The University of British Columbia

Curriculum Vitae for Faculty Members

Date: Oct 22, 2026
(Indicates new since April 1, 2025)

1. Surname: Taylor **Given names: Eric Burke**

2. Department/School: Zoology

3. FACULTY: Science

4. PRESENT RANK: **Professor Emeritus** **SINCE**: Sept 1, 2025

Professor, Department of Zoology	July 2005-Sept 2025
Interim Director, Beaty Biodiversity Museum	Jan. 2025 – Dec. 2025
Director, Beaty Biodiversity Museum (BBM)	Sept. 2015 - July 2020
Interim Director, BBM	May 2013 - Sept. 2014
Acting Director, Cowan Tetrapod Collection, BBM	July 2010 - June 2011
Associate Director, Biodiversity Research Centre	Sept. 2004 - April 2013
Director, Fish Collection, BBM	Dec. 1999 – Dec. 2025

5. POST-SECONDARY EDUCATION

University or Institution	Degree	Subject Area	Dates
Queen's University (Biology)	NA	Life Sciences	1977-79
University of British Columbia (Zoology)	B.Sc. (Hon., UBC)	Zoology	1979-81
University of British Columbia	M.Sc.	Zoology	1984
University of British Columbia	Ph.D.	Zoology (evolutionary ecology and genetics)	1989

Special Professional Qualifications

6. EMPLOYMENT RECORD

(a) Prior to coming to UBC

University, Company or Organization	Rank or Title	Dates
Molecular Genetics Laboratory, Pacific Biological Station, Nanaimo	Visiting Research Scientist	1991-1993
Department of Biology and Marine Gene Probe Laboratory, Dalhousie Univ., Halifax	Post-doctoral Fellow	1989-1991

(b) At UBC

Rank or Title	Dates
Assistant Professor (without review – Stacie Award replacement)	July 1, 1993 - June 30, 1996
Instructor (tenure-track)	July 1, 1996 - June 30, 1997

Assistant Professor (tenure-track)	July 1, 1997 – June 30, 2000
Associate Professor (tenured)	July 1, 2000 – June 30, 2005
Associate Director, UBC Biodiversity Research Centre	July 1, 2003 – April 30, 2013
Professor	July 1, 2005 – Sept. 1, 2025
Professor Emeritus	Sept. 1, 2025
Director, Beaty Biodiversity Museum	May 1, 2013 – Sept. 2014; Sept. 2015-July 2020
Interim Director, Beaty Biodiversity Museum	Jan. 2025-Dec. 2025

(c) Date of granting of tenure at UBC: July 1, 2000

LEAVES OF ABSENCE:

1. Sept. 1, 2022-August 31, 2023, Auckland, New Zealand
2. Sept. 1, 2014-August 31, 2015, School of Biological Sciences, University of Queensland, Brisbane, Australia
3. July 1, 2002-June 30, 2003, Centre for Tropical and Mediterranean Ecology and Ichthyology, CNRS, University of Perpignan, Perpignan, France

8. AWARDS AND DISTINCTIONS

(a) Awards for Teaching (indicate name of award, awarding organizations, date)

Killam Faculty of Science Teaching Award Nominee, Autumn 2013 (declined nomination)
Killam Faculty of Science Teaching Award Nominee, Spring 2008

(b) Awards for Scholarship (indicate name of award, awarding organizations, date)

Certificate of Achievement Award, American Fisheries Society (BC-WA Chapter), 2025
Killam Faculty Research Fellowship, 2002-2003
Advanced Level Scientific Stay (SSHN) Fellowship (France, EGIDE), 2002-2003

Academic awards and distinctions (prior to final degree):

University of B.C. Graduate Fellowships, 1985-88.

Academic Awards and distinctions (subsequent to final degree):

Elected President of the C*anadian Conference for Fisheries Research*, Vancouver, 2002
Nominated, *Dr. J. C. Stevenson Award*, Canadian Journal of Fisheries and Aquatic Sciences, 2002
Murray A. Newman Award for Research (Vancouver Public Aquarium, 1998)
Government of Canada Visiting Scientist Fellowship, 1991-93
NSERC Postdoctoral Fellowship, 1989-91
Florence M. Christie Research Fellowship in Biology (New Brunswick Museum, Saint John, N.B.), 1991

(c) Awards for Service (indicate name of award, awarding organizations, date)

Outstanding Reviewer, 2017. *Canadian Journal of Zoology*
Canada Foundation for *Innovation Leaders Opportunity Fund Award*, 2008

(d) Other Awards

Elected as a Fellow of the *Royal Canadian Geographical Society*, November 2016

9. TEACHING

(a) Areas of special interest and accomplishments in undergraduate teaching:

