

CURRICULUM VITAE
BRENDAN PATRICK KELLY

Education: B.A. University of California Santa Cruz, 1975 (Biology)
M.S. University of Alaska Fairbanks, 1979 (Biology)
Ph.D. Purdue University, 1996 (Biology)

Professional Memberships: Arctic Institute of North America (Life Member)
International Society for Behavioral Ecology
The Society for Marine Mammalogy (Charter Member)
National Center for Science Education
Sigma Xi
National Association of Underwater Instructors

Awards and Fellowships: Ida L. Goebel Undergraduate Research Award
University of California Santa Cruz - 1974
National Science Foundation Undergraduate Research Fellow
Stanford University - 1974
Highest Honors in Biology
University of California Santa Cruz - 1975
Research and Advanced Study Grants
University of Alaska Fairbanks - 1977 and 1978
David Ross Fellow
Purdue University - 1990-1992
Award for Excellence; Contributions to Third National Climate Assessment
White House Office of Science and Technology Policy – 2014
Senior Fellow
Middlebury Inst. International Studies - Monterey, 2015 - present

Professional Experience:

Executive Director, Study of Environmental Arctic Change, Univ. Alaska, 2015 – present
Director of Conservation Research & Chief Scientist, Monterey Bay Aquarium, 2014 - 2015
Assistant Director, Polar Science, White House Office of Science & Technology Policy, 2012–14
Deputy Director, Arctic Division, National Science Foundation, 2011 – 2012
Research Scientist, National Marine Mammal Laboratory, NOAA, 2009 – 2011
Associate Vice President for Research, University of Alaska, 2007 - 2009
Program Director for Arctic Biology, National Science Foundation, 2007 – 2009
Vice Provost for Research & Dean of Arts and Sciences, Univ. Alaska Southeast, 2003 - 2007
Associate Professor of Marine Biology, University of Alaska Fairbanks, 1996 - 2009
Associate Professor of Biology, University of Alaska Southeast, 1996 – 2009
Research Associate, Institute of Marine Science, University Alaska, 1982 - 1996
Marine Mammals Biologist, Alaska Department of Fish and Game, 1981-1982

Professional Service:

Polar Research Board: 2014 – present

Advisory Board, School Marine Sci. & Ocean Engineer., Univ. New Hampshire: 2014 - present

Lead U.S. reviewer, Ch. 21/28, Working Group 2, Intergovern. Panel on Climate Change - 2013

Climate change lecturer, Alaska Marine Conservation Counsel speaking tour – 2008 - 2009

U. S. Climate Change Sci. Prog. Work Group: Agricul., Biodiversity, Land & Water Res. - 2007

Chair, Mayor's Scientific Panel on Climate Change, City & Borough of Juneau, Alaska: 2006

Research Advisory Council, University of Alaska: 2003 - 2007

Alaska Scientific Review Group - marine mammal stocks (NMFS/USFWS): 1994 - 2009

Marine Mammal Steering Committee, U.S.- Russia Environmental Agreement: 1996 – present

Shelf Basin Interactions Project (NSF), Advisory Committee: 2005 - 2007

Scientific advising, Alaska Native Harbor Seal Commission: 1995 - 2007

Scientific advising, Alaska Sea Otter Commission: 1991 - 1997

Co-chair for Biology, American – Norwegian Arctic Research Opportunities (NSF): 1999

Graduate student and post-doctoral fellow advising:

Jill Anthony (M.S.1995) - Habitat utilization by sea otters in Prince William Sound, Alaska

Gay Sheffield (M.S. 1997) - Walrus feeding - a re-examination

Lauri Jemison (M.S. 1997) - Recent history & demography of harbor seals on Tugidak Island

Michael Simpkins (Ph.D. 2000) – Three-dimensional diving behavior of ringed seals

