

Kathleen Church

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Professional Experience

Assistant Professor of Integrative Biology, Missouri State University, Springfield, Missouri, USA	2025 – Present
Postdoctoral Fellow, Great Lakes Institute of Environmental Research (GLIER) University of Windsor, Windsor, ON, Canada	2024 – 2025, 2018 – 2022
Postdoctoral Fellow, Institut des Sciences de la Forêt Tempérée (ISFORT) University of Québec at Outaouais, Ripon, QC, Canada	2022 – 2024

Education

Doctor of Philosophy, Department of Biology Concordia University, Montréal, QC, Canada	2013 – 2018
Master of Science, Biology McGill University, Montréal, QC, Canada	2007 – 2010
BSc (Honours), Marine and Freshwater Biology (Distinction) University of Guelph, Guelph, ON, Canada	2003 – 2007

Publications

Submitted & In Review

Church KDW, Seymoure BM, Jenks SM, Kohn NR, Mandrak NE, Smith NS, Bednekoff PA, Brownscombe JW, Bzonek, PA, Kemp P, Larocque SM, Midwood JD, Neff BD, Semeniuk CAD, Swaisgood RR, Wilson EC, Zhou W, McPhee ME, Ricciardi A *Submitted (cifas-2025-0269)* The importance of animal behavior to conservation in the Laurentian Great Lakes: an expert consensus of key issues.

Church KDW, Seymoure BM, Crossen S, Fowler-Finn K, LeFauve MK, Phillips JN, Schulte BA *In Review (ANBEH-D-25-00253)* A conservation behaviour approach to the mitigation hierarchy for anthropogenic stressors.

Accepted & Published

Church K, Aguilar Melo AR, Krupa A, Morin G, Stevens T, Asselin H, Turgeon K *Accepted in FACETS* Perspectives of Cree land users on the performance of fish habitat compensation projects in Eeyou Istchee.

Church KDW, Aguilar Melo AR, Asselin H, Turgeon K (2025) Case Studies of Fish Habitat Compensation in Eeyou Istchee: Compensation Projects Prioritize Facility over Effectiveness. *Environmental Management*: 1-7. <https://doi.org/10.1007/s00267-025-02276-1>

Church KDW, Railsback SF, Semeniuk CAD (2025) Influence of personality traits on the response of a modelled population of stream-dwelling rainbow trout (*Oncorhynchus mykiss*) on microplastics consumption. *Individual-based Ecology* 1: e137398. <https://doi.org/10.3897/ibe.1.e137398>

Semeniuk C, **Church K**, Eissenhauer F, Grimm J, Hechler R, Howell B, Ivanova S, Klemet-N'Guessan S, Madliger C, Reid J, Thompson-Kumar K, Arismendi I, Penaluna BE, Kirkwood A, Febria C (2024) On increasing equity and inclusion of early-career professionals for conferences and conference networking in Canadian fisheries and aquatic science societies. *Canadian Journal of Fisheries and Aquatic Sciences* 81(11): 1606-1620. <https://doi.org/10.1139/cjfas-2024-0033>

Church KDW, Nguyen-Dang L, Neff BD, Semeniuk CAD (2022) Personality in hatchery Atlantic salmon (*Salmo salar*) is associated with growth but not metabolic rate or stress tolerance. *Canadian Journal of Fisheries and Aquatic Sciences* 79(11): 2006-2024. <https://doi.org/10.1139/cjfas-2022-0041>

Church KDW, Matte J-M, Grant JWA (2022) Territoriality modifies the effects of habitat complexity on animal behavior: a meta-analysis. *Behavioural Ecology* 33(2): 455-466. <https://doi.org/10.1093/beheco/amac003>

Chock RY, Clucas B, Peterson EK, Blackwell BF, Blumstein DT, **Church K**, Fernández-Juricic E, Francescoli G, Greggor A, Kemp P, Pinho G, Sanzenbacher P, Schulte BA, Toni P (2021) Evaluating potential impacts of solar power facilities on wildlife from an animal behavior perspective. *Conservation Science and Practice* 3(2): e319. <https://doi.org/10.1111/csp2.319>

