could be moved back to A (acceptable). Significant deficiencies found: None.

Minor deficiencies found (at this time):

Institutional Policies and Responsibilities:

Section 8: Veterinary Care: If part time /consulting veterinarian, visits meet programmatic needs. (UAF has an MOU to establish an agreement with a Veterinarian in Palmer for the Agricultural Farm and the agreement needs to be finalized.)

Minority Opinions: There were no minority opinions on this report.

(acceptable) or an A to an M.	inged during this review either from	an M (minor deficiency) to an
	(b) (б)	(b) (6)
Milan Shipka, Chair John Blake		(b) (б)
Received and reviewed by: (b) (6) Date:	1 ay 2018	

Present for Inspection: John Blake, (b) (6)

(b) (6

Also present:

(b) (6)

(b) (6

I. CORE FACILITIES:

Veterinary Records/Drug Storage: Satisfactory
Hay Barn: Satisfactory
Feed Storage: Satisfactory
Handling Facility: Satisfactory

Alleyways: Satisfactory

II. ANIMAL HOUSING:

Research Barn (Red Barn):

Main (Brown) Barn:

West Pen (handling barn):

Old Barn- South Side Pen:

Satisfactory

Satisfactory

East Pasture: Unused (thermocarst damage to fence.)

South Pasture:
South Pasture Runway:
North Catch:
North Pasture:
Satisfactory
North Pasture:
Satisfactory
Lower West Pasture:
Satisfactory
Upper West Pasture:
Satisfactory
Satisfactory

Pen 1: Satisfactory Pen 2: Satisfactory Pen 3: Satisfactory Pen 4: Satisfactory Pen 5: Satisfactory Pen 6: Satisfactory Pen 7: Satisfactory Pen 8: Satisfactory Pen 9: Satisfactory Pen 10: Satisfactory

Pen 11: Satisfactory
Pen 12: Satisfactory
Pen 13: Satisfactory
Pen 14: Satisfactory
Pen 15: Satisfactory
Pen 16: Satisfactory

Pen 17: Satisfactory; see note below

Pen 18: Satisfactory
Breeding Pens: Satisfactory

III. LARS ANIMAL ISOLATION FACILITY:

This facility is for short-term holding of large animals (3 weeks maximum). This was the first IACUC inspection of this new construction. The facility consists of 3 "buildings", a double gated road from Miller Hill Extension.

Equipment trailor

Not inspected

Animal Holding Structure

2 holding cages and 1 enrichment cage were present

Shade cloth provided on south wall

Feed Storage Container

Not inspected

Yard

Satisfactory

III. STAFF:

2 full time animal caretakers

2 full time temporary animal caretakers (students in summer)

IV. GENERAL COMMENTS:

V. DISASTER PLAN: posted.

Total species housed in facility:

3 species:

Muskoxen	31	
Reindeer	43	
Cattle	4	
Total	78	

V. ACTION ITEMS WITH DEADLINES:

(Time frame provided is a regulatory requirement. If action cannot be taken within time frame please, provide the IACUC with a plan of action with an estimated completion date.)

LARS ANIMAL ISOLATION Facility

A second inspection of the facility was held July 16, 2018. Present: John Blake.

(b) (6)

(b) (6)

Comment: One bear at a time can be held for up to two weeks.

- 1) Check security cameras to insure that they are operational. A 24-hour surveillance plan needs to be created. Due: before animals are held. Cameras are operational. 6.12.18
- 2) Increase bear cage floor coverings so that bears do not have to walk on chain link flooring. Due: before animals are held. Completed: Inspection 7.16.18
- 3) There was concern that the secondary containment would not be sufficient if a bear was to escape the cages. Due: before animals are held. Completed: Inspection 7.16.18
- 4) Gates need to be completed. Due: before animals are held. Completed: Inspection 7.16.18
- 5) Security signs need to be posted (no trespassing, who to contact, etc.). Due: Done 6.12.18. Partially completed: Inspection 7.16.18 (no trespassing sign present).
- 6) Lighting on the north side of the facility needs to be raised. Due: before more cages can be added.