Mervi Kunnasranta (Postdoctoral Fellow 2002-4) – Ecology of ringed seals

Stephanie Haverlack (M.S. program) - Diving behavior of sea otters

Jamie Womble (M.S. 2003) – Seasonal distribution of Steller sea lions

Karen Blejwas (Postdoctoral Fellow 2004-5) – Photographic mark-recapture of Steller sea lions

Johanna Vollenweider (M.S. 2005) – Variability in Steller sea lion prey quality in SE Alaska

Publications:

- Martinez-Bakker M. E., S. K Sell, B. J. Swanson, **B. P. Kelly**, and D. A. Tallmon. 2013. Combined genetic and telemetry data reveal high rates of gene flow, migration, and long-distance dispersal potential in Arctic ringed seals (*Pusa hispida*). PLoS ONE 8(10): e77125. doi:10.1371/journal.pone.0077125
- Kelly, B. P.** et al. 2013. Pursue Responsible Arctic Region Stewardship. *In* National Strategy for the Arctic Region, Executive Office of the President.
- Clement, J. P., J. L. Bengtson, and **B. P. Kelly**. 2013. Managing for the future in a rapidly changing Arctic; a report to the President. Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska and the National Ocean Council.
- Kelly, B. P.** et al. 2012. Arctic Research Plan: FY2013–2017. Interagency Arctic Research Policy Committee, Office of Science & Technology Policy, Executive Office of the President. 95pp.
- Hezel, P. J., X. Zhang, C. M. Bitz, and **B. P. Kelly**, and Massonnet. 2012. Projected decline in snow depth on Arctic sea ice caused by progressively later autumn open ocean freeze-up this century. Geophysical Research Letters, VOL. 39, L17505, doi:10.1029/2012GL052794.
- Cameron, M. F., J. L. Bengtson, P. L. Boveng, J. K. Jansen, **B. P. Kelly**, S. P. Dahle, E. A. Logerwell, J. E. Overland, C. L. Sabine, G. T. Waring, and J. M. Wilde. 2010. Status review of the bearded seal (*Erignathus barbatus*). U.S. Department of Commerce, NOAA Technical Memorandum NMFS-AFSC-211. 246 p.
- Kelly, B. P.**, O. H. Badajos, M. Kunasranta, J. R. Moran, M. Ponce, D. Wartzok, and P. Boveng. 2010. Seasonal home ranges and fidelity of breeding sites among ringed seals. Polar Biology 33:1095–1109.
- Kelly, B. P.**, J. L. Bengtson, P. L. Boveng, M. F. Cameron, S. P. Dahle, J. K. Jansen, E. A. Logerwell, J. E. Overland, C. L. Sabine, G. T. Waring, and J. M. Wilder. 2010b. Status review of the ringed seal (*Phoca hispida*). U.S. Department of Commerce, NOAA Technical Memorandum NMFS-AFSC-212. 250 p.
<http://www.alaskafisheries.noaa.gov/protectedresources/seals/ice/ringed/statusreview10.pdf>
- Kelly, B. P.**, A. R. Whiteley, and D. A. Tallmon. 2010. Arctic melting pot. Nature 468:891.
- Kelly, B. P.** 2009. Studying seals in their sea ice habitat: application of traditional and scientific methods. Pages 301-344 *in* H. Eicken and R. Gradinger (eds.) Handbook on field techniques in sea-ice research; a sea-ice system services approach. University of Alaska Press.
- Kelly, B. P.** 2008. Ringed seals; an instrumentation challenge. Pages 145-148 *in* G. Marshall (ed.) Proceedings of the 2007 Animal-borne Imaging Symposium. 10-13 October 2007. National Geographic Society. Washington, DC.
- Janetos, A., L. Hansen, D. Inouye, **B. P. Kelly**, L. Meyerson, B. Peterson, and R. Shaw. 2008. **Biodiversity**. *In: The effects of climate change on agriculture, land resources, water resources, and biodiversity in the United States. A Report by the U. S. Climate Change Science Program and the Subcommittee on Global Change Research.* Washington, DC. USA 362pp.
- Kelly, B. P.**, P. Boveng, B. R. Swanson. 2008. Ice seal movements and stock structure in a changing cryosphere. North Pacific Research Board Final Report 515, 54 pp.
http://doc.nprb.org/web/05_prjs/515_Final_report.pdf

