

# BETH E. CAISSIE

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## EDUCATION

### **2006—University of Massachusetts Amherst**

M.Sc. Geology

Thesis: Rising Temperatures, Shrinking Ice: The Deglaciation to Holocene Paleooceanography of Umnak Plateau, Bering Sea

Advisor: Dr. Julie Brigham-Grette

### **2003—University of Alaska Fairbanks**

B.Sc. Geology *Magna cum laude*

### **1997—Hampshire College, Amherst, Massachusetts**

B.A. Photography and Children's Writing

Thesis: "Looking for Bears," a photographically illustrated children's book about a young girl in Denali National Park

## EMPLOYMENT

- Laboratory Instructor**—Teach the lab section of Geo 108, Oceanography *Spring 2007*  
Smith College, Northampton, MA
- Adjunct Lecturer**—Design and teach Geo 104, Introduction to Oceanography lecture and lab *Fall 2006, Fall 2007*  
Greenfield Community College, Greenfield, MA
- Communications Assistant**—website design and newsletter production *September 2005-Present*  
UMass Department of Geosciences, Amherst, MA
- Research Assistant**—working with Julie Brigham-Grette *September 2003-Present*  
UMass Department of Geosciences, Amherst, MA
- Micropaleontological Tech**—process sediment; pick chironomid head capsules *Summer 2006*  
UMass Department of Geosciences, Amherst, MA
- Undergraduate Field & Research Assistant** *June 2002-November 2002*  
Institute of Arctic Biology, University of Alaska Fairbanks and Northeast Science Station, Cherskii, Siberia

## GRANTS AND AWARDS

- 2007 Gloria Radke Memorial Award; (\$440) University of Massachusetts Amherst
- 2006 Geological Society of America, Quaternary Geology and Geomorphology Division, Arthur D. Howard Award
- 2006 Geological Society of America Research Grant; (\$2000)
- 2006 Leo M. Hall Memorial Award; (\$500) University of Massachusetts Amherst
- 2005 Elinor Fierman Memorial Award; (\$300) University of Massachusetts Amherst
- 2004 Elinor Fierman Memorial Award; (\$200) University of Massachusetts Amherst
- 2003 Outstanding Undergraduate; (\$500) University of Alaska Fairbanks Department of Geology and Geophysics
- 2003 Undergraduate Teaching Assistant (\$100) University of Alaska Fairbanks
- 2002 UAF Undergraduate Research Opportunities Program grant: *Sedimentological Evaluation of Siberian Soils* (\$1093)
- 2002 University Women's Association Scholarship (\$500)
- 2002 Alaska Geological Society Scholarship (\$500)

## PRESENTATIONS/PUBLICATIONS

- Caissie, B.E., Brigham-Grette, J., Lawrence, K.T., Cook, M.S. 2006. Deglaciation to Holocene Sea-Ice History at Umnak Plateau, Bering Sea as Inferred from Diatom, Alkenone, and Stable Isotope Records. *GSA Abstracts with Programs*, 38(7). *Talk*.
- Caissie, B.E., Brigham-Grette, J., Lawrence, K.T., Cook, M.S. 2006. Rising temperatures, shrinking ice: the deglaciation in the Bering Sea based on diatoms, alkenones, and oxygen isotopes. *Arctic Workshop*, Boulder, CO. *Talk*.
- Caissie, B.E., Brigham-Grette, J., Driscoll, N.W., Cook, M.S., and Herbert, T.D. 2005. Deglacial to Holocene Sea-Ice History using Diatoms and Alkenones, Umnak Plateau, Bering Sea. *Bering Strait Workshop*, Fairbanks, Alaska and *Polar Marine Diatom Meeting*, Yamagata, Japan. *Poster*.
- Caissie, B.E., Brigham-Grette, J., Driscoll, N.W., Cook, M.S., and Herbert, T.D. 2004. Deglaciation to Holocene sea-ice history using diatoms and alkenones, Umnak Plateau, Bering Sea. *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract: PP21B-1382. *Poster*.
- Caissie, B., 2003, Sedimentological Evaluation of Siberian Yedoma. Alaska Geological Society 2003 Geology Symposium. April 25-26, Proceedings Volume. p. 29. *Poster*.

## FIELD WORK

- 2006, 2007 ***Bering Sea, aboard the USCGC Healy Ice Breaker***  
Collected short sediment cores, Van Veen grabs, water samples, CTD data, and sea ice for my dissertation. Also assisted PI Jackie Grebmeier with sediment and water collection and sediment sieving to collect benthos.
- 2003 ***Mutnovsky and Gorely craters, near Petropavlovsk, Kamchatka***  
Participated in a two week, international (Russian, American, Japanese) field course in volcanology.
- 2003 ***Denali National Park and Limestone Gap, Alaska***  
Six week undergraduate geology field camp—mapped bedrock lithology and structure.
- 2002 ***Cherskii, Siberia***  
One month assisting ecologists F. Stuart (Terry) Chapin III, Michelle Mack, and Edward (Ted) Schuur to sample sediment, soil horizons and leaf litter as part of their project looking at the relationship between the carbon cycle, climate change, and ecosystem disturbances such as fire.

## SYNERGISTIC ACTIVITIES

- Compiled an illustrated diatom key to major Bering Sea diatom species. This guide will serve as either a teaching tool for undergraduate students or for individuals assisting with diatom counts. (2004)
- Helped organize Science Potpourri at the University of Alaska—a day-long program designed to peak students' interest in natural sciences (2003)
- Secretary of University of Alaska Geosciences Club (2002-2003); University of Massachusetts Geology Graduate Student Fund (2005-2006)
- Memberships: American Geophysical Union, American Quaternary Association, Arctic Institute of North America, Geological Society of America, International Society for Diatom Research, IGBP—PAGES (Past Global Changes Project), North American Micropaleontological Section, SEPM
- Workshops Attended: *Neogene Polar Marine Diatoms*, August 1-6, 2005, Yamagata, Japan; *US-ANDRILL Workshop*, March 31-April 3, 2005, Denver, CO; *The Bering Strait, Rapid Climate Change and Land Bridge Paleoecology*, June 20-22, 2005, Fairbanks, AK; *Arctic Climate and Terrestrial Ecosystems*, August 1-14, 2005, Fairbanks and Toolik Lake, AK