My areas of expertise in teaching include molecular population genetics and ecology, biostatistics, zoogeography, systematics and evolutionary genetics. As a zoologist, I have a particular expertise in the evolutionary ecology and genetics of fishes – the largest group of vertebrates. My teaching philosophy emphasizes a partnership in learning between instructor and student. As an instructor, I provide the necessary background information on issues and controversies and available resources that students need to explore (construct, test and evaluate) hypotheses in evolution and ecology. I stimulate independent thinking by extensive use of the primary literature and burgeoning internet resources so that students are motivated to extend their learning beyond the lecture room either individually or in small groups. I believe that students learn the most if they are motivated to think and work independently via the use of projects, tutorial assignments, and term papers. I also encourage spontaneous exchanges and discussions by posing questions in class. I try to use humour responsibly in class to project an enthusiasm for biology and science in general. I emphasize science in my areas of expertise as a "way of knowing" rather than just a collection of unconnected facts. For instance, some of the courses that I teach/taught (e.g. Biology 465 and 413) have large descriptive components, but I strive to emphasize what generalities can be reached or hypothesized about from such descriptive material. My exams and assignments are "problem-based" to assess students' abilities to generate and test hypotheses and to think critically within specific areas.

(b) Courses Taught at UBC: Summary

Biometrics (Bio. 300) six times
Evolutionary Ecology (Biol. 418) twice
Population Genetics (Biol. 434) three times
Diversity and Evolution of Fishes (Biol. 426/465) continuing annually since 2000
Directed Studies in Biology (Biol. 448) seven times
Directed Biological Research (Biol. 449) five times
Advanced Ecology (Zool. 502) once
Applied Population Genetics (Zool. 510) twice
Topics in Conservation Genetics (Zool. 524) four times
Zoogeography (Biol. 413) eleven times
Biology Honours Student Colloquium (447) continuing (2010-)

In addition to these major course commitments; I also taught 3 week components of Zoogeography (Biol. 413) twice (1997-98, 1998-99), gave guest lectures in Zool. 502 five times, ran a journal club (Behavioural ecology and evolution of fish) four times to date.

Note: Years indicated as XXXX – and in **boldface**, indicate ongoing commitments unless otherwise indicated.

Session	Course Number	Scheduled Hours	Class Size	Hours Taught			
				Lectures	Tutorials	Labs	Other

2010-2023	Biol. 447	3/wk	30-40	3			2
2002-2010	Zool. 524	3/wk	14	3/wk			1/wk
2000-2024	Biol. 465	6wk	25-30	2/wk	1/wk	4wk	2/wk
1999-2009, 2013[1]	Biol. 413	3/wk	124	3/wk			2/wk
1998-99	Zool. 502	3/wk	10	3/wk			
1997-98, 1999-00	Zool. 510	3/wk	12	2/wk			
1996-97, 1999-00	Biol. 426	7/wk	25-30	3/wk		2/wk	2/wk
1995-97	Biol. 449	33 hrs	22				33 hrs
1993-97	Zool. 500	1.5/wk	5				
1993-97	Biol. 448	6/wk	5	2/wk	2/wk		2/wk
1993-96	Biol. 300	7/wk	240	3/wk		2/wk	2/wk
1993-96	Biol. 434 lecture	7/wk	150	3/wk	4/tut		
1993-96	Biol. 418	6/wk	20	2/wk	2/wk		2/wk

[1]**Filled-in** for another faculty member would became ill at the start of the term

1. <u>Diversity and Evolution of Fishes</u> (Biology 465): Systematics, taxonomy, evolutionary ecology, genetics and evolution of fishes.

Biology 465 (see http://www.zoology.ubc.ca/~etaylor/426outl.html) explores the systematics, ecology, and evolution of fishes, the most diverse group of vertebrates. My emphasis on a process-based approach has integrated the class better with other evolution-type course in the Biology Teaching Program, which ,I feel in large part, helps to explain my continuing high ratings for this course (> 4.1). Finally, I include a field component to the course involving a collecting trip to the Bamfield Marine Station or the lower Fraser River. This is typically a great success, particularly as it represents, for many students, their first experience with the diversity of habitats and species in a natural setting. The web-based notes for this course have been recognized as excellent and some have been incorporated in a teaching database in 2002 by the "SciLinks program", a service of National Science Teachers Association (USA) that links teachers and students to web-based resources.

2. **<u>Honours colloquium</u> (Biology 447)**: A lecture/tutorial mentoring-style class to introduce and discuss fundamentals of research planning, execution, statistical analysis, ethics, funding, and communication for students engaged in honours biology research projects. Also, I act as Chair for approximately one-half of all honours exams each April (ranges from 10-20 chaired exams per year).

3. <u>Zoogeography</u> (Biology 413): Patterns and processes involved in the past, current, and future distribution of animals and their attributes in space and time.

Biology 413 is an advanced course in biogeography with a medium enrollment (typically 55-60) serving a diverse group of students in the ecology, conservation, and animal biology programs. Initially, I contributed three week lecture components to the course. Also, I developed a hypothetical distribution problem for a class project that encouraged students to work independently in small groups to solve real problems in zoogeography. My emphasis has been on phylogenetic biogeography and island biogeography to develop analytical approaches to hypothesis testing in zoogeography. Eventually, the became my sole responsibility for eleven years during which I completely revised the course content to emphasize a more evolutionary perspective (e.g., by including a section on geographic aspects of speciation theory). My aim was to better

integrate Biology 413 with other courses in the evolutionary program in Biology (e.g. Biol. 336, 418, 430, 434). In addition, I developed a section dealing with "applied'' aspects of biogeography in response to the emerging interest of many students on the applications of biogeographic theory to conservation (e.g. global warming, reserve design). Some of my course notes were selected for use on *Wikipedia's* website (e.g., http://en.wikipedia.org/wiki/Zoogeography).

