

Curriculum Vitae
BEVERLY J. JOHNSON
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PERSONAL

Spouse: Mathieu Duvall, two children (ages 9 and 11 yrs).

EDUCATION

Ph.D. 1995	Geological Sciences/INSTAAR, University of Colorado, Boulder
M.Sc. 1990	Geological Sciences, University of Delaware, Newark
B.Sc. 1985	Geological Sciences, University of Delaware, Newark

TEACHING AND RESEARCH EXPERIENCE

2008, Fall: *Visiting Researcher*, Institute of Biology, Univ. of Southern Denmark.

2006- present: *Associate Professor*, Department of Geology, Bates College.

2001-2006: *Assistant Professor*, Department of Geology, Bates College. Courses taught: Earth Surface Processes, Environmental Geochemistry, Biomolecular Paleoclimatology, Stable Isotope Geochemistry, Introduction to Hydrogeology, and The History and Environmental Impact of Fire (FYS 284). Environmental Geochemistry Laboratory established for student-faculty research projects on the analysis of environmental samples for paleoclimatic and environmental applications in Australia, Russia, and New England (instruments: EA/GC-C-IRMS, GC-FID, ICP-OES).

1997-2000: *Postdoctoral Researcher*, University of Washington (1998-2000) and the Australian National University (1997).

1995 - 1996: *Postdoctoral Fellow*, Geophysical Laboratory.

1991 - 1993: *Predoctoral Fellow*, Geophysical Laboratory.

1991 - 1993: *Visiting Scientist*, MSC/CAL, Smithsonian Institution.

GRANTS, AWARDS AND FELLOWSHIPS

External Grants

- 2009: NSF, Ocean Sciences, Biological Oceanography. PI, "Establishing 'Baseline Conditions' in Coastal Ecosystems of the Gulf of Maine using Isotopic Analysis of Fish Proteins: Gulf of Maine (to be submitted 2/15/09).
- 2002: Maine Marine Research Institute. PI, "Investigation of Terrestrial Organic Carbon Cycling and Human Impact on Maine Coastal Environments," \$168,866 awarded (9/02-8/05).
- 2001: NSF, Earth System History/GEO. Co-PI, "Collaborative Research: Centennial-to-Millennial-Scale Climatic Fluctuations in Northeast Siberia During the Last Glacial Cycle," \$55,000 awarded (8/01-2/05).
- 2001: NSF, Major Research Instrumentation. Co-PI, "Acquisition of a GC-MS and a GC-FID for research in environmental science at Bates College;" \$107,000 awarded (11/01-10/04).
- 2000: NSF, Earth System History/GEO. Co-PI, "Collaborative Research: Megafauna Extinction, Ecosystem Disruption, and Climate Change in Australia: Assessing the Human Factor," \$155,800 awarded (9/00-8/03).
- 1997: NSF, Earth System History/GEO. CO-PI on "Drought in the Australian Outback: Milankovitch and Anthropogenic Forcing of the Australian Monsoon," awarded in full.
- 1996: NSF, International Postdoctoral Fellowship. "Late Quaternary Changes of Vegetation and Climate in Northern Australia," awarded in full.
- 1992: NSF, Dissertation Improvement Award, Archaeology. "Stable Isotope Biogeochemistry of Fossil Ostrich Eggshell: A New Tool for Late Pleistocene-Holocene Paleoecologic Reconstructions in Africa," awarded in full.

Internal Grants

- 2006: Bates, Bowdoin and Colby Mellon Collaborative Faculty Development Project. CO-PI, "The Androscoggin River - A Living Laboratory," \$10,500 awarded (8/06-7/08).
- 2005: Harvard Center for Community Partnerships, Discretionary Funds "Phosphorus Cycling in the Gulf Island Pond, Androscoggin River: A Proposal for Thesis Student Research (ES 457)," \$600 awarded.
- 2005: Bates College, Hughes Grant for Faculty/Student Group Project "Investigation of Organic Carbon Cycling and Sequestration Over the Last 5,000 Years at Sprague Marsh," \$9,100 awarded.
- 2003: Bates College, Hughes Grant for Faculty/Student Group Project "Investigation of Terrestrial Organic Carbon Cycling in Maine Coastal Environments Through the Last 12,000 Years," \$8,770 awarded.
- 2001: Bates College, Hughes Grant III Equipment Proposal. "Purchase of a New Chemical Fume Hood for the Geochemistry Curriculum in the Department of Geology," \$9,650 awarded.
- 2001: Bates College, Hughes Grant for Faculty/Student Group Project "Geologic Field-Work in the Wolf Creek Meteorite Crater, Western Australia," \$6,800 awarded.

