

Caroline H. Fox

CONTACT INFORMATION

Raincoast Conservation Foundation & Department of Geography,
University of Victoria, PO Box 3060 STN CSC, Victoria, BC, V8W 3R4.

phone: +1 250 812 1956
email: caroline@raincoast.org
web: www.web.uvic.ca/
~darimont/people/caroline-fox/

EDUCATION

- Ph.D., Department of Biology, University of Victoria. Dissertation title: *Pacific herring and salmon: ecological interactions across the land-sea interface*. Victoria, BC 2009-2013
- M.Sc., Department of Biology, Case Western Reserve University. Thesis title: *Patterns of kelp lifestage diversity along intertidal height gradients*. Cleveland, OH 2004-2006
- B.Sc., Departments of Biology & Environmental Studies, University of Victoria. Victoria, BC 1998-2003

RESEARCH

- NSERC IRDF Postdoctoral Fellow. Raincoast Conservation Foundation & Department of Geography, University of Victoria. Research title: *Marine bird-habitat relationships and spatial assessment of risk with anthropogenic activities*. Sidney & Victoria, BC 2013-Present
- Biologist and Marine Bird Program Coordinator. Raincoast Conservation Foundation. Sidney, BC 2007-2013
- Research Technician. Geoduck environmental impact project and aerial surveyor. Fisheries and Oceans Canada, Pacific Biological Station. Nanaimo & Tofino, BC 2006-2007
- Research Assistant. Marine phycology and global climate change. Bamfield Marine Sciences Centre. Bamfield, BC 2004
- Research Assistant. Marine phycology. Canadian Kelp Resources, Ltd., Simon Fraser University and Bamfield Marine Sciences Centre. Bamfield, BC 2003-2004
- NSERC Undergraduate Student. Fisheries Oceanography and Zooplankton Ecology Laboratory. University of Victoria. Victoria, BC 2003
- Research Volunteer. Coastal wolf research. Raincoast Conservation Foundation and University of Victoria. Victoria, BC 2001-2003

TEACHING

- Instructor. Marine Population Ecology & Dynamics. Bamfield Marine Sciences Centre. Bamfield, BC 2012-2014
- Instructor. Coastal Biodiversity & Conservation. Bamfield Marine Sciences Centre. Bamfield, BC 2013
- Teaching Assistant. Marine Invertebrate Zoology. Bamfield Marine Sciences Centre. Bamfield, BC 2011-2012
- Teaching Assistant. Marine Ecology and Marine Population Ecology and Dynamics. Bamfield Marine Sciences Centre. Bamfield, BC 2010
- Teaching Assistant. Genes, Evolution and Ecology. Case Western Reserve University. Cleveland, OH 2004-2005

SUPERVISION & MENTORING

- Mentor and supervisor to Environment Canada Science Horizons Youth Interns K. Kezes, G. Harvey and J. Robinson. Victoria, BC 2012-Present
- Project advisor to B. Proudfoot, BSc. Student, Advanced Diploma in GIS Applications, Vancouver Island University. Nanaimo, BC 2014-2015
- Leader. Field research teams (1-4 individuals). Numerous Locations 2007-2012

REFEREED PUBLICATIONS

- **Fox, C.H.**, Huettmann, F., Morgan, K., O' Hara, P., Paquet, P.C. In prep. Ensemble modelling of marine bird diversity in the Queen Charlotte Basin, British Columbia.
- Darimont, C.T., **Fox, C.H.**, Bryan, H.B., Reimchen, T.E. Submitted. Trophic hegemony by human predators. Science.
- **Fox, C.H.**, Paquet, P.C., Reimchen, T.E. In Press. Novel species interactions: American black bears respond to Pacific herring spawn. BMC Ecology.
- Best, B., **Fox, C.H.**, Williams, R., Halpin, P., Paquet, P.C. In press. Updated marine mammal distribution and abundance estimates in British Columbia. Journal of Cetacean Research and Management.
- Favaro, B., Claar, D.C., **Fox, C.H.**, Freshwater, C., Holden, J.J., Roberts, A., UVic Research Derby. 2014. Trends in extinction risk for imperiled species in Canada. PlosOne. 9(11): e113118.