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LARS ANIMAL ISOLATION Facility

- 1) Check security cameras to insure that they are operational. A 24-hour surveillance plan needs to be created. Due: before animals are held. Cameras are operational. 6.12.18
- 2) Increase bear cage floor coverings so that bears do not have to walk on chain link flooring. Due: before animals are held.
- 3) There was concern that the secondary containment would not be sufficient if a bear was to escape the cages. Due: before animals are held.
- 4) Gates need to be completed. Due: before animals are held.
- 5) Security signs need to be posted (no trespassing, who to contact, etc.). Due: Done 6.12.18.
- 6) Lighting on the north side of the facility needs to be raised. Due: before more cages can be added.

Pen 17

- 1) fence rail needs to be fixed. Due: summer 2018
- 2) fence post broken Due: summer 2018
- 3) underground fencing is eroding out of surface soil. Due: summer 2018

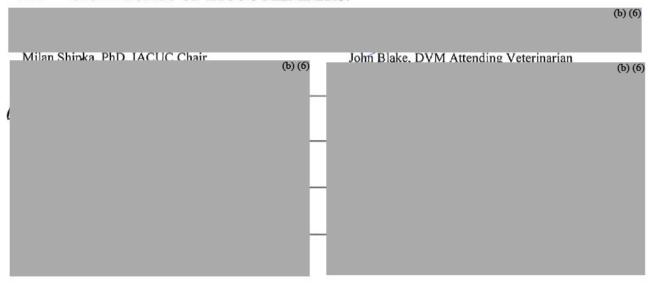
All facility

Plan to add shade trees to pens beginning this summer. Ongoing.

VI. PREVIOUS ACTION ITEMS:

Ongoing work to remove dead trees from pens. Minor. Ongoing

VII. SIGNATURES OF IACUC MEMBERS:



CC: John Blake, Director of Animal Resources Center

Present for Ins	spection: John Blake,	(b) (6)
Also present:	(b) (6)	¥

General Statement on IACUC Inspection of Agricultural Facilities:

The Agriculture and Forestry Experiment Station on the UAF Campus is currently housing reindeer for agricultural research and teaching.

IACUC facility inspection of an agricultural research site is approached from a slightly different perspective than other research facilities. This is founded in the perceived differences between conventional biomedical/biological research and agricultural research. However, the boundary is not well defined. Animals used in agricultural research are not covered under the Animal Welfare Act or Public Health Service Policy. Nevertheless, it is generally accepted that IACUCs should inspect facilities and review experimental, husbandry and teaching protocols. At present, the available resources for an IACUC include: The Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching (Federation of Animal Science Societies, 2011) and The Wellbeing of Agricultural Animals in Biomedical and Agricultural Research (1990). AFES staff, faculty and personnel are expected to be familiar with these documents. Based on these documents, the housing and care for farm animals on an Agricultural Research Facility should meet the standards that prevail on a high quality, well-managed farm.

With this in mind, the UAF IACUC expects to see a well maintained facility, good record keeping, a well designed preventive medicine program, and above all, excellent performance of the livestock. This IACUC relies heavily on performance standards. Sickly animals and high morbidity/mortality rates may indicate substandard care or inadequate facilities. Maintaining animal health and well-being requires cooperation between the researchers, the farm staff, the UAF Physical Plant, and the UAF IACUC.