- Kelly, B. P.**, O. H. Badajos, M. Kunnasranta, and J. R. Moran. 2006. Timing and re-interpretation of ringed seal surveys. Final Report OCS Study MMS 2006-013. Minerals Management Service, Dept. of the Interiors and School of Fisheries and Ocean Sciences, University of Alaska Fairbanks.
- Swanson, B. J., **B. P. Kelly**, C. K. Maddox, and J. R. Moran. 2006. Shed skin as a source of DNA for genotyping seals. *Molecular Ecology Notes* 6:1006-1009.
- Womble, J. N., M. F. Willson, M. F. Sigler, **B. P. Kelly**, and G. R. VanBlaricom. 2005. Distribution of Steller sea lions *Eumetopias jubatus* in relation to spring-spawning fish in SE Alaska. *Mar Ecol Prog Ser* 294:271-282.
- Kelly, B. P.** 2004. Correction factor for ringed seal surveys in northern Alaska. Final Report to the Coastal Marine Institute, University of Alaska Fairbanks.
- Conway, J. E., **B. P. Kelly**, and E. Hood. 2004. Predicting lair abandonment by ringed seals based on physical properties of the snow pack. 34th International Arctic Workshop. March 10-13, 2004. Institute of Arctic and Alpine Research, Univ. of Colorado, Boulder. Abstract.
- Blejwas, K. M, and **B. P. Kelly**. 2004. Photographic mark-recapture of Steller sea lions. Final Report to the North Pacific Universities Marine Mammal Research Consortium.
- Kelly, B. P.** 2001. Climate change and ice breeding pinnipeds. Pages 43-55 in G.-R. Walther, C. A. Burga and P. J. Edwards, editors. "Fingerprints" of climate change: adapted behaviour and shifting species' ranges. Kluwer Academic/Plenum Publishers, New York and London.
- Jemison, L. A., and **B. P. Kelly**. 2001. Pupping phenology and demography of harbor seals on Tugidak Island, Alaska. *Marine Mammal Science* 17:585-600.
- Kelly, B. P.**, and E. A. Mathews. 2001. (Book Review). Marine mammals; evolutionary biology. Book Review. *Marine Mammal Science* 17(200-201).
- Sheffield, G. G, F. H. Fay, H. Feder, and **B. P. Kelly**. 2001. Laboratory digestion of walrus prey and interpretation of stomach contents. *Marine Mammal Science* 17(310-330).
- Simpkins, M. A., **B. P. Kelly**, and D. Wartzok. 2001. Three-dimensional analysis of search behaviour by ringed seals. *Animal Behaviour* 62:67-72.
- Simpkins, M. A., **B. P. Kelly**, and D. Wartzok. 2001. Three-dimensional diving behaviors of ringed seals (*Phoca hispida*). *Marine Mammal Science* 17:909-925.
- Simpkins, M. A., **B. P. Kelly**, and D. Wartzok. 2001. Three-dimensional movements within individual dives by ringed seals (*Phoca hispida*). *Canadian Journal of Zoology* 79:1455-1464.
- Kelly, B. P.** 2001. Steller sea lion foraging. *Oncorhynchus* XXI:1-2.
- Fay, F. H., L. L. Eberhardt, **B. P. Kelly**, J. J. Burns, and L. T. Quakenbush. 1997. Status of the Pacific walrus population, 1950-1989. *Marine Mammal Science* 13:537-565.
- Kelly, B. P.** 1996. Live capture of ringed seals in ice-covered waters. *J. Wildl. Man.* 60:678-684.
- Kelly, B. P.** 1996. Behavior of ringed seals diving under shore-fast sea ice. Ph.D. Dissertation, Purdue University, West Lafayette, Indiana. 91 pp.
- Kelly, B. P.** 1996. (Book Review) Marine mammals and the *Exxon Valdez*. Edited by T. R. Loughlin. Academic Press. San Diego. 395pp. *Arctic* 49:100-101.
- Kelly, B. P.**, and D. Wartzok. 1996. Ringed seal diving behavior in the breeding season. *Canadian Journal of Zoology* 74:1547-1555.
- Mathews, E. A., and **B. P. Kelly**. 1996. Extreme temporal variation in harbor seal numbers in Glacier Bay, a glacial fjord in southeast Alaska. *Mar Mamm Sci* 12:483-489.
- Kelly, B. P.** 1995. (Obituary) Francis Hollis Fay (1927 – 1994). *Arctic* 48:107-108.