Church KDW, Janisse K, Nguyen-Dang L, Heath JW, Heath DD, Semeniuk CAD (2021) Rearing conditions differentially affect behavioural phenotypes of male 'jack' and 'hooknose' chinook salmon and their sisters in both fresh and salt water. *Canadian Journal of Fisheries and Aquatic Sciences* 78(1): 18-31. <https://doi.org/10.1139/cjfas-2020-0052>

Church KDW, Grant JWA (2019) Effects of habitat complexity, dominance and personality on habitat selection: ideal despotic cichlids. *Ethology* 125(11): 832-845. <https://doi.org/10.1111/eth.12938>

Church KDW, Grant, JWA (2019) Ideal despotic distributions in convict cichlids (*Amatitlania nigrofasciata*)? Effects of predation risk and personality on habitat preference. Behavioural Processes 158: 163-171. <https://doi.org/10.1016/j.beproc.2018.12.002>

Church KDW, Grant JWA (2018) Does increasing habitat complexity favour particular personality types of juvenile Atlantic salmon (*Salmo salar*)? Animal Behaviour 135: 139-146. <https://doi.org/10.1016/j.anbehav.2017.11.006>

Church K, Iacarella JC, Ricciardi A (2017) Aggressive interactions between two invasive species: the round goby (*Neogobius melanostomus*) and the spinycheek crayfish (*Orconectes limosus*). Biological Invasions 19: 425-441. <https://doi.org/10.1007/s10530-016-1288-x>

In prep (full manuscript drafts available upon request)

Church KDW, Aguilar Melo AR, Asselin H, Turgeon K *In prep* The inherent deception of habitat compensation, biodiversity offsets and the NNL policy.

Invited Talks and Seminars

April 24, 2025, “Fish Personality, Conservation Behavior & Two-Eyed Seeing in Conservation”
Job Talk, Missouri State University, Springfield, Missouri

July 24, 2024, “Fish habitat compensation projects in Eeyou Istchee: Cree perspectives”
Regional Forum, Mistissini Lodge, Mistissini, Eeyou Istchee

June 23, 2024, “Introduction to the Great Lakes”, “Horizon Scans”
ABS Conservation Committee Workshop: Conservation Behavior in the Great Lakes, Animal Behavior Society (ABS), London, ON, June 2024

April 12, 2024, “The predictive power of personality for hatchery-raised Atlantic salmon”
Biology Seminar Series, Western Kentucky University, Bowling Green, Kentucky

February 5, 2024, “Fish personality, conservation behavior & two-eyed seeing in conservation”
Job Talk, University of Madison-Wisconsin, Madison, Wisconsin

February 12, 2024, “Fish personality, conservation behavior & two-eyed seeing in conservation”
Job Talk, California State University, Chico, Chico, California

July 14, 2023, “Effects of mining activity and habitat compensation on aquatic ecosystems”
ABS Conservation Committee Special Symposium: Conservation behavior as a tool to reduce the effects of anthropogenic stressors, Animal Behavior Society (ABS), Portland, Oregon

Conference Presentations and Posters

Church KDW, Seymoure BM, Jenks SM, Kohn NR, Mandrak NE, Smith NS, Bednekoff PA, Brownscombe JW, Bzonek, PA, Kemp P, Larocque SM, Midwood JD, Neff BD, Semeniuk CAD, Swaisgood RR, Wilson EC, Zhou W, McPhee ME, Ricciardi A “The importance of animal behavior to conservation in the Laurentian Great Lakes: an expert consensus of key issues” (Talk) Animal Behaviour Society (ABS) Baltimore, Maryland, July 2025 (International)

Church K*, Nguyen-Dang L, Potter K, Bergner S, Neff B, Semeniuk CAD “The impacts of personality on antipredator behaviour & social learning in hatchery-raised juvenile Atlantic salmon” (Talk) & **Church K***, Aguilar Melo AR, Asselin H, Turgeon K “The inherent deception of habitat compensation, biodiversity offsets, and the No Net Loss policy” (Talk) Society for Canadian Aquatic Sciences (SCAS) Hamilton, ON, February 2025 (National)