Caroline H. Fox

- **Fox, C.H.**, El-Sabaawi, R., Paquet, P.C., Reimchen, T.E. 2014. Pacific herring (*Clupea pallasii*) and wrack macrophytes subsidize semi-terrestrial detritivores. *Marine Ecology Progress Series*. 495: 49-64.
- Reimchen, T.E., **Fox, C.H.*** 2013. Fine-scale spatiotemporal influences of salmon on growth and nitrogen signatures of Sitka spruce tree rings. *BMC Ecology*. 13(1): 38. *Authors contributed equally.
- **Fox, C.H.**, Paquet, P.C., Reimchen, T.E. 2010. Active black bear dens adjacent to a marine beach used for foraging. *Ursus*. 21(2): 195-197.
- **Fox, C.H.**, Swanson, A.K. 2007. Molecular detection of microscopic lifestages of laminarian macroalgae and comparison with adult forms along intertidal gradients. *Marine Ecology Progress Series*. 332:1-15. *Feature Article*.
- Swanson, A.K., **Fox, C.H.** 2007. Altered kelp (Laminariales) phlorotannins and growth under elevated carbon dioxide and ultraviolet-B treatments influence associated intertidal food-webs. *Global Change*. 13(8): 1696-1709.

SELECT UNREFEREED PUBLICATIONS

- **Fox, C.H.** 2015. Pacific herring: a cornerstone of the British Columbian coast. *BC Nature Magazine*. Spring edition.
- **Fox, C.H.**, Favaro, B. 2015. Canada's species at risk rarely recover: the story behind the Plos One article. Plos One community blog pick of the month. bit.ly/1Kf266n.
- **Fox, C.H.** 2014. In peril: Canada's species at risk. Notes from the field. Raincoast Conservation Foundation.
- **Fox, C.H.** 2014. Herring for the masses, herring for all classes. Notes from the field. Raincoast Conservation Foundation.
- **Fox, C.H.**, Harvey, G. 2013. Marine bird surveys, 2005-2008: raw sightings information. Raincoast Conservation Foundation. Technical Report.
- Raincoast Conservation Foundation*. 2012. Art for an oil-free coast, Canada's raincoast at risk. Raincoast Conservation Foundation. ***Fox, C.H.**, Contributing Author.
- Raincoast Conservation Foundation*. 2010. What's at stake: the cost of oil on British Columbia's priceless coast. ***Fox, C.H.**, Contributing Author.
- **Fox, C.H.** 2009. Herring coast. Notes from the field. Raincoast Conservation Foundation.
- **Fox, C.H.** 2008. Tar (sands) and feathers. Notes from the field. Raincoast Conservation Foundation.
- **Fox, C.H.** 2007. Marine birds of Queen Charlotte Sound. Notes from the field. Raincoast Conservation Foundation.

CONFERENCE PRESENTATIONS

- **Fox, C.H.**, Paquet, P.C., and Reimchen, T.E. 2014. Pacific herring provide an important spatial subsidy to nearshore and intertidal species. Canadian Society for Ecology and Evolution. Montreal, QC.
- **Fox, C.H.**, Paquet, P.C., and Reimchen, T.E. 2013. Ecological interactions between Pacific herring and black bears. Canadian Society for Ecology and Evolution. Kelowna, BC.
- **Fox, C.H.**, Paquet, P.C., and Reimchen, T.E. 2013. Ecological linkages between Pacific herring and black bears. Pacific Ecology and Evolution Conference. Bamfield, BC.
- **Fox, C.H.**, El-Sabaawi, R., Paquet, P.C., and Reimchen, T.E. 2012. Herring spawn and macrophytes provide a spatial subsidy to intertidal detritivores. Ecological Society of America. Portland, Oregon.
- Darimont, C.T., **Fox, C.H.**, Reimchen, T.E. 2012. Deep divergence in predatory behaviour between humans and natural predators: insights into ecosystem-based harvest management from the natural world. North American Congress for Conservation Biology. Oakland, California.
- **Fox, C.H.**, El-Sabaawi, R., Paquet, P.C., and Reimchen, T.E. 2012. Herring spawn events provide a spatial subsidy to intertidal detritivores. Restoration. Victoria, British Columbia.
- **Fox, C.H.**, Reimchen, T.E. 2011. Spawning salmon abundance predicts Sitka spruce growth in riparian forests of British Columbia. Western Society of Naturalists. Portland, Oregon.
- **Fox, C.H.** 2011. Spawning salmon abundance predicts Sitka spruce growth in riparian forests of British Columbia. Graduate Student Symposium, the University of Victoria. Victoria, British Columbia.
- Hessian-Lewis, M., Keeling, B., **Fox, C.H.**, Gerrard, A., Reimchen, T.E., Paquet, P.C., Salomon, A. 2011. Quantifying ecological effects of herring spawn events. Herring Workshop. Simon Fraser University, Burnaby, British Columbia.
- **Fox, C.H.** 2010. Seabirds and economy in British Columbia: the ENGO perspective. World Seabird Conference. Victoria, British Columbia.
- **Fox, C.H.** 2010. Linking marine, intertidal and terrestrial ecosystems: intertidal black bear activity and diet. Graduate Student Symposium, the University of Victoria. Victoria, British Columbia.

