

#### Brett Johnson

Quadra Island Ecological Observatory Hakai Institute PO Box 631 Heriot Bay, British Columbia, Canada V0P 1H0 Brett.Johnson@hakai.org

# Professional experience

#### 2018–Present Scientific Data Specialist

Ecological Information Management and Canadian Integrated Ocean Observing Systems, Hakai Institute, Tula Foundation, Heriot Bay, BC, Canada

#### 2015–2018 Program Biologist

Juvenile Salmon Program, Hakai Institute, Tula Foundation, Heriot Bay, BC, Canada

#### 2014–2015 Research Assistant

Cutthroat Trout Estuarine Ecology, University of Northern British Columbia, Prince George, BC, Canada

#### 2008-2013 Fish, Wildlife, and Forestry Technician

Lower Seymour Conservation Reserve, Watershed Management Division, Metro Vancouver, North Vancouver, BC, Canada

#### 2004-2008 Engineer

39 Combat Engineer Regiment, Canadian Armed Forces, Department of National Defence, Chilliwack, BC, Canada

## Education

#### 2013-2015 Bachelors of Science Fisheries and Wildlife Management

University of Northern British Columbia,

Prince George, BC, Canada

## 2011-2013 Diploma of Technology Fish, Wildlife, and Recreation

British Columbia Institute of Technology,

Burnaby, BC, Canada

## 2010–2011 Certificate of Natural Resource Management

British Columbia Institute of Technology,

Burnaby, BC, Canada

#### 2005–2006 Military Occupational Training Courses

Canadian Forces School of Military Engineering,

Gagetown, NB, Canada

## **Publications**

## Technical reports

- 2019 Irvine, J.R., S. Akenhead, T. Beacham, C.M. Deeg, S.C.H. Grant, K.D. Hyatt, C. Holt, B.V.P. Hunt, B.T. Johnson, J. King, K.M. Miller, and C. Neville. 2019. Update on Canadian research relevant to the 2016–2020 NPAFC Science Plan. NPAFC Doc. 1841. 6 pp. Fisheries and Oceans Canada, University of British Columbia, and Hakai Institute (Available at https://npafc.org).
- 2019 Johnson, B.T., J.C.L. Gan, S.C. Godwin, M. Krkosek, and B.P.V Hunt. 2019. Juvenile salmon migration observations in the Discovery Islands and Johnstone Strait in British Columbia, Canada in 2018. NPAFC Doc. 1838. 21 pp. Hakai Institute, Institute for the Oceans and Fisheries and Department of Earth, Ocean and Atmospheric Sciences, University of British Columbia, Earth to Ocean Research Group, Simon Fraser University, Department of Ecology and Evolutionary Biology, University of Toronto, and Salmon Coast Field Station (Available at https://npafc.org).
- 2018 Hunt, B.P.V., B.T. Johnson, S.C. Godwin, M. Krkosek, E.A. Pakhomov, and L. Rogers. 2018. The Hakai Institute Juvenile Salmon Program: early life history of sockeye, pink and chum salmon in British Columbia, Canada. NPAFC Doc. 1788. 14 pp. Institute for the Oceans and Fisheries and Department of Earth, Ocean and Atmospheric Sciences, University of British Columbia, Hakai Institute, Earth to Ocean Research Group, Simon Fraser University, Department of Ecology and Evolutionary Biology, University of Toronto, and Salmon Coast Field Station (Available at http://www.npafc.org).
- 2018 Johnson, B.T., J.C.L. Gan, C.V. Janusson, and B.P.V. Hunt. 2018. Juvenile salmon migration dynamics in the Discovery Islands and Johnstone Strait; 2015–2017. NPAFC Doc. 1790. 10 pp. Hakai Institute, Institute for the Oceans and Fisheries and Department of Earth, Ocean and Atmospheric Sciences, University of British Columbia (Available at http://www.npafc.org)/

## Software

- **2018 Johnson, B.T.** Juvenile Salmon Program Data Explorer. https://hecate.hakai.org/shiny/JSP/. Web application. Quadra Island, BC, Canada.
- 2018 Johnson, B.T. hakaisalmon: Hakai Institute Juvenile Salmon Program functions, templates, and helpers. R package. https://hakaiinstitute.github.io/hakaisalmon/

#### **Books**

2017 Johnson, B.T. Hakai Institute R Stats Guide for Reproducible Analyses. Quadra Island, BC, Canada.

## Academic achievements

- **2015 Johnson, B.T.** Development and evaluation of a new method for assessing migration timing of juvenile Fraser River Sockeye salmon in their early marine phase. BSc. Undergraduate Honours Thesis. University of Northern British Columbia.
- 2015 Vernon C. Brink Award for the Study of Biological Diversity. University of Northern British Columbia.
- 2015 Wyerhauser Scholarship. University of Northern British Columbia. University of Northern British Columbia.
- 2015 Frank Oberle Scholarship. University of Northern British Columbia.
- 2014 Canfor Annual Award. University of Northern British Columbia.
- 2013 Entrance scholarship. University of Northern British Columbia.
- 2010 Entrance scholarship. British Columbia Institute of Technology.