4. Biometrics (Biology 300): Introduction to probability and statistical analysis in biological research. Biometrics is a large (enrollment 230-270) core course in the biology program that introduces students to statistical theory and analysis in biological research through lectures and computer-based tutorial sessions. It is also taken by a number of graduate students each year. Historically, this course has usually been unpopular with students (as well as with some instructors). Typically, the reputation of Biometrics suffered from "mathphobia" of many biology students. My philosophy was to emphasize the critical role that statistical analysis plays in hypothesis testing and biological research and to always emphasize the *biological questions* that statistical analysis can help answer. I strove to incorporate many examples from different fields of biology (e.g., analysis of behavioural studies to analysis of DNA sequences) to keep the interest level of a diverse groups of students high with just enough theory so that statistical analyses could be responsibly applied. Although a challenging course to teach, Biometrics was also immensely satisfying because each year that I taught the class I could feel the students begin to acknowledge the elegance and utility of many kinds of analyses in biology. High (> 4.2) teaching evaluations reflected the general appreciation for this approach by students, at least one of whom by the end of the year rated Biometrics as his/her "favourite course in four years at UBC".

5. Population genetics (Biology 434): Principles of the origin and maintenance of genetic variation within and among populations.

Population genetics is an advanced course in the theoretical and applied aspects of genetic variation within and among populations. In recent times, this course has suffered from a lack of consistency in course organization and structure having been taught by a variety of different instructors (from at least two different faculties). Upon assuming responsibility for this course during the winter 1994/95 session, I completely revised the course content and organization with the principle aim of better integrating the substantial theoretical foundations of population genetics with explicit examples from natural populations. I developed a completely new set of lectures, problem sets, and exams for this course that better reflected the consequences of the nature and structure of real populations for genetic variation and evolution. I also integrated computer projection simulations of key principles (e.g. genetic drift as a function of population size) into the lectures using the "GeneWright" software (developed at the University of Pennsylvania) to help students better visualize evolution in "real time". I received high ratings in this class and the enrollment increased from about 40 to nearly 170 students during the three years that I taught it suggesting that students appreciated the changes that I made.

6. Evolutionary ecology (Biology 418): Introduction to the evolutionary consequences of ecological interactions.

Biology 418 is an advanced course on ecological interactions (e.g. predation, competition) and their evolutionary consequences in real natural populations. I taught this course while its originator was on leave. I integrated some components that better reflected my own areas of research expertise (e.g. molecular approaches to questions in evolutionary ecology). I also integrated new tutorial topics (e.g. molecular assays of paternity, molecular studies of natural selection in nature) such that students would have better contact with me and my areas of expertise specifically.

7. Directed Biological Studies (Biology 448)

I have supervised at least one Biology 448 project for each of my six years at UBC. Typically, these projects involve relatively small-scale molecular analyses of genetic variation in natural populations. Students are required to collect and analyze their data and to provide a written report on their results within the context of a larger (and ongoing) parent study. In this way, students are motivated to learn about scientific research in the broad sense of hypothesis testing and data analysis while learning specific skills within a limited time frame. The generality of such molecular-based directed studies is reflected in the diversity of organisms that these students have worked on (hares, salamanders, and fish).

8. Directed Biological Research (Biology 449)

Over the years, I have supervised five B.Sc. honours thesis projects .While the general questions asked in these thesis projects have been generated by myself, I place great emphasis on each student designing the specific approaches to answer the questions posed (e.g. organizing field trips, sample collection, choosing among molecular assays, data analysis options) to encourage independent thinking. These projects typically require an initial heavy training commitment by myself (students are not simply foisted upon graduate students) as I am committed to teaching through joint research projects. All 449's completed to date have been published in leading journals in the fields of molecular ecology, phylogeography, and fish biology (see Taylor *et al.* 1997b; and Redenbach and Taylor 1999; Altman and Taylor 2003; Johnson and Taylor 2004; Dennert et al. 2016).

(c) Graduate teaching philosophy and courses taught:

I strive to help graduate students achieve their potential by again emphasizing a partnership in research between supervisor and student. Within the framework of a research partnership, I believe in promoting considerable freedom in graduate students to develop their own strategies and tactics within a general research question. I promote frequent supervisor-student interaction by working alongside them in the lab, solving and discussing problems together, and through the use of our weekly lab discussion group (BEEG, "Behavioural Ecology and Evolution of Fish"). In addition, I provided a crucial teaching service for ecology and evolution students who are supervised primarily by other faculty, but who I train and who use my lab for molecular aspects of their thesis research (see below and Hoysak *et al.* 2004.).

