

## Curriculum Vitae

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**NAME:** Cheryl Ann Frederick

**TITLE:** Assistant Professor

**ADDRESS:** 204A Founders Hall  
Unity College  
90 Quaker Hill Road  
Unity, ME 04988

### EDUCATIONAL HISTORY:

Ph.D. 12/2008 University of Washington, Seattle  
Department of Psychology (Animal Behavior)  
Dissertation: *Reproductive biology and behavior of the sun bear (Ursus malayanus)*

M.S. 12/1995 University of Massachusetts, Boston  
Department of Biology  
Thesis: *Reproductive behavior and biology of the potto (Perodicticus potto)*

B.S. 5/1989 University of Massachusetts, Amherst  
Major: Psychology  
Minor: Zoology  
Concentration: Biological Anthropology

**Teaching Workshop** Faculty Workshops on Teaching and Learning:  
4/2009 Teaching Racial Literacy  
University of Washington, Seattle

### Other Coursework:

February 1995 American Zoological Association Conservation Academy  
Studbook School Certification

Spring 1994 Parasites and Pathogens: Training Course  
Zoo New England

Spring 1992 Behavioral Research in Zoos: Training Course  
Zoo New England

**TEACHING INTERESTS AND EXPERIENCE:**

**Interests:** Animal Behavior, Behavior & Physiology, Behavioral Genetics, Introductory Psychology, Endocrinology, Reproductive Biology, Research Methods and Study Design, Animal Learning Theory, Statistics, Evolutionary Biology and Conservation Biology.

**Courses Taught:** Unity College

Spring 2011	Introduction to Wildlife Care and Education	WF 1013
	Introduction to Wildlife Care and Education Lab	WF 1013LAB
	Exotic Animal Identification (2 sections)	WF 1011
	Comparative Animal Physiology	BI3254
	Comparative Animal Physiology Lab	BI3254LAB
	Environmental Challenge	IC3113

Fall 2010	Introduction to Wildlife Care and Education	WF 1013
	Introduction to Wildlife Care and Education Lab	WF 1013LAB
	Exotic Animal Identification	WF 1011
	Animal Health	WF4034
	Animal Health Lab	WF4034LAB

University of Washington (Bothell)

Summer 2009	Field Course in Animal Behavior	BIS 393A
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Spring 2009	Introductory Biology III (physiology)	BES 220
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**Courses Taught Pre-doctoral:**

2001 – 2008 University of Washington (Seattle)

Animal Behavior Laboratory (3 quarters)	PSY 330
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## Teaching Assistant

-Introduction to Psychology (4 quarters)	PSY 101
-Human Sexuality	PSY 210
-Comparative Animal Behavior (5 quarters)	PSY 200
-Comparative Animal Behavior	PSY 300
-Honors Animal Behavior (2 quarters)	HA&S 222
-Early Start Animal Behavior (2 quarters)	PSY 200

## Supervisor

-Independent Study Undergraduates (2)	PSY 499*
-Independent Study Undergraduates (6)	BIO 499*
-Independent Study Undergraduates (2)	ANTH 499*

\*10 Students, each registered for multiple quarters

-Visiting master's student, Univ. of Münster, Germany

1993 – 1995                      University of Massachusetts

Laboratory Instructor

-Introductory Biology                      BIO 111

-Human Anatomy                              BIO 207

-Human Physiology                          BIO 208

**EMPLOYMENT:**

8/10 – present              Unity College, Unity ME  
Assistant Professor of Captive Wildlife Care and Education

1996 – 2010              Woodland Park Zoological Gardens, Seattle, WA  
Zookeeper (Asian Bears, primates etc.)

Fall 2009                      Pearson Education, Freeman’s Biological Sciences Textbook  
Writer for *Diversity of Life* and *Ecology* units reading quiz questions

1/09 – 8/09                      University of Washington, Bothell; Interdisciplinary Arts and Sciences  
Adjunct Instructor

2001– 2008                      University of Washington, Seattle; Department of Psychology  
Teaching Assistant

1989 – 1996                      Zoo New England, Boston, MA  
Zookeeper (African Tropical Forest Complex)

9/88 – 5/89                      University of Massachusetts, Amherst  
Animal Care Technician (primate lab, vole lab)

6/88 – 9/88                      New England Regional Primate Center  
Research Assistant

9/87 – 6/88                      University of Massachusetts, Amherst  
Laboratory Assistant (G. Wade Neuroscience lab)

**PUBLICATIONS:**

**Frederick C.**, Patten F., Collins D., Durrant B., & Travillion, R.S. (Under review). Techniques to Optimize Vaginal Cytology Assessment and Minimize Data Loss: What We Learned from Sun Bears (*Ursus malayanus*) *Journal of Zoo and Wildlife Medicine*

**Frederick C.**, Kyes R., Hunt K., Collins D., & Wasser S. (Accepted 7/24/2011). Reproductive timing and aseasonality in the sun bear (*Ursus malayanus*). *Journal of Mammalogy*.