# Conference presentations

- **2019 Johnson, B.T.**, J.C.L. Gan, C.V. Janusson, B.P.V. Hunt. *Hakai Institute Juvenile Salmon Program Time Series Poster*. Poster presentation at the Salmon Ocean Ecology / North Pacific Anadromous Fisheries Commission Meeting, Portland Oregon.
- **2019 Johnson, B.T.**, J.C.L. Gan, C.V. Janusson, B.P.V. Hunt. *Hakai Institute Juvenile Salmon Program* 2015–2018 Time Series Poster. Poster presentation at Fisheries and Oceans Canada State of the Pacific Ocean meeting. Nanaimo, BC, Canada.
- **2018 Johnson**, **B.T.** Hakai Institute Juvenile Salmon Program. Oral presentation at the Pint of Salmon Science community event held at the Riptide Pub, Campbell River, BC, Canada
- **2018 Johnson, B.T.**, J. Jackson, B.P.V. Hunt., A. Hare, W. Evans. *Quadra Island Ecological Observatory; Ocean Conditions, Juvenile Salmon Migrations, and Data Management.* Oral Presentation at the BCSFA Research Priorities Workshop, Courtenay, B.C.
- **2018 Johnson, B.T.**, C. Neville, B.P.V. Hunt. Fine scale migration dynamics of juvenile sockeye in the Discovery Islands, B.C. Oral presentation at the Salmon Ocean Ecology Meeting. Newport, Oregon.
- 2017 Hunt, B.P.V., B.T. Johnson. Juvenile Salmon Program update; foraging conditions, migration dynamics, and growth. Pacific Salmon Foundation Salish Sea Marine Survival Project international conference. Richmond, BC, Canada.
- 2017 Johnson, B.T., J.C.L. Gan, C.V. Janusson, B.P.V. Hunt. *Hakai Institute Juvenile Salmon Program* 2015–2017 Time Series Poster. Poster presentation at the Pacific Salmon Foundation Salish Sea Marine Survival Project juvenile salmon work group. Nanaimo, BC, Canada.
- 2017 Johnson, B.T., J.C.L. Gan, C.V. Janusson, B.P.V. Hunt. *Hakai Institute Juvenile Salmon Program* 2015–2016 Time Series Poster. Poster presentation at Fisheries and Oceans Canada State of the Pacific Ocean meeting. Sidney, BC, Canada.
- **2016 Johnson, B.T.** *Hakai Institute Juvenile Salmon Program highlights 2015–2016.* Hakai Institute Research Exchange. Nanaimo, BC, Canada.
- 2016 Hunt, B.P.V., B.T. Johnson. Juvenile Salmon Program review; ocean conditions fish condition analysis. Pacific Salmon Foundation Salish Sea Marine Survival Project Canadian meeting. Nanaimo, BC, Canada.

# Working groups and workshops

- 2019 International Year of the Salmon High Seas Cruise Data Management and Communications Team. Collaboration with Noth Pacific Anadromous Fish Commission, International Year of the Salmon, Hakai Institute, University of British Columbia, and Ocean Networks Canada.
- **2019** Metadata Profile Task Team. Canadian Integrated Ocean Observing System. Collaboration with Fisheries and Oceans Canada, Ocean Networks Canada, and Hakai Institute.
- 2019 Production methodologies and measurements for in situ zooplankton workshop. PICES workshop. Oct 12-13, Hakai Institute, Quadra Island, BC.
- 2019 International Ocean Observation Systems Code Sprint. Oct 8-10, Ann Arbour, MI, USA.
- 2016–2018 Pacific Salmon Foundation Salish Sea Marine Survival Project Juvenile salmon work group.
- 2017–2019 Salmon Migrations and Climate Change Annual Workshop. Pacific Salmon Ecology and Conservation Lab. Dr. Scott Hinch.

#### Certifications

- 2018 Data Carpentry Instructor. Course taught by John Simpson. Oct 18-19. Simon Fraser University.
- 2017 Occupational First Aid Level 1. St. John's Amubulance. February 18. Campbell River, BC.
- 2010 Swift Water Rescue Technician. Rescue Canada Occupational River Safety Technician Level II. Aug 5. Chilliwack, BC.
- 2010 Electrofishing Crew Supervisor. Ministry of Environment. North Vancouver, BC.

2010 Chainsaw Technician. Safety Fundamentals. Arboriculture Canada. April 19. North Vancouver, BC.

# Skills

Salmon Ecology, Oceanography, Data Science, Research, Field Operations, DevOps, Project Management, Agile, Data Analysis, Data Management, Research Software Engineering