1. Topics in conservation genetics (Zoology 524): Selected topics in conservation genetics.

This course was developed and taught in collaboration with Sally Aitken of the Dept. of Forest Sciences. The course introduced graduate students to the major issues and controversies associated with the use and interpretation of genetic theory, methods, and data in conservation biology. Topics included issues dealing with inbreeding depression, population structure, mutation in conservation, outbreeding depression, hybridization, and statistical inference. It consisted of a lecture session on the first meeting day of the week (to introduce a topics and its theory) and presentation/discussion of assigned papers from the literature on the other meeting day. The course was designed to meet the growing needs of an increasing number of students in Zoology, Botany, and Forestry who are using genetic data in a conservation context for their thesis research.

2. Advanced ecology (Zoology 502): Advanced topics in ecology

Zoology 502 is an advanced ecology seminar course that is typically taken by all new graduate students entering the Zoology program. The course is taught by different instructors each year on a rotational basis and during 1998/99 I taught it along with Dr. D. Schluter. Heavy emphasis was placed on reading topical primary literature with students presenting critiques of each paper on a rotational basis to develop critical thinking and oral communication skills. In addition, I contributed lectures on phylogenetic analysis of animal distribution and speciation, hitherto relatively unexplored topics in this central graduate course in Zoology.

3. <u>Applied population genetics</u> (Zoology 510): Statistical and molecular techniques in the genetic analysis of populations.

Zoology 510 was a new course first offered in 1997/98 by myself and Drs. Carol and Kermit Ritland of the Department of Forest Sciences. We conceived and designed the course to address a critical need for many students in our departments: to participate in a course that introduces the basic theoretical and applied aspects of conducting population genetic studies on natural populations that utilize molecular methodology and statistical analyses. Many new students in Zoology are undertaking molecular studies of ecology and population genetics of natural populations with little or no formal training in molecular biological analysis. Our new course strives to give students this background information in a lecture and seminar setting. We developed three modules: (I) basic laboratory techniques (e.g. DNA extractions to PCR-based microsatellite analysis), (II) statistical aspects of molecular analysis (e.g. statistics of population structure and relatedness analysis), and (III) applications in natural populations (e.g. phylogeography and analysis of hybrid zones). I was primarily responsible for component (III) and developed lectures and assignments to illustrate basic analytical techniques and resources in phylogeography and hybrid zone analysis.

(d) Graduate Students Supervised

<u>Summary:</u> Seven students over the last five years (since and including 2019)

Student Name	Program Type	Year		Principal Supervisor	Co-Supervisor(s)
		Start	Finish		
Amy (Di) Liu	MSc	2019	2022	E.B. Taylor	
K. Zinn	MSc	2018	2020	E.B. Taylor	J. Rosenfeld
J. Heavyside	MSc	2017	2021	E. B. Taylor	
S. Sullivan	PhD	2017	2023*	E.B. Taylor	
Karen Frazer	PhD	2015	2019 (withdrew)	E.B. Taylor	
Shuang Liu	PhD	2015	2023	E.B. Taylor	J. Richards
A. DeBruyn	MSc	2015	2019	E.B. Taylor	
Amanda Moreira	MSc	2012	2014	E.B. Taylor	
Matt Siegle	PhD	2012	2017	E.B. Taylor	M. O'Connor
Shannan May-McNally	MSc	2011	2014	E.B. Taylor	
Jennifer Ruskey	MSc	2011	2014	E.B. Taylor	
Monica Yau	MSc	2010	2013	E.B. Taylor	
Carla Crossman	MSc	2010	2012	E.B. Taylor	L. Barrett-Leonard
Stefan Dick	MSc	2009	2014	E.B. Taylor	J. Shurin
J-S. Moore	PhD	2008	2012	E.B. Taylor	
Matt Siegle	MSc	2008	2011	E.B. Taylor	J. Shurin
Gerrit Velema	MSc	2007	2010	E.B. Taylor	J. Rosenfeld (MoE)
Damon Nowosad	MSc	2007	2011	E.B. Taylor	
Chad Ormond	MSc	2007	2010	E.B. Taylor	J. Rosenfeld (MoE)
Jonathan Mee	PhD	2006	2011	E.B. Taylor	
Patricia Woodruff	MSc	2006	2010	E.B. Taylor	
Les Harris	MSc	2005	2008	E.B. Taylor	
Sara Northrup	MSc	2005	2008	E.B. Taylor	

Wendy Tymchuk	PhD	2003	2006	P. Schulte/R.H. Devlin	E.B. Taylor (for one yr)
Katriina Ilves	PhD	2002	2007	E.B. Taylor	
Emily Rubidge	MSc	2000	2003	E.B. Taylor	
Anna Elz	MSc	2000	2003	E.B. Taylor	
Ramona deGraaf	MSc	2000	2006	E.B. Taylor	
Patrick Tamkee	MSc	2000	2006	E.B. Taylor	
Charles Darveau	PhD	1999	2004	P.W. Hochachka/P. Schulte	E.B. Taylor (for 1 yr)
Allan Costello	PhD	1999	2006	E.B. Taylor	
Janelle Curtis	MSc	1998	2000	E.B. Taylor	W.E. Neill
Zoë Redenbach	MSc	1997	2000	E.B. Taylor	
John Hagen	MSc	1997	2000	E.B. Taylor	
Mike Stamford	MSc	1997	2002	E.B. Taylor	
Jennifer McLean	MSc	1996	1999	E.B. Taylor	
Stephen Latham	MSc	1996	2002	E.B. Taylor	
Jason Ladell	MSc	1996	2003	E.B. Taylor	
Megan McCusker	MSc	1995	1999	E.B. Taylor	J.D. McPhail
Claire Thompson	MSc	1992	1995	J.D. McPhail	E.B. Taylor