I. CORE FACILITIES:

Records:

Veterinary Care Program:

UAF Veterinary Services

Feed Storage:

Satisfactory

General Storage:

Satisfactory

II. ANIMAL HOUSING:

Upper Holding Pens:

Pen #1: Satisfactory

Pen #2: Satisfactory Pen #3: Satisfactory Pen #4: Satisfactory

Pen #5: Satisfactory Pen #6: Satisfactory Pen #7: Satisfactory

Pen #8: Satisfactory

Lower Pastures:

Pen #9: Unsatisfactory – flooded and unusable

Pen #10: Satisfactory Pen #11: Satisfactory

III. STAFF:

1 full-time animal caretaker

2 student employees

IV. GENERAL COMMENTS:

Animal health and welfare:

High morbidity/mortality, mediocre weight gains, and lower than expected reproductive performance have been cyclical issues since reindeer were brought onto this facility. The very high mortality seen in the first half of 2017 is reduced; however, 1 abortion and 2 early neonatal deaths in 2018 are a concern. Overall reproductive performance for 2017-18 season and calf survival/performance is not yet available to the IACUC.

Census is markedly reduced via attrition, animals sent to slaughter, and animals provided to (b) (4) Reduced density may help to improve overall health status.

Nutritional disease (chronic rumenitis, periodontal disease, poor weight gains) has been a recurring problem. Fiber in the powdered diet was increased in July 2017. It is too soon to say whether this will eliminate the rumenitis problem.

Chronic periodontal disease has been a persistent problem. This is manifest as severe gum retraction, root exposure, loss of the periodontal ligament and infection with tooth loss. Similar problems occurred at LARS prior to 2011; since improving trace mineral supplementation the oral health has markedly improved. We recommend RRP follow the same trace mineral supplementation procedures.

Facility drainage:

The reindeer facility has always had problems with water accumulation and poor drainage which has contributed to disease prevalence. However, the increased water flow onto the farm has worsened over the past 3 years. At present, the entire farm is at risk with increased running and standing water crossing the reindeer pens and crossing the crop fields.

Poor water drainage has rendered the proposed pens in the western half of the facility unusable and the main pen is unusable during breakup. The original pond has been filled with silt from run-off.

Pasture condition and foxtail management:

It is too early in the season to assess pasture condition. Will evaluate in early July.

Total species housed in facility: 1; reindeer

Total animals housed in facility: Adults: 33

Calves: 11 Total: 44

V. ACTION ITEMS:

(Time frame provided is a regulatory requirement. If action cannot be taken within the time frame please, provide the IACUC with a plan of action with an estimated completion date.)

None.

PREVIOUS ACTION ITEMS:

Check/redo fench patch jobs in lower pasture area, in walkway, bottom right just inside gate. Completed

VI. SIGNATURES OF IACUC MEMBERS:

	(b) (6)
John Blake, DVM Attending Veterinarian	(b) (6)
	John Blake, DVM Attending Veterinarian

Milan Shipka, Director, Agricultural and Forestry Experiment Station
(b) (6)

cc:

Present for Inspection: John Blake,

Also present:

(b) (6)

(b) (6)

I. ANIMAL HOUSING:

(b) (4)

II. ACTION ITEMS:

Requested that water SOP be posted. Due: immediately.

III. PREVIOUS ACTION ITEMS:

None.

IV. RESPONSIBLE INDIVIDUALS

Trent Sutton, PhD - Principal Investigator

V. DISASTER PLAN AVAILABLE

Disaster plan available in record notebooks in both labs and on top of the backup power supply.

VI. GENERAL COMMENTS:

None.

Total species housed in facility:

2 species

Total animals housed in facility:

90 Coho

40 Broad whitefish

VI. SIGNATURES OF IACUC MEMBERS:

Milan Shipka, PhD, Interim IACUC Chair John Blake, DVM Attending Veterinarian	(6)
Milan Shipka, PhD, Interim IACUC Chair John Blake, DVM Attending Veterinarian	
Milan Shipka, PhD, Interim IACUC Chair John Blake, DVM Attending Veterinarian	
Milan Shipka, PhD, Interim IACUC Chair John Blake, DVM Attending Veterinarian	
0	b) (6)
се: (b) (б)	

Present for Inspection: John Blake,	(b) (6)
Also present:	(b) (6)

I. ANIMAL HOUSING: O'Neill second floor alcove

IACUC protocol: # 144727.