Church K*, Aguilar Melo AR, Krupa A, Morin G, Stevens T, Asselin H, Turgeon K “Cree perspectives on fish habitat compensation projects in Eeyou Istchee” (Talk) Ecological Society of America (ESA) Long Beach, California, August 2024 (International)

Church K*, Nguyen-Dang L, Potter K, Bergner S, Neff B, Semeniuk CAD “Personality, antipredator behaviour and social learning in hatchery-raised juvenile Atlantic salmon” (Talk) Animal Behavior Society (ABS) London, Ontario, July 2024 (International)

Church K*, Aguilar Melo AR, Krupa A, Morin G, Stevens T, Asselin H, Turgeon K “Cree perspectives: performance of fish habitat compensation in Eeyou Istchee” (Poster) Groupe de recherche interuniversitaire en limnologie (GRIL) Sherbrooke, Quebec, March 2024 (Provincial)

Church K*, Aguilar Melo AR, Krupa A, Morin G, Stevens T, Asselin H, Turgeon K “Cree perspectives on fish habitat compensation projects in Eeyou Istchee” (Talk) Society of Canadian Aquatic Sciences (SCAS) Fredericton, New Brunswick, February 2024 (National)

Church K*, Aguilar Melo AR, Krupa A, Guth E, LeBlanc K, Salt M-J, Asselin H, Turgeon K “Traditional knowledge perspective of the performance of fish habitat compensation projects in Eeyou Istchee” (Poster) Society of Canadian Aquatic Sciences (SCAS) Montreal, Quebec, February 2023 (National)

Church K*, Aguilar Melo, AR, Krupa A, Guth E, LeBlanc K, Salt M-J, Asselin H, Turgeon K “Traditional knowledge perspective of the performance of fish habitat compensation projects in Eeyou Istchee” (Poster) Groupe de recherche interuniversitaire en limnologie (GRIL) Montreal, Quebec, February 2023 (Provincial)

Church K*, Railsback S, Semeniuk C “Consumption of microplastics by rainbow trout (*Oncorhynchus mykiss*) in a fictional stream” (Presentation) & **Church K***, Aguilar Melo AR, Krupa A, Guth E, LeBlanc K, Salt M-J, Asselin H, Turgeon K “Traditional knowledge perspective of the performance of fish habitat compensation projects in Eeyou Istchee” (Poster) Société Québécoise pour l’Étude Biologique du Comportement (SQEBC) Gatineau, Quebec, November 2022 (Provincial)

Church K*, Railsback S, Semeniuk C “Predicting population level effects of microplastics ingestion on the behaviour of stream-dwelling rainbow trout (*Oncorhynchus mykiss*) using inSTREAM 7” (Presentation) Ecological Society of America (ESA) + Canadian Society for Ecology and Evolution (CSEE) Montreal, Quebec, August 2022 (International)

Church K*, Matte J-M, Grant J “A meta-analysis of habitat complexity and behavior for territorial and non-territorial animals” (Presentation) Animal Behavior Society (ABS) Virtual Meeting, July 2022 (International)

Church K*, Semeniuk C “Using ABMs to predict population-level effects of microplastics on stream-dwelling Salmonids” (Presentation) Animal Behaviour Society (ABS) Virtual Meeting, August 2021 (International)

Church K*, Semeniuk C “Predicting population level effects of microplastics ingestion on the behaviour of fishes” (Presentation) Canadian Conference for Fisheries Research (CCFFR), Virtual Meeting, February 2021 (National)

Church K*, Nguyen-Dang L, Neff B, Semeniuk C “Is personality in hatchery Atlantic salmon (*Salmo salar*) associated with metabolic rate and growth? (Presentation) Animal Behaviour Society (ABS) Virtual Meeting, July 2020 (International)