***Upon mutual agreement, S. Sullivan was assigned a new supervisor**

Graduate Student Committees Served On

Summary: Ten committees served on over the last five years (since and including 2021)

Student Name	**Program Type**	**Year**		**Principal Supervisor**	**Co-Supervisor(s)**
		Start	**Finish**		
R. Arnold	PhD	2024		A. Vincent (IOF)	
C. Raymond	PhD	2022	2025	M. O'Connor	
A. Kanigan	PhD	2020	2025	S. Hinch (Forest Sci.)	
C. Nelson	PhD	2018	2023	C. Brauner	
C. McMaster	MSc	2020	2023	P. Schulte	
P. Templeton	MSc	2021	2023	A. Vincent (IOF)	
G. Monnet	PhD	2017	2022	J. Richards	J. Rosenfeld
J. Cristiani	PhD	2018	2022	M. O'Connor	
R. Chudnow	PhD	2012	2021	S. Hinch (Forest Sci.)	
E. Nikelski	MSc	2018	2021	D. Irwin	
K. Stark	PhD	2019	2021	M. O'Connor	
M. Sackville	PhD	2010	2020	C. Brauner	
Matt Gilbert	PhD	2016	2020	A Farrell	
J. Shu	MSc	2016	2019	C. Brauner	
A. Kanigan	MSc	2017	2019	S. Hinch (Forest Sci.)	
A.Herbert	MSc	2018	2019	S. Hinch (Forest Sci.)	
M. Ore	MSc	2019	2019	D. Irwin	
E. Stump	MSc	2016	2018	A. Vincent/S Otto	J. Rosenfeld
K. Thompson	PhD	2016	2018	D. Schluter	

R. Shartau	PhD	2011	2017	C. Brauner	
M. Bartlett	MSc	2014	2017	M. Krokosek (UoT)	E. Taylor
S. Rudman	PhD	2010	2016	D. Schluter	
D. Rennison	PhD	2010	2016	D. Schluter	
S. Miller	PhD	2010	2016	D. Schluter	
Z. Chen	PhD	2012	2016	A. Farrell	
M. Champion	MSc	2012	2016	B. Shadwick	J. Rosenfeld
D. Haggerty	PhD	2010	2015	J. Shurin	M. O'Connor
A. Porter	MSc	2012	2015	D. Irwin	
D. Allen	MSc	2010	2015	J. Richards	J. Rosenfeld
J. Hamilton	PhD	2009	2014	S. Aitken (Forest Sci)	
J. Lawson	MSc	2012	2014	A. Vincent	
J. Mackenzie	PhD	2007	2013	T. Schulte	
K. Jefferies	PhD	2007	2013	S. Hinch (Forest Sci)	
S. Avery-Gomm	MSc	2010	2013	J. Richardson (Forest Sci.)	J. Rosenfeld
B. van Poorten	PhD	2005	2012	C. Walters	
S. McAdam	PhD	2006	2012	C. Walters	
A. Dalziel	PhD	2005	2012	P. Schulte	
Matt Casselman	MSc	2009	2012	T. Farrell	
R. Markel	PhD	2005	2011	J. Shurin	
K. Magnasson-Ford	MSc	2009	2011	S. Otto	
A. Belsford	PhD	2005	2010	D. Irwin	
E. Rechisky	PhD	2003	2010	C. Walters	
T. Ingram	PhD	2006	2010	J. Shurin	
T. Leeuwen	MSc	2008	2010	J. Richards	J. Rosenfeld
M. Melnychuk	PhD	2004	2009	C. Walters	
J. Korman	PhD	2005	2009	C. Walters	
S. Ayers	MSc	2006	2009	A. Rosenberger (U Alaska-Fairbanks)	
J. Clarke	MSc	2007	2009	D. Schluter	
A. Wilson	PhD	2004	2008	P. Arcese (Forest Sci.)	
S. Jeffery	MSc	2005	2008	R. DeWreede (Botany)	
J. Weir	PhD	2001	2007	D. Schluter	
S. Murray	MSc	2004	2007	J. Innes (Forest Res. Mgmt.)	
A. Waldron	PhD	2002	2007	D. Schluter	
D. Toews	PhD	2005	2007	D. Irwin	
A. Rush	PhD	2005	2007 (withdrew)	D. Irwin	
A. Albert	PhD	2001	2006	D. Schluter	
Amanda Brown	PhD	1996	2005	M. Adamson	
R. Johnson	PhD	2003	2005 (withdrew)	B. Devlin/S. Otto	
Harvey Su	MSc	2001	2004	H. Kasinsky	
E. Gillis	PhD	1999	2003	C. Krebs	
N. Amatya	MSc	2000	2003	K. Cheng, Agri. Sci.	
Y. Berube	MSc	2000	2003	K. Ritland, Forest Sci.	