GRANTS, AWARDS AND FELLOWSHIPS, continued**Awards and Fellowships**

- 2007: Phillips Fellowship, Bates College
 1995: Outstanding Woman Geoscientist Award, Association for Women Geoscientists
 1993: Zena Hunter Andrews Fellowship, University of Colorado

PUBLICATIONS (# designates Bates student author)

- 2008: Carroll, M.L., **Johnson, B.J.**, Henkes, G.A.#, McMahon, K.W., Voronkov, A., Ambrose, W.A., Jr., Denisenko, S.G., Bivalves as indicators of environmental variation and potential anthropogenic impacts in the southern Barents Sea over multiple scales, *Marine Pollution Bulletin*, in press.
- 2008: Morata, N., Renaud, P.E., Brugel, S., Hobson, K.A., **Johnson, B.J.**, Spatial and seasonal variations in the pelagic-benthic coupling of the southeastern Beaufort Sea revealed by sedimentary biomarkers, *Marine Ecology Progress Series*, in press.
- 2008: Bourque, B. J., **Johnson, B.J.**, and Steneck, R., 2008. Possible prehistoric fishing affects on coastal marine food webs in the Gulf of Maine. In *Human Impacts on Ancient Marine Ecosystems* (eds., T.C. Rick and J.M. Erlandson), University of California Press, Berkley, p. 165-185.
- 2007: Boving, T., Klement, J., Thienel, B. #, and **Johnson, B.** Runoff Treatment with Aspen Wood. In: ASABE - American Society of Agricultural and Biological Engineers, Eleventh Individual and Small Community Sewage Systems Conference Proceedings. Warwick, RI, Oct. 20-24, 2007. Paper No. 701P1107cd.
- 2007: **Johnson, B.J.**, Moore, K.A.#, Lehmann, C., Bohlen, C. and Brown, T.A. Middle to Late Holocene fluctuations of C₃ and C₄ vegetation in a Northern New England salt marsh, Sprague Marsh, Phippsburg Maine: *Organic Geochemistry*, 38, 394-403. (DOI: 10.1016/j.orggeochem.2006.06.006)
- 2006: McMahon, K.W. #, Ambrose, W.G., **Johnson, B.J.**, Sun, M.-Y., Lopez, G.R., Clough, L.M., and Carroll, M.L. Benthic community response to ice algae and phytoplankton in Ny Ålesund, Svalbard: *Marine Ecology Progress Series*, 310, 1-14.
- 2005: McMahon, K.W. #, **Johnson, B.J.**, and Ambrose, W.G. Diet and movement of the killifish, *Fundulus heteroclitus*, in a Maine salt marsh assessed using gut contents and stable isotope analyses: *Estuaries*, 28, 966-973.
- 2005: **Johnson, B. J.**, Miller, G. H., Magee, J. W., Gagan, M. K., Fogel, M. L., and Quay, P.D. Carbon isotope evidence for abrupt grassland loss coincident with European settlement of Lake Eyre, South Australia: *The Holocene*, 15, 888-896.
- 2005: Wooller, M.J., **Johnson, B.J.**, Wilkie, A.#, and Fogel, M.L.. Stable isotope characteristics across narrow savanna/woodland ecotones in Wolfe Creek Meteorite Crater, Western Australia: *Oecologia*, 145, 100-112. (DOI: 10.1007/s00442-005-0105-5)

PUBLICATIONS (continued)