**Frederick C.**, Kyes R., Hunt K., Collins D., Durrant B., & Wasser S. 2010. Methods of Estrus Detection and Correlates of the Reproductive Cycle in the Sun Bear (*Ursus malayanus*) *Theriogenology* 74:1121 – 1135.

**Frederick C.** 2008. The Reproductive Biology and Behavior of the Sun Bear (*Ursus malayanus*). Dissertation. University of Washington, Seattle.

Buckanoff H. D., **Frederick C.** & Murphy H. W. 2006. The hand-rearing of a Potto, *Perodicticus potto*, at the Franklin Park Zoo, Boston, *International Zoo Yearbook*.

**Frederick C.** 2002. Highly Recommended Elements for Sun Bear Exhibits. In: Frederick C. and Shrake, D. 2002 North American Regional Studbook for the Sun Bear (*Helarctos malayanus*). Woodland Park Zoological Society

**Frederick C.** & Shrake D. 2002. North American Regional Studbook for the Sun Bear (*Helarctos malayanus*).

**Frederick C.** 2001. Sun Bear Introductions.....The Long and Winding Road. *American Association of Zoological Parks and Aquariums. Bear Essentials II*.

**Frederick C.** 1998. Observations of Male Parental Care in *P. Potto* at the Cincinnati Zoo and Botanical Garden. *Folia Primatologica*. Vol. 69:312-317.

**Frederick C.** 1998. North American Regional Studbook for the Sun Bear (*Helarctos malayanus*). Woodland Park Zoological Society.

**Frederick C.** 1997. Sun Bear Training Promotes Well-Being. *Shape of Enrichment* 6 (4)

**Frederick C.** & Fernandes D. 1996. Behavioral Changes in Pottos (*Perodicticus potto*): Effects of Naturalizing an Exhibit. *International Journal of Primatology*. Vol. 17, No. 3.

**Frederick C.** 1995. The Reproductive Behavior and Biology of the Potto. M.S.. University of Massachusetts at Boston.

**Frederick C.**, Fernandes, D. & Pastorello, L. 1995. Photoperiod and Activity Profiles of Captive Nocturnal Prosimians. *Laboratory Primate Newsletter*. Vol. 34, No. 3.

**Frederick C.** & Fernandes D. 1994. Increased Activity in a Nocturnal Primate Through Lighting Manipulation: the case of *Perodicticus potto*. *International Zoo Yearbook*. Vol. 33.

**Frederick C.** & Fernandes D. 1991. Creating a Nocturnal Exhibit in a Diurnal Building. *Regional Conference Proceedings of the Association of Zoological Parks and Aquariums*.

#### **POSTER SESSIONS and ABSTRACTS:**

1994 Frederick C., Campbell, K., and Monfort, S.L. The Reproductive Profile of Female Pottos (*Perodicticus potto*). Abstract. *Biology of Reproduction Supplement*. No. 51.

1991 Frederick, C., Fernandes, D. The Dramatic Effects of Innovative Lighting and Exhibit Modifications on *Perodicticus potto*. Abstract. *1991 Annual Conference Proceedings of the American Association of Zoological Parks and Aquariums*.

**GRANTS:**

- 2005 Sun Bear Reproductive Project, AAZK Conservation Funds,  
\$565
- 2004 Reproductive biology and behavior of the sun bear. Oracle Giving Foundation,  
\$10,000
- 2003 Reproductive biology and behavior of the sun bear. AZA Conservation Endowment Fund,  
\$17,000
- 2001 Sun Bear Assisted Reproduction Techniques: Vaginal Cytology and Hormone Profiling  
Adapted from the Giant Panda (Pilot Study) WPZS Conservation Endowment Fund.  
\$6,598.42
- 2001 Sun bear education outreach poster program Woodland Park Zoo and Zoological  
Society's Conservation Education Grant,  
\$1,000
- 1999 Promoting Enriched Sun Bear Environments (in Borneo) Through Staff Training and  
Interaction, Woodland Park Zoo and Zoological Society's Conservation Education Grant,  
\$6,700.00. Grant awarded - Project cancelled.
- 1996 Franklin Park Zoo in-house Grant funding field research in Belize Howler monkeys  
*Alouatta pigra*  
\$500
- 1994 Co-PI with K. Campbell Ph.D., Detection of Estrus, Pregnancy and Sexual Viability  
Parameters in a Captive Loroid Using Non-Invasive Techniques, Behavioral Correlates,  
Chicago Zoological Society Conservation and Research Grant,  
\$2000
- 1994 Lipke Travel Grant research at Front Royal Conservation and Research Center,  
\$500
- 1994 GSA Grant (Univ. of Mass. Boston) funding research at Duke University Primate Center,  
\$500

**GRANTS SUPPORTING CONSERVATION PARTNERS:**

- 2004 Sun bear education center in Kalimantan. Staff representative for proposal submitted on  
behalf of A. Redmond to AAZK Conservation Fund:  
\$1,200
- 2003 Formation of a Sun Bear Expert Team. Staff representative for proposal submitted on behalf  
of S.T. Wong to WPZ Conservation Endowment Fund:  
\$3,500

