

Kara J. Pitman

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EDUCATION

PhD, Simon Fraser University – Biological Sciences, Earth to Oceans Group 2015-present
M.Sc., University of Victoria – Physical Geography, University of Victoria Tree Ring Lab 2009-2011
B.Sc., University of Victoria – Physical Geography 2007-2009

PEER-REVIEWED PUBLICATIONS

Pitman KJ, Moore JW, Sloat MR, Beaudreau AH, Bidlack AL, Brenner RE, Hood EW, Pess GR, Mantua NJ, Milner AM, Radic V, Reeves GH, Schindler DE, Whited DC (2020) Glacier Retreat and Pacific Salmon. *Bioscience*, 70: 220-236.

Atlas WI, Selbie DT, Holt CA, Cox-Rogers S, Carr-Harris C, **Pitman KJ**, Moore JW (2020) Landscape and biophysical controls of lake capacity to inform evaluation of sockeye salmon (*Oncorhynchus nerka*) populations in data-limited regions. In Review: *Limnology & Oceanography*, 65: 2205-2219.

Pitman KJ, Wilson SM, Sweeney-Bergen E, Hirshfield P, Beere MC, Moore JW (2019) Linking anglers, fish, and management in a catch-and-release steelhead trout fishery. *Canadian Journal of Fisheries and Aquatic Sciences*, 76: 1060-1071.

Pitman KJ and Smith DJ (2012) Tree-ring derived Little Ice Age temperature trends from the central British Columbia Coast Mountains, Canada. *Quaternary Research*, 78: 417-426.

Pitman KJ and Smith DJ (2013) A dendroclimatic analysis of mountain hemlock (*Tsuga mertensiana*) ring-width and maximum density parameters, southern British Columbia Coast Mountains, Canada. *Dendrochronologia*, 31: 165-174.

PRESENTATIONS

Pitman KJ, Moore JW, Huss M, Whited D, Sloat MW, Radic V, Milner AM, Hood EW, Brenner R, Reeves GH (2018) Glacial retreat creates new salmon habitat in Alaska. Canadian Society of Ecology and Evolution (CSEE). July 18-21, 2018. (PhD work) (National, oral).

Pitman KJ, Moore JW, Huss M, Whited D, Sloat MW, Radic V, Milner AM, Hood EW, Brenner R, Reeves GH (2018) Glacial retreat creates new salmon habitat in Alaska. Association for the Sciences of Limnology and Oceanography (ASLO). June 10-15, 2018, Victoria BC. (PhD work) (International, oral).

Pitman KJ (2018) Glacial retreat and the redistribution of salmon habitat. IDEAS. Jan 27, 2018, Burnaby BC (PhD work) (Departmental, oral).

Pitman KJ, Sloat M, Bliss A, Radic V, Moore JW (2017) Glacial recession and salmon futures. Canadian Society of Evolution and Ecology. May 7-11, 2017, Victoria BC (PhD work) (National, oral).

Pitman KJ and Smith DJ (2011) Creating a multi-century tree-ring record in the Bella Coola area, British Columbia. Canadian Association of Geographers. May 31-June 4, 2011, Calgary AB. (MSc work) (National, oral).

Pitman KJ and Smith DJ (2011) Constructing a supra-long chronology: A dendrolaustrine investigation in the Bella Coola area, British Columbia. American Association of Geographers. April 12-16, 2011, Seattle WA. (MSc work) (International, oral).

Pitman KJ and Smith DJ (2011) Diving for giants: A dendrolacustrine investigation in Bella Coola area, British Columbia. Western Division of Canadian Association of Geographers. March 10-12, 2011, Vancouver BC. (MSc work) (National, oral).

Pitman KJ and Smith DJ (2010) Geobotanical Tales from the Asulkan Glacier, Glacier National Park, British Columbia. Canadian Association of Geographers. June 1-5, 2010, Regina SK. (National, oral).

Pitman KJ and Smith DJ (2010) Lichenometric and dendrochronologic dating of the Little Ice Age moraines at Asulkan Glacier, Glacier National Park, British Columbia. Association of Western Geographers. May 15 2010, Washington USA. (International, oral).

Pitman KJ and Smith DJ (2010) Lichenometric and dendrochronologic dating of the Little Ice Age moraines at Asulkan Glacier, Glacier National Park, British Columbia. Western Division of Canadian Association of Geographers. March 26-28, 2010, Edmonton AB. (National, oral).

SCHOLARSHIPS and AWARDS

The W. Garfield Weston Award for Northern Research - Doctoral (ACUNS) - \$50,000	2017
Travel & Minor Research AWARD (TMRA) - ~\$450	2017, 2018
Alexander Graham Bell CGS-D (NSERC) - \$105,000	2015
CD Nelson Entrance Scholarship (SFU) - \$18,000	2015
Provost Prize of Distinction (SFU) - \$2,500	2015
Northern Science Training Program (CNST) - ~\$2,500	2015, 2016
'Best Presentation' award (Association of Western Geographers conference)	2010

TEACHING EXPERIENCE and CURRICULUM INVOLVEMENT

Course Instructor: *Camosun College* Jan-Apr 2014
GEOG 111: Natural Hazards
GEOG 274: Biogeography
I was responsible for delivering the lecture and lab materials for all courses and was accountable for the development of the Biogeography course.