C. Bessy	MSc	1999	2003	R. Liley	
W. Gapare	PhD	2000	2003	S. Aitken (Forest Sci.)	
Tammy Laberge-MacDonald	MSc	1996	2002	M. Adamson	
C. Matheson	MSc	2000	2002	M. Healey	
M. Harrison	PhD	1998	2002	B. Crespi, SFU	
L. Mehnranvar	MSc	1999	2002	M. Healey	
C. Bristow	MSc	2002	2002 (withdrew)	S. Lindstrom (Botany)	
Drew Hoysak	PhD	1994	2001	N.R. Liley	
David O'Brien	MSc	1995	2001	J.D. McPhail	
John Volpe	PhD	1996	2001	B. Glickman, U.Vic.	
Steve Vamosi	PhD	1996	2001	D. Schluter	
Kyle Young	PhD	1997	2001	S. Hinch, Forest Sci., UBC	
J. Taylor	MSc	1997	2001	J.D. McPhail	
Howard Rundle	PhD	1998	2001	D. Schluter	
D. Haggarty	MSc	1998	2001	M. Healey	
C. Burton	MSc	1998	2001	C. Krebs	
E.-J.G. Kwon	MSc	1998	2001	T. Grigliatti	
Peter Troffe	MSc	1994	2000	J.D. McPhail	
Allyson Miscampbell	MSc	1996	2000	M. Adamson	
Janelle Curtis	MSc	1997	2000	W.E. Neill	
Michelle Roberge	MSc	1997	2000	S. Hinch	
Y. Chan	MSc	1997	2000	P. Arcese, Forest Sci.	
D. Ally	MSc	1998	2000	K. Ritland, Forest Sci.	
Shelly Boss	MSc	1996	1999	J. Richardson, Forest Sci., UBC	
C. Tovey	MSc	1996	1999	A. Lewis	
Diana Dobson	MSc	1996	1999	S. Aitken, Forest Genetics, UBC	
Jason Mayden	MSc	1997	1999	K. Ritland , Forest Genetics, UBC	
Ernest Keeley	PhD	1994	1998	J.D. McPhail	
Uli Reinhardt	PhD	1994	1998	M. Healey	
James Baxter	MSc	1993	1997	J.D. McPhail	
K. Haman	PhD	2012	Withdrew	A. Trites	
W. Cheung	MSc	2012	2017-withdrew	T. Schulte	R. Devlin

Graduate students, postdoctoral fellows, and research assistants (RA) who I have trained and who used my lab on a regular to sustained basis

Student	**Degree**	**Supervisor**	**Thesis/research topic**
P. Tamkee	RA	N. Liley	Paternity assignment in rainbow trout
J. Curtis	MSc	W. Neill	Population structure in salamanders
D. Cooper	MSc	J. Myers	Genetic differentiation in caterpillar viruses

C. Burton	MSc	C. Krebs	Genetic variation in snowshoe hares
P. Troffe	MSc	J. McPhail	Molecular assays of whitefish ecotypes
D. O'Brien	MSc	J. McPhail	Genetic divergence of bull trout populations
G. Haas	PhD	J. McPhail	Hybrid origin of dace species
D. Hoysak	PhD	N. Liley	Paternity assignment in sockeye salmon
E. Gillis	PhD	C. Krebs	Paternity in ground squirrels
A. Brown	PhD	M. Adamson	Phylogenetic analysis and population structure in parasites
T. Vines	PDF	D. Schluter	Stickleback evolution
J. Weir	PhD	D. Schluter	Avian phylogenetics
L. Barrett-Lennard	PhD	J. Smith	Paternity and population structure in killer whales
J. Gow	PhD	Taylor	Genetic assays of fish populations

Undergraduate Honours theses supervised: **(5 total, all published their theses in the primary literature)**

Student	**Date**	**Thesis topic**
Allison Dennert	2014/2015	Ecology of sympatric char in Alaska
Lisa Johnson	2000/2001	Stickleback phylogeography
Alon Altman	1999/2000	Population structure of tidepool sculpins
Zoe Redenbach	1996/1997	Phylogeography of Arctic grayling
Sara Harvey	1994/1995	Genetic variation among kokanee ecotypes

Postdoctoral Fellows and research associates trained: **12 total**

1994-1996 Dr. Thuan Nguyen: Evolution of annualism in cyprinodont fishes inferred from DNA-based phylogeny. Dr. Nguyen was officially a PDF of Dr. D. Jones in our department. Dr. Nguyen and I embarked on a collaborative project during which I trained him in molecular phylogenetic analysis (see Murphy *et al.* 1999).

1998-1999 Dr. Ernest Keeley. Partitioning of components of biodiversity in rainbow trout. Dr. Keeley is now a full Professor at the Department of Biological Sciences, Idaho State University, Pocatello, Idaho. Dr. Keeley is continuing to collaborate with me on our joint rainbow project on rainbow trout biodiversity.