II. ACTION ITEMS:

Provide a notebook should be added to worksite including: SOPs for measuring water quality, cleaning the aquarium, and feeding instructions. There should also be data sheets for recording water quality measurements, feeding and cleaning dates. Data record sheets should have the year clearly labeled at the top of the form. Records should be maintained for the last three years. Due: immediately

It was recommended that an electronic pH probe would be good to use to monitor water quality.

PREVIOUS ACTION ITEMS:

Provide a copy of the current permit on the tank door for the public to see. Completed

III. RESPONSIBLE INDIVIDUALS

J. Andres Lopez, PhD – Principal Investigator Student subunit of American Fisheries Society

V. DISASTER PLAN AVAILABLE? Yes. In notebook.

VI. GENERAL COMMENTS:

Total species housed in facility:	1 species: Lake Chub	
Total animals housed in facility:	2	

VI	SICNA	THDES	OFIACI	C MEMBEDS.

		(b) (6)
Milan Shipka, PhD, IACUC Chair	John Blake, DVM Attending Veterinarian	
		(b) (6)

Present for Inspection: John Blake and (b) (6)			
Also present:	(b) (6)		
_I CORE FACILITIES:			
L CORE FACILITIES: (b) (4) Surgery Prep.	Satisfactory		
(b) (4) Surgery Prep	Satisfactory		
Surgery Room	Satisfactory		
Recovery	Satisfactory		
Vet Supply Room	Satisfactory		
Pharmacy	Satisfactory		
Imaging	Satisfactory		
(b) (4) Quarantine:	Satisfactory		
Quarantine:	Satisfactory		
Diagnostics Room	Satisfactory		
(b) (4): Laboratory	Satisfactory		
: Clinical Pathology	Satisfactory		
: Clinical Pathology	Satisfactory		
: Microbiology	Satisfactory		
(b) (4) Specimen Handling	Satisfactory		
- Necropsy Dock	Satisfactory		
(b) (4): Necropsy Room	Satisfactory		
(b) Incinerator Room	Satisfactory		
II. ANIMAL HOUSING:			
(b) (4) Procedure Room	Satisfactory		
Animal Holding Room	Satisfactory; 6 tanks Xenopus frogs (Weltzin 1122657)		
Animal Holding Room	Satisfactory; 28 cages rat colony (Blake)		
Animal Procedure Room	Satisfactory		
State of the property of the p	•		
Animal Holding Room	Satisfactory		
Procedure Room	Satisfactory		
Animal Holding Room	Satisfactory		
1 1 199 111 2	1.77		
Animal Holding Room	Satisfactory		
Procedure Room	Satisfactory		
Animal Holding Room	Satisfactory		
Animal Holding Room	Satisfactory		
Animal Holding Room	Satisfactory		
Animal Holding Room	Satisfactory		
(b) (4) Research Supply Room	Satisfactory		
(b) (4)			
Animal Holding Room	Satisfactory		
Environmental Chamber	Satisfactory; renovation almost complete		
Procedure Room	Satisfactory		
Environmental Chamber	Satisfactory		
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(b) (4)
       Animal Holding
                                        Satisfactory; 16 cages mice, Bult-Ito (986146 and 911872)
       Procedure Room
                                        Satisfactory
       Animal Holding
                                        Satisfactory; 168 cages mice colony Bult-Ito
       Animal Holding
                                        Satisfactory
       Animal Holding
                                        Satisfactory
      Animal Holding
                                        Satisfactory
 (b) (4) Employee Work Area
     Empty
      : Animal Holding Room
                                        Satisfactory
      : Environmental Chamber
                                        Satisfactory
      : Procedure Room
                                        Satisfactory
      : Environmental Chamber
                                        Satisfactory
(b) (4) Cage Wash Entry
                                        Satisfactory
    Clean Cage Wash
                                        Satisfactory
(b) (4) Empty
     : Animal Holding
                                        Satisfactory
     : Procedure Room
                                        Satisfactory
     : Animal Holding
                                        Satisfactory
     ): Animal Holding
                                        Satisfactory
     : Animal Holding
                                        Satisfactory