Teaching Assistant Consultant: *University of Victoria* 2010-2011
Coordinated and presented monthly workshops on expert teaching techniques. Contributed to fostering community through creating social bonding activities and providing conflict management guidance and support to Teaching Assistants to resolve issues between staff and/or students.

Teaching Assistant: *University of Victoria* 2009-2011
Geography 120: Introduction to the Earth Systems II,
Geography 370: Hydrology,
Geography 477: Field Studies in Physical Geography,
Geography 472: Disaster Planning

COLLABORATIONS and WORKING GROUPS

Glacier Retreat and Salmon Futures Fall 2017

I was one of three co-leaders of a working group that brought together 14 scientists from 13 institutions to integrate fields of Aquatic Ecology, Geomorphology, Glaciology, and Biology. Funding was from the Gordon and Betty Moore Foundation.

MEDIA COVERAGE

Into the mist. Written by *Cheryl Lyn Dybas*. Oceanographic Issue 13. [link](#) (print)

Glacier retreat will affect salmon habitat. March 14, 2020. Written by: *Ken Ferguson*. Salmon-net. [link](#). (web story)

For salmon, glacier retreat will have mixed effects. March 12, 2020. Written by: *Molly Tankersley*. Alaska Coastal Rainforest Center. [link](#) (web story)

Retreating ice has huge implications for salmon – including the need to proactively protect emerging salmon habitat. March 11, 2020. Written by: *Damona DeNies*. Wild Salmon Center. [link](#) (web story)

Glacial retreat good news and bad news for Pacific salmon species. March 10, 2020. Written by: *Randy Shore*. Vancouver Sun. [link](#) (print)

When the glaciers disappear, those species will go extinct. April 17, 2019. Written by: *Henry Fountain*. New York Times. [link](#) (print)

Human interference in the Pacific Northwest & Alaska: Will Wild Salmon Survive?. November 1, 2018. Written by: *Maria Dombrov*. GlacierHub. [link](#) (web story)

New Streams of Thought: Glacial Retreat Creates News Habitat for Salmon. June 20, 2018. Written by: *Lesley Evans Ogden*. Biobriefs (Bioscience). [link](#) (print)

SCIENCE COMMUNICATION and OUTREACH

Nominated for Science Communication Compass Workshop “Grad #SciComm Fellows Workshop”. Nov 2018

Presented research to Vancouver Aquarium staff at “Lunch and Learn”. May 2017

Led an “interpretive cart” to public at Vancouver Aquarium. May 2017

I was one of six lead authors who submitted an open letter to the federal government of Canada. Our letter provided five recommendations to assist the federal government in strengthening evidence-based decision-making in Canada. <https://www.youngresearchersopenletter.org/>

This work was presented orally in the House of Commons, was published in 26 online or print media outlets, and was broadcasted on five radio interviews.

PROFESSIONAL HISTORY

Skeena River Guardian Project Coordinator: *British Columbia Conservation Foundation* 2013-2017

Supervised, managed, and coordinated teams conducting angler interviews in the Skeena watershed.

Developed sampling plans, interviewed and trained candidates, and analyzed and completed reports

Sole Proprietor/Contractor 2013-2015

Obtained contracts from the provincial government, private research organizations, and biological consulting companies. These contracts include: assessing hydrological impacts on Pacific salmon in the Skeena and Morice Rivers; applying ecological vegetation sampling techniques and sampling edible plants to be measured for contaminants in the Wet’suwet’en territory; and, analyzing and writing sections of the updated Biogeoclimatic Ecosystem Classification (BEC) field guide for the Kootenay region.

Research Technician: *Ecology Research Branch, Ministry of FLNRO, Smithers BC* 2012-2013

Assisted with the Biogeoclimatic Ecosystem Classification alpine and Kootenay field guide climate analysis and writing.

Supervisor: Will Mackenzie, Provincial Ecologist.

REPORTS and SUMMARIES

Pitman KJ and Moore JW (2018). Update: Babine River temperature Project. Plain language summary for dissemination for Gitxsan and Lake Babine Nations

Pitman, KJ and Hirshfield, P (2017). A Survey of Steelhead Anglers on the Bulkley, Kispiox, Zymoetz II and Skeena IV Classified Waters in 2015. British Columbia Ministry of Environment, Lands, and Parks. Fisheries Branch, Skeena Region, BC. Skeena Fisheries Report SK 170. pp 81.

Pitman, KJ and Hirshfield, P (2017) A Survey of Steelhead Anglers on the Bulkley, Kispiox, Zymoetz II and Skeena IV Classified Waters in 2014. British Columbia Ministry of Environment, Lands, and Parks. Fisheries Branch, Skeena Region, BC. Skeena Fisheries Report SK 170. pp 75.

Pitman, KJ and Hirshfield, P (2015) A Survey of Steelhead Anglers on the Bulkley, Kispiox, Zymoetz II and Skeena IV Classified Waters in 2013. British Columbia Ministry of Environment, Lands, and Parks. Fisheries Branch, Skeena Region, BC. Skeena Fisheries Report SK 167. pp 76.

Pitman KJ (2012) Scientific review of tree ring derived proxy climate records, Athabasca river headwaters, Alberta. Report to Water and Climate Impacts Research Centre, Environment Canada.