1998-2000 Dr. Andrew Hendry. Gene flow selection balance in parapatric populations of stickleback. Dr. Hendry was awarded the Young Investigators Prize (American Society of Naturalists, 2001) based in part on our work. He is now a full Professor at McGill University, and we continued our collaboration on sticklebacks for several years (see Hendry *et al.* 2001, 2002; Hendry and Taylor 2004).

2003-2005 (PDF) Dr. Jennifer Gow. University of Aberdeen, Aberdeen Scotland. Historical and contemporary hybridization in sticklebacks.

2003-2005 Dr. Jennifer McLean. University of Washington, Seattle. MHC variation and reproductive success in steelhead trout.

2003-2006 Dr. Jonathan Witt. University of Guelph. Phylogeography of pygmy whitefish.

2003-2007 R. Aidan Martin, MSc, *ReefQuest Centre for Shark Research*, Vancouver. Conducting research on systematics of sharks and rays in the UBC Fish Museum (see Martin, AR, 2004, *J. Fish Biol*. **64**, 711-716).

2004-2005 Dr. Eloísa Revaldaves. Universidade Estadual de Maringa (State University of Maringa, Brazil). Five month genetic training fellowship from Brazilian government.

2006-2009 *Dr. Jennifer Gow*. UBC. Historical and contemporary hybridization in sticklebacks; conservation genetics of steelhead trout.

2007 Ms. Nicole Farrell, UBC. Stickleback genetic analysis (Science Horizons Program Environment Canada)

2017-2022 Dr. Jared Grummer, UBC. Genomic signatures of selection in rainbow trout

2018-2026 *Dr. Armando Geraldes*, UBC. Genomic analysis of salmonid fishes
2026-ongoing *Dr. Armando Geraldes*, Honourary RA. Site C Genomic Monitoring

2025-ongoing *Dr. Natalia Bercovich* (30%), Site C Genomic Monitoring

2021-2023 *Ms. Alisha Goodbla*. RA, UBC. Shared with P. Schulte

Visiting Scientists:

1995 Professor Ruth Phillips, Univ. of Wisconsin - Milwaukee: Karyotyping of char species and their hybrids

2001 Professor Jan Heggenes, Norway: Genetic structure of Norwegian populations of European grayling (see Heggenes *et al.* 2003)

2002 Professor Keisuke Takata, Shinsu University, Japan: Stickleback physiology

2004 Professor Jan Heggenes, Norway: Conservation genetics of British Columbia steelhead trout

2005 Dr. Kitty Mecklenberg, Alaska Museum (Bering Sea Project)

2008 Noel Alfonso, National Museum of Nature, Ottawa (Flatfish systematics)

2008 Dr. Kitty Mecklenberg, Alaska Museum (Bering Sea Project)

2009 Dr. Kitty Mecklenberg, Alaska Museum (Bering Sea Project)

2012 Dr. Jen Zhao, South China Normal University (Fish systematics)

2013 Dr. Jan Heggenes, Telemark University Norway (Fish genetics)

Visiting students*:*

2006 Ms. Astrid Lilliestrale, BSc, Uppsala University, May-August research internship (genetic analysis of sympatric char populations)

2007 Mr. Lasse Jensen, PhD, Århus University, Århus Denmark, June – Dec 2006 (genetic analysis of Danish brown trout)

2008 Mr. Will Warnock, MSc, Department of Biology, University of Lethbridge, June 2007 (genetic analysis of Alberta bull trout)

2009 Mr. Scott Ayres, MSc, Department of Biology, University of Alaska-Fairbanks, April 2008 (phylogenetic position of Alaskan North Slope "Old Man Char") (official committee member)

2016-17 Mr. Mack Bartlett, MSc, Department of Ecology and Evolutionary Biology, University of Toronto

Undergraduate students:

I have supervised at least one undergraduate student as a research assistant for each year that I have been at UBC including several summer **NSERC/BRITE USRA** award holders. Several have gone on to pursue graduate degrees (e.g. **A. Aspinall**, 2006 U. Waterloo), C. Gerlinsky 2008, 2009 (UBC), C. Chan 2010 (Columbia), **K. Janot** 2011 (UBC), A. Roman 2012, Rebecca Siefert 2012 (UVic), Rebecca Piercey (2013) **Allison Dennert** (2014-2015), Kathleen Higgins, Elias Elhaimer, and Scott Brydle (2015-2016), **Jessica Shen** (2019, SuRE awardee); Kately Nikiforuk (2019), Marie Sandler (International Work Learn) (2024-2025); Co-Op students: Emma Laqua (Jan-April '22), Faith Pan (Sept. 2022-Jan. 2023), Brian Wu (Jan 2023-Sept.2023), Aimen Sajid (Jan – May 2023), Kat Ryjkova (Jan-May 2025). A video featuring co-op involvement can be seen **HERE** (https://www.youtube.com/watch?v=8inzPkXrCLc).

***Integrated Sciences Mentor*:**

I have been a mentor in the UBC Integrated Sciences Degree Program since 2011. I have mentored 13 students so far (all graduated, zero current).