Church K*, Nguyen-Dang L, Neff B, Semeniuk C “Does personality in hatchery Atlantic salmon (*Salmo salar*) predict life history and metabolic rate?” (Presentation) Canadian Conference for Fisheries Research (CCFFR) Halifax, Nova Scotia, January 2020 (National)

Church K*, Nguyen-Dang L, Neff B, Semeniuk, C “The predictive power of personality for hatchery raised Atlantic salmon” (Presentation) Animal Behaviour Society and International Ethological Conference (Behaviour) Chicago, Illinois, July 2019 (International)

Church K*, Janisse K, Forest A, Heath J, Heath D, Semeniuk C "Behavioural phenotypes of sneaker male Chinook salmon in fresh and saltwater" (Presentation) & **Church K***, Janisse K, Nguyen-Dang L, Neff B, Semeniuk C "The predictive power of personality for hatchery raised

Atlantic salmon (*Salmo salar*)" (Poster) Canadian Conference for Fisheries Research (CCFFR) London, Ontario, January 2019 (National)

Church K*, Grant J “A meta-analysis of the effects of habitat complexity and territoriality on behaviour” (Presentation) Ecology and Evolutionary Ethology of Fishes (EEEF) Montreal, Quebec, June 2018 (National)

Church K*, Grant J “Ideal despotic distributions in convict cichlids (*Amatitlania nigrofasciata*)? Effects of habitat complexity & personality” (Presentation) Quebec Centre for Biodiversity Science (QCBS) Montreal, Quebec, December 2017 (Provincial)

Church K*, Grant J “The role of dominance, predation risk, and personality on the territorial behaviour of convict cichlids (*Amatitlania nigrofasciata*) in open and complex habitats” (Poster) Behaviour Conference, Estoril, Portugal, July-August 2017 (International)

Church K*, Grant J “Personality of wild juvenile Atlantic salmon (*Salmo salar*) in complex and open habitats: Implications for restoration” (Presentation) Canadian Conference for Fisheries Research (CCFFR) Montreal, Quebec, January 2017 (National)

Church K*, Grant J “Ideal free or ideal despotic? Territorial behaviour of the convict cichlid (*Amatitlania nigrofasciata*) in complex and open habitats” (Presentation) Quebec Centre for Biodiversity Science (QCBS) Montreal, Quebec, December 2016 (Provincial)

Church K*, Grant J “Personality of wild juvenile Atlantic salmon (*Salmo salar*) in complex and open habitats” (Presentation) European Conference for Behavioural Biology (ECBB) Vienna, Austria, July 2016 (International)

Church K*, Grant J “Restoring Atlantic salmon (*Salmo salar*) streams by adding structure: Implications of personality” (Presentation) Quebec Centre for Biodiversity Science (QCBS) Montreal, Quebec, October 2015 (Provincial)

Church K*, Ricciardi A “Antagonistic interactions between an invasive fish and an invasive crustacean” (Poster) Canadian Aquatic Invasive Species Network (CAISN) Conference Halifax, Nova Scotia, May 2008 (National)

Scholarships, Awards & Grants (total: \$192 500 CAD & \$40 000 USD)

Striped Bass otolith microchemistry analysis	2025-2026	\$40 000
Oklahoma Department of Wildlife Conservation (ODWC)		(USD)

Mitacs Accelerate Internship Partnership with Department of Fisheries and Oceans (DFO), Cree Trappers Association (CTA), and Cree Nation Government	2022 – 2024	\$120 000 (CAD)
Mitacs Accelerate Internship Partnership with <i>rare</i> Charitable Research Reserve	2021	\$15 000 (CAD)
Concordia Accelerator Award School of Graduate Studies, Graduate Awards	2017	\$5 000 (CAD)
Concordia Conference and Exposition Award School of Graduate Studies, Graduate Awards	2016, 2017	\$1 000 (CAD)
Student Conference Travel Support Faculty of Arts and Science, Concordia University	2016, 2017	\$500 (CAD)
Frederick Lowy Scholars Fellowship Concordia University Entrance Scholarship	2013 – 2016	\$45 000 (CAD)
Arts and Science Class of 1966 Award McGill University	2009	\$4 000 (CAD)
Entrance Scholarship University of Guelph	2003 – 2004	\$2 000 (CAD)