Caroline H. Fox

- Kawai, D., O'Hara, P.D., **Fox, C.H.**, Paquet, P.C., Huettmann, F. 2010. Seasonal distribution and abundance predictions of seabirds in British Columbia using Random Forests. World Seabird Conference, Victoria, British Columbia. (Poster).
- Kawai, D., **Fox, C.H.**, Heise, K., Paquet, P.C., Huettmann, F. 2010. Accurate predictions of pelagic seabird populations with distance sampling, black boxes and public data: overcoming traditional regression models and parsimony. Pacific Seabird Conference. Longbeach, California. (Poster).
- **Fox, C.H.** 2009. Pacific herring: marine, intertidal and terrestrial linkages. Graduate Student Symposium, the University of Victoria. Victoria, British Columbia.
- **Fox, C.H.** and Swanson, A.K. 2005. The development of environmental genomic tools to identify microbial life-stages of brown algae. Case Western Reserve University. Northeast Algal Symposium. Rockland, MA.
- **Fox, C.H.** and Druehl, L.D. 2004. Vital staining suggests a novel growth pattern for *Alaria*. Simon Fraser University and Bamfield Marine Sciences Centre. Northwest Algal Symposium. Bamfield, B.C. (Poster).

AWARDS & SCHOLARSHIPS

- NSERC IRDF Postdoctoral Fellowship. Raincoast Conservation Foundation and the University of Victoria. 2013-present.
- Arne H. Lane Graduate Fellowship in Marine Sciences. University of Victoria. 2012-2013.
- King Platt Fellowship. University of Victoria. 2012-2013.
- Edward Bassett Family Scholarship. University of Victoria. 2011-2012.
- Maureen De Burgh Memorial Scholarship. University of Victoria. 2011-2012.
- Teaching Assistant Scholarships. Bamfield Marine Sciences Centre. 2010-2012.
- President's Research Award. University of Victoria. 2009-2011.
- NSERC Post Graduate Scholarship. University of Victoria. 2009-2011.
- David & Geoffrey Fox Graduate Fellowship. University of Victoria. 2009-2010.
- University of Victoria Graduate Fellowship. 2009. (Declined).
- Graduate Assistantship. Case Western Reserve University. 2004-2006.
- Sigurd Tveit Memorial Scholarship. Bamfield Marine Sciences Centre. 2005.
- F. W. Benton Bursary. Bamfield Marine Sciences Centre. 2004.
- NSERC Undergraduate Award. University of Victoria. 2003.
- Samuel Simcoe Bursary. University of Victoria. 2003.
- Scholarship for Academic Excellence. University of Victoria. 2002.
- Golden Key Member. University of Victoria. 1998-2003.

ADDITIONAL CONTRIBUTIONS

- Manuscript & Grant Review: Conservation and Biodiversity, Journal of Wildlife Management and Wildlife Monographs, Rendiconti Lincei - Scienze Fisiche e Naturali, National Science Foundation.
- Marine Conservation Caucus representative for the Integrated Herring Harvest Planning Committee (IHHPC). 2014-present.
- Expert for Raincoast Conservation Foundation as part of the Kinder Morgan Trans Mountain Pipeline Expansion Project Joint Panel Review. 2013-2015.
- Expert for Nature Canada and BC Nature as part of the Kinder Morgan Trans Mountain Pipeline Expansion Project Joint Panel Review. 2013-2015.
- Expert and Witness for Raincoast Conservation Foundation as part of the Enbridge Northern Gateway Pipeline Project Joint Panel Review. 2011-2013.
- Member of the Ancient Murrelet Management Team. 2011-2012.