- 2005: Miller, G.H., Fogel, M.L., Magee, J.W., Gagan, M.K., Clarke, S.J., and **Johnson, B.J.** Ecosystem collapse in Pleistocene Australia implies a human role in megafaunal extinction: *Science*, 309, 287-290.
- 2000: Miller G.H., Hart C.P., Roark E.B., and **Johnson B.J.** Isoleucine epimerization in eggshells of the flightless Australian birds, *Genyornis* and *Dromaius*. In *Perspectives in Amino Acid and Protein Geochemistry* (ed. G. A. Goodfriend, M. J. Collins, M. L. Fogel, S. A. Macko, and J. F. Wehmiller), p. 161-181. Oxford University Press, Oxford.
- 1999: **Johnson, B.J.**, Miller, G.H., Fogel, M.L., Magee, J.W., Gagan, M.K., and Chivas, A.R. 65,000 years of vegetation change in central Australia and the Australian summer monsoon: *Science*, 284, 1150-1152.
- 1999: Miller, G.H., Magee, J.W., and **Johnson, B.J.**, Fogel, M.L., Spooner, N.A., McCulloch, M.T., Ayliffe, L.K. Pleistocene extinction of *Genyornis newtoni*: human impact on Australian megafauna: *Science*, 283, 205-208.
- 1998: **Johnson, B.J.**, Fogel, M.L., and Miller, G.H. Stable isotopes in modern ostrich eggshell: a calibration for paleoenvironmental applications in semi-arid regions of southern Africa: *Geochimica et Cosmochimica Acta*, 62, 2451-2461.
- 1997: **Johnson, B.J.**, Miller, G.H., Fogel, M.L., and Beaumont, P.B. The determination of late Quaternary paleoenvironments at Equus Cave, South Africa, using stable isotopes and amino acid racemization in ostrich eggshell: *Palaeogeography, Palaeoclimatology, Palaeoecology*, 136, 121-137.
- 1997: **Johnson, B.J.** and Miller, G.H. Archaeological applications of amino acid racemization dating: a review: *Archaeometry*, 39, 265-287.
- 1997: Fogel, M.L., Tuross, N., **Johnson, B.J.**, and Miller, G.H. Biogeochemical record of ancient man: *Organic Geochemistry*, 27, 257-287.
- 1993: **Johnson, B.J.**, Fogel, M.L., and Miller, G.H. Paleoecological reconstructions in southern Egypt based on the stable carbon and nitrogen isotopes in the organic fraction and stable carbon isotopes in individual amino acids of fossil ostrich eggshell: *Chemical Geology*, 107, 493-497.
- 1992: Miller, G.H., Beaumont, P.B., Jull, A.J.T., and **Johnson, B.J.** Pleistocene geochronology and paleothermometry from protein diagenesis in ostrich eggshells: implications for the evolution of modern humans: *Phil. Trans. R. Soc. Lond. B*, 337, 149-157.
- 1992: **Johnson, B.J.**, Fogel, M.L., and Miller, G.H. Stable isotopes in fossil ostrich eggshell: *Carnegie Institution of Washington Year Book*, p. 97.

INVITED TALKS

Akvaplan Niva, 11/08; Institute of Biology, University of Southern Denmark, 10/08; The State of Marine Ecology in Maine Symposium, Bowdoin College, 5/08; Maine Maritime Academy, 4/08; Colby, 10/05; University Maine, 2/03; University of Tennessee, 2/02; Australian Rangeland Society, 8/00; Gordon Conference, 1/00; University South Carolina, 9/99; Goldschmidt Conference, 8/99; CSIRO, Division of Wildlife and Ecology, 6/97; RSES, Australian National University 3/97; University of Delaware 3/96; Duke University, 11/95; Academy of Natural Sciences, Philadelphia, 11/95; Geological Society of America, 10/95

PROFESSIONAL MEMBERSHIPS

American Geophysical Union	National Association of Geoscience Teachers
Geological Society of America	Am. Assoc. for the Advancement of Science
American Chemical Society	Universities Council on Water Resources

RECENT COLLABORATORS

Ambrose, William: Department of Biology, Bates College, Lewiston, ME
Anderson, Patricia: Quaternary Research Center: University of Washington, Seattle
Belknap, Dan: Department of Geology, University of Maine, Orono, ME
Bigelow, Gerry: Environmental Studies Program, Bates College, Lewiston, ME
Bourque, Bruce: Department of Anthropology, Bates College, Lewiston, ME
Brown, Stine: Department of Biology, University of New England
Burdick, David: Jackson Estuarine Laboratory and the University of New Hampshire
Canfield, Don: Institute of Biology, University of Southern Denmark
Carroll, Michael: Akvaplan-niva AS, Tromso, Norway
Clough, Lisa: Department of Biology, Eastern Carolina University
Dionne, Michele: Wells National Estuarine Research Reserve
Fogel, Marilyn: Geophysical Laboratory, Carnegie Institution of Washington
Gontz, Allen: Department of Geology, University of Massachusetts, Boston
Luly, Jon: James Cook University, Townsville, Australia
Miller, Gifford: INSTAAR, University of Colorado, Boulder
Magee, John: Australian National University, Canberra
Renaud, Paul: Akvaplan-niva AS, Tromso, Norway
Retelle, Mike: Department of Geology, Bates College, Lewiston, ME
Steneck, Bob: Darling Marine Center, University of Maine
Wooller, Matt: Water and Environmental Research Center and School of Fisheries and Ocean Sciences, University of Alaska