     : Animal Holding
                                        Satisfactory
(b) (4) Clean Cage Holding
                                        Satisfactory
 (b) (4) Empty due to repairs
      : Behavior Suite
                                        Satisfactory
      : Animal Holding Room
                                        Satisfactory
     : Animal Holding Room
                                        Satisfactory
     : Animal Holding Room
                                        Satisfactory
     : Procedure Room
                                        Satisfactory
     : Animal Holding Room
                                        Satisfactory
  (b) Fumehood
                                        Satisfactory
(b) (4) Feed Storage
                                        Satisfactory
    Feed Storage (freezer)
                                        Satisfactory
(b) (4) Drew 491809, 467983, 451019
     : Animal Holding
                                        Satisfactory; 8 cages rats, Oliver (1162733)
     : Animal Holding
                                        Satisfactory
     : Animal Holding
                                        Satisfactory; 2 cages rats, Drew (1107387)
     ): Animal Holding
                                        Satisfactory
     : Animal Holding
                                        Satisfactory
     : Procedure Room
                                        Satisfactory
(b) (4) Drew (491809, 451019, 467983, 491309)
```

Animal Holding Satisfactory
Animal Holding Satisfactory
Environmental Chamber Satisfactory

: Environmental Chamber Satisfactory; 7 Arctic Ground Squirrels, Drew (491809)

: Environmental Chamber Satisfactory
Telemetry Room Satisfactory
Procedure Room Satisfactory

III. STAFF: (The following staff is responsible for Biological Reserve and BiRD facilities.)

Core Facilities:

2 full time animal caretakers

1 full time student animal caretaker

IV. GENERAL COMMENTS:

Is Disaster Plan for facility available? Yes, available in main corridor 100C1.

Total species housed in facility:

1

Total animals housed in facility:

Mice	168 cages
Rats	38 cages
Arctic Ground Squirrels	7 cages (1 squirrel each)
Xenopus	6 tanks

V. ACTION ITEMS:

(Time frame provided is a regulatory requirement. If action cannot be taken within time frame, please provide the IACUC with a plan of action with an estimated completion date.)

001 Weltzin -

- 1) Provide tank identification tags (including protocol number, dates of surgeries, etc). Due: immediately. Pending.
- 2) Replace all paper boxes with plastic totes. Due: immediately. Done.
- 3) Provide a record of all pit tag numbers present in animals in the room and tank assignment. Due: immediately.
- 4) All solutions need to be labeled with mix date and expiration date. Due: immediately.

Facility -

Provide a record of all pit tag numbers present in animals in the room and cage/tank assignment. Due: immediately.

Provide a university and an IACUC Disaster Plan on the upper hallway bulletin board. Due: immediately.

VI. PREVIOUS ACTION ITEMS:

Provide a university and an IACUC Disaster Plan on the hallway bulletin board. Not completed.

VI. SIGNATURES OF IACUC MEMBERS:

, a 1

		(b) (6)
Milan Shipka, PhD, IACUC Chair	John Blake, DVM Attending Veterinarian	(b) (6)

cc: John Blake, Director of Animal Resources Center



Larry D. Hinzman Vice Chancellor for Research (907) 474-7800 uaf-iacuc@alaska.edu www.uaf.edu/iacuc

Institutional Animal Care and Use Committee

909 N Koyukuk Dr. Suite 212, P.O. Box 757270, Fairbanks, Alaska 99775-7270

Date: Septemb	per 18, 2018
To: From: Subject:	Larry Hinzman, Vice Chancellor for Research (Institutional Official) Institutional Animal Care and Use Committee Semi-Annual Evaluation of Animal Care and Use Program
<u>Comments:</u> Addendum to	o the Spring Semi Annual Program Review (dated 3.30.18)
There were no	o departures from the <i>Guide</i> to report at this review.
Received and r	reviewed by:
Larry D. Hinzr Institutional O	