- 2002 Sun bear enclosure and education centre, East Kalimantan, Indonesia. Staff representative submitting proposal on behalf of G. Fredriksson for Jungle Party Conservation Fund:  
\$4,700

### PRESENTATIONS:

- 1/09 Conservation Biology Seminar: Guest Speaker  
University of Portland, Portland, OR
- 12/04 Honors Conservation Biology: Guest Speaker  
University of Washington, Seattle, WA
- 10/04 Zoobright Scholarship Award Presentation  
Woodland Park Zoo, Seattle, WA
- 7/04 Sun Bear Reproductive Biology  
Ragunan Zoo, Java, Indonesia
- 7/04 Sun Bear Exhibit Design  
Tamen Safari Zoo, Java, Indonesia
- 7/04 Welfare Issues for Sun Bears  
Indonesian Veterinary Assoc. Java, Indonesia
- 9/02 Bear Exhibits at the Woodland Park Zoo.  
Bear Taxon Advisory Group Workshop,  
2002 Central Regional Conference of the American Association of Zoological  
Parks and Aquariums
- 8/01 Small Bears in Big Trouble: Fundraising Event  
WPZ Education Center, Seattle, WA
- 5/01 Sun Bear Introductions.....The Long and Winding Road.  
Bear Taxon Advisory Group Workshop,  
2001 Central Regional Conference American Association of Zoological Parks and  
Aquariums
- 5/00 Sun Bear Training and Enrichment Facilitates their Health and Psychological  
Well-Being.  
Sepilok Orangutan Rehabilitation Center, Sabah, Borneo
- 3/98 Sun Bear Exhibit Renovation as Enrichment at the Woodland Park Zoo. Bear  
Taxon Advisory Group Workshop,  
1998 Central Regional Conference of the American Association of Zoological  
Parks and Aquariums

- 3/95 Behavioral Research in Zoos  
Simmons College, Boston, Massachusetts
- 9/92 Zookeeping as a Career. Presentation and panel discussion.  
Christa McAuliffe Women in Science Symposium.  
Notre Dame College, Manchester, NH
- 5/91 Creating a Nocturnal Exhibit in a Diurnal Building: the case of *Perodicticus potto*.  
1991 Northeast Regional Conference of the American Association of Zoological  
Parks and Aquarium

### **HONORS AND AWARDS:**

- 2008 Alcor Graduate Fellowship (UW)
- 2005 Bolles Fellowship Award (UW)
- 2004 Zoobright Travel and Training Award
- 2003 Rachel Royston Permanent Scholarship
- 1998 Elected Chair North American Species Survival Plan for sun bear *Ursus malayanus*
- 1997 Awarded Regional Studbook for Asiatic black bear *Ursus thibetanus*
- 1997 Awarded Regional Studbook for sun bear *Ursus malayanus*
- 1997 Elected National AAZK Enrichment Committee Panel Member
- 1994 AAZK Certificate of Excellence in Exhibit Renovation for *Perodicticus potto*
- 1991 Appointed North American Population Manager *Perodicticus potto*

### **PROFESSIONAL MEMBERSHIPS:**

American Zoological Association  
 American Association of Zookeepers  
 NA Prosimian Taxon Advisory Group (steering committee member 1991-1997)  
 NA Bear Taxon Advisory Group (BTAG) (Chair sun bear SSP, sloth bear management  
 committee, TAG steering committee member 1997-2008; TAG Research Advisor and  
 Scientific Advisor sun bear SSP current)  
 Animal Behavior Society

### **SERVICE (PEER REVIEW):**

Journal of Zoo Biology  
 Journal of General Comparative Endocrinology  
 International Bear Association Grants Program  
 BTAG Research Liaison

**MEDIA (INTERVIEWS):**

Discovery Channel Canada: sun bear enrichment  
 Jack Hannah's Wildlife Adventures: WPZ's sun bears  
 Smithsonian Magazine interview with Michael Behar: importation of sun bears  
 Seattle Post Intelligencer: sun bear exam  
 NPR KUOW Steve Scher weekday show with author Sye Montgomery: the sun & the moon bear  
 Discovery Channel Canada (documentary): importation of sun bears  
 LA Times: sun bear importation  
 Seattle Times: "A pregnant pause" World's first artificial insemination attempt on a sun bear  
 Evening magazine: sun bear AI and what's next  
 Keltie Thomas book - Bear Rescue: Changing the future for endangered wildlife "On the  
 frontline: Woodland Park Zoo"  
 University of Washington News and Information (uwnews.org) Vol. 23, No. 34 August 3, 2006  
 UW, zoo to continue cooperative work

**INTERNATIONAL TRAVEL:**

Indonesia, Kalimantan  
 Indonesia, Java  
 Malaysia, Borneo (orchestrated importation of sun bears from rescue facility)  
 Belize (also field-work on Howler monkeys *Alouatta pigra*)  
 Panama  
 Ecuador  
 Kenya  
 Guinea