- Wartzok, D., R. Elsner, H. Stone, **B. P. Kelly**, and R. W. Davis. 1992. Under-ice movements and sensory basis of hole finding by ringed and Weddell seals. *Canadian Journal of Zoology* 70:1712-1722.
- Kelly, B. P.**, and L. T. Quakenbush. 1990. Spatiotemporal use of lairs by ringed seals (*Phoca hispida*). *Canadian Journal of Zoology* 68:2503-2512.
- Kingsley, M. C. S., M. O. Hammill, and **B. P. Kelly**. 1990. Detecting ringed seal lairs by the heat they radiate. *Marine Mammal Science*. 6:339-347.
- Kelly, B. P.** 1990. Tooth-walker, unique mammal of the arctic. *Anima* 216:28-31.
- Fay, F. H., **B. P. Kelly**, and J. L. Sease. 1989. Managing the exploitation of Pacific walrus: a tragedy of delayed response and poor communication. *Marine Mammal Science* 5:1-16.
- Elsner, R., D. Wartzok, N. B. Sonafank, and **B. P. Kelly**. 1989. Behavioral and physiological reactions of arctic seals during under-ice pilotage. *Canadian Journal of Zoology* 67:2506-2513.
- Kelly, B. P.** 1988. Ringed seal, *Phoca hispida*. Pages 59-75 in J. W. Lentfer, ed. Selected marine mammals of Alaska: species accounts with research and management recommendations. Marine Mammal Commission, Washington, D.C.
- Kelly, B. P.** 1988. Ribbon seal, *Phoca fasciata*. Pages 97-106 in J. W. Lentfer, ed. Selected marine mammals of Alaska: species accounts with research and management recommendations. Marine Mammal Commission, Washington, D.C.
- Kelly, B. P.** 1988. Bearded seal, *Erignathus barbatus*. Pages 77-94 in J. W. Lentfer, ed. Selected marine mammals of Alaska: species accounts with research and management recommendations. Marine Mammal Commission, Washington, D.C.
- Kelly, B. P.**, J. J. Burns, and L. T. Quakenbush. 1988. Responses of ringed seals (*Phoca hispida*) to noise disturbance. Pages 27-38 in W. M. Sackinger, M. O. Jeffries, J. L. Imm, and S. D. Treacy, eds. Port and Ocean Engineering under Arctic Conditions. Vol. II. Symposium on noise and marine mammals in ice-covered waters. Geophysical Inst., Univ. Alaska, Fairbanks.
- Kelly, B. P.**, and L. T. Quakenbush. 1987. Trained dogs and wild seals. *Whalewatcher, Journal of the American Cetacean Society* 21:8-11.
- Kelly, B. P.** 1981. Pelage polymorphism in Pacific harbor seals. *Can. J. Zool.* 59:1212-19.
- Fay, F. H. and **B. P. Kelly**. 1980. Mass natural mortality of walrus (*Odobenus rosmarus*) at St. Lawrence Island, Bering Sea, autumn 1978. *Arctic* 33:226-245.
- Kelly, B. P.** Report on a Study of *Phocoena sinus*, Norris and MacFarland 1958, and an attempt to Collect a Specimen (unpublished manuscript). University of California, Santa Cruz.