Media

Equity for early-career researchers in fisheries and aquatic science
Canadian Science Publishing Blog, September 26, 2025 <<https://blog.cdnscepub.com/equity-for-early-career-researchers-in-fisheries-and-aquatic-science>>

The Deal with Animals – Anthropogenic Change series, 2024 <www.thedealwithanimals.com>

Conservation for Conservation – Dr. Kathleen Church on Eating Microplastics
rare Charitable Research Reserve, raresites.org, 2022
<<https://www.youtube.com/watch?v=SYnrklM3TVA&list=PLLesisN70YguF49BK0Dd-UoFO6O0fzLrO&index=2>>

Personality cult: do fish sort into habitats based on personality?
Habitat Section of the American Fisheries Society. By Lauren Flynn, July 3, 2018.
<<https://habitat.fisheries.org/personality-cult-do-fish-sort-into-habitats-based-on-personality>>

Reviewing

Ecology and Evolution

Behavioral Ecology

Aquaculture Research

Aquatic Living Resources

Canadian Journal of Zoology

Supervisory Experience

Co-supervisor, Honours thesis project (BIOL 490), Concordia University, 2016 – 2017

Co-supervisor, Honours thesis project (BIOL 490), Concordia University, 2016

Supervisor, CEGEP research project, Concordia University, 2016

Volunteer Supervisor, Grant Lab

Concordia University, 2015 – 2016; Catamaran Brook Field Station, Summer 2015, 2016

Teaching Experience

Instructor, General Biology II (BIO122)

Department of Biology, Missouri State University, Fall 2025

Workshop Organizer & Facilitator, “Conservation Behavior in the Great Lakes”

ABS Conservation Committee, ABS 2024 Conference in London, ON

Invited Teaching Demonstration, “Introduction to Population Dynamics”

California State University, Chico, February 2024

Workshop Instructor, “Generalized Linear Mixed Models (GLMM)”

Quebec Centre for Biodiversity Research (QCBS), Concordia University, 2018

Guest lecture, “Dietary Sustainability”, Introduction to Sustainability

Guest lecture, “Cephalopods”, Invertebrate Biology

Guest lecture, “Sexual Selection”, Evolution

Guest lecture, “Community Ecology”, Ecology and Biodiversity

Department of Biology, Concordia University, Spring 2014, 2016, 2017; Fall 2015

Teaching Assistantship, Introductory Biology

Teaching Assistantship, Biostatistics

Department of Biology, Concordia University, Fall 2016

Teaching Assistantship, Organismal Biology

Teaching Assistantship, Animal Diversity

Department of Biology, McGill University, Fall 2007 – 2009; Winter 2008

Outreach

Intern, *rare* Charitable Research Reserve 2021 – 2022

Position Overview: I developed and delivered educational and outreach deliverables (virtual activities for students in middle or high school, in-person camp activities, talk geared toward adults) to inform members of the public of all ages about the drastic impacts of microplastics

Service

Team member, planning committee for 2024 regional forum Mistissini 2024

Team lead, planning committee for ABS CC all-day workshop ABS 2024

Session organizer & chair for special session: Conservation Behaviour SCAS 2024

Team member, planning committee for CC special symposium ABS 2023

Team member, planning committee for conference
(JEDI committee, special session: partnerships with Indigenous communities) SCAS 2023

Team member, planning committee for conference SQEBC 2022

Society Memberships

Fisheries Society of the British Isles (FSIB) 2023 – Present

Society of Canadian Aquatic Sciences (SCAS) 2022 – Present

Member of ABS Conservation Committee Board 2021 – Present

Animal Behaviour Society (ABS) 2019 – Present

Société Québécoise pour l'Étude Biologique du Comportement (SQEBC) 2013 – Present

Quebec Centre for Biodiversity Science (QCBS) 2013 – 2018