***High School Mentoring*:**

I have worked with high school students per year since 2008 (four in total). This involves a range of activities from the loan of museum specimens to class, to "professional experience days" to formal mentoring of students in small research projects (e.g., Prince of Wales Mini School, two students, spring 2009).

(e) Continuing Education Activities

(f) Visiting Lecturer (indicate university/organization and dates)

1. Bamfield Marine Station, Bamfield, B.C. June 10-18, 2001. Taught the molecular population genetics component of the *Fourth H.R. MacMillian Coastal Biodiversity Workshop and Symposium*

2. Faculty of Sciences, University of Perpignan, Perpignan, France, November, 2002

3. University of Umëa, Umëa, Sweden, May, 2003

(g) Other: I supervised a research technician (Mr. Allan Costello), who worked for me on population genetic studies of bull trout and cutthroat trout funded by the B.C. Ministry of Fisheries. Mr. Costello worked for me since January of 1997-Sept 1999 and became a PhD student under my supervision in September 1999. I also supervised another research technician,

Mr. Patrick Tamkee beginning in November 1999 who later completed an MSc under my supervision and is now the Zoology Aquatics Technician.

SCHOLARLY AND PROFESSIONAL ACTIVITIES

(a) Areas of special interest and accomplishments

Research background

I have been conducting independent research as a graduate student, postdoctoral fellow, and faculty member in the general fields of evolutionary ecology and genetics. I was trained as an evolutionary ecologist with a special interest in investigating the role of natural selection in driving interpopulation divergence in morphological, behavioural, and life history traits, and how this relates to how new species arise ("speciation") and the interactions between species (e.g., hybridization). This area of research is a fundamental one within evolutionary biology, which is the unifying discipline in biology. As evolutionary biologists we try to resolve processes that have led to the tremendous diversity in natural biological systems. For example, what constitutes a "species" and how species are formed represent two central and unresolved issues in evolution. Theories on the origin of species were formalized most famously by Darwin, but we still lack a complete understanding of various aspects of speciation: (i) how long does the process take? (ii) is geographic isolation always necessary or can species arise from within a single interbreeding population? (iii) what is the role of ecology in speciation? (iv) how much and what kinds of genetic change at the molecular level are necessary for species formation? Using a combination of molecular and ecological approaches, I address these fundamental uncertainties by asking the following questions: (i) what can analysis of population relationships tell us about the geographic mode of speciation (i.e., can we test for sympatric speciation), and (ii) what is the nature of reproductive isolation between species and how did such isolation evolve? Answers to these questions are essential to understand the generation of species diversity and contribute to the conservation of biodiversity. I work on north temperate freshwater fish, a superb model system to address evolutionary diversification owing to the natural fragmentation of watershed ecosystems and because of the recent colonization of many of these habitats since the end of the last ice age (< 10,000 years ago). The postglacial nature of many populations means that we can still observe the process of diversification in some populations, some of which have only recently come into contact. Whenever such distinct genomes come into contact there is the potential to watch "evolution in action".

Initially I worked on geographic variation using species of Pacific salmon and sticklebacks as model systems. This research (Taylor and McPhail 1985a,b, 1986; Taylor and Larkin 1986; Taylor 1988, 1990a,b) made significant contributions to understanding how natural selection has promoted within-species diversification in these fishes. These contributions have been widely recognized, for example in a major review of differentiation in vertebrate populations (Garland and Adolph. 1991 *Ann. Rev. Ecol. Syst*. 22: 193-228) and when I was invited write or contribute to two reviews of local adaptation in salmonid fishes (Taylor 1991a, and Fraser et al. 2011), reviews that together have received over 1,360 citations as of March 2021.

As a postdoctoral fellow (1989-93) I extended my expertise to molecular genetic assays of divergence to address the role of historical geographic isolation in divergence and the relationship between divergence at the level of the phenotype (morphology, behaviour) and divergence at the molecular level. I found strong evidence of sympatric speciation (the existence of which is very controversial in evolutionary biology) in smelt (*Osmerus,* Taylor and Bentzen 1993a,b) and I demonstrated the role of geographic isolation in divergence in sockeye salmon (*Oncorhynchus,* Taylor *et al*. 1996). Both studies were published in the journal *Evolution*, and each has received over 40 citations to date. My work on smelt was cited as recent evidence for the likelihood of speciation in sympatry (see review by Bush 1994, *Trends in Ecology and Evolution* 8:285-288). My projects on smelt and salmon have provided some of the best evidence in fish for parallel evolution, i.e., the idea that evolution may be "repeatable" in similar environments.

Current Research Program:

As a faculty member at UBC, I continue to investigate the fundamental issues of resolving the mechanisms that drive population divergence and speciation and, more recently, the importance of such information in biodiversity conservation. Much of my work focuses on coexisting species of sticklebacks, which represent a recent divergence (since the ice sheets retreated 10,000 years ago), and two species of char, which have an older origin (1-2 million years ago). Both systems represent species that can still exchange genes and provide superb opportunities to study the processes involved in divergence. I focus on four major areas of research:

(1) **Evolutionary mechanisms driving natural population diversification**

My students and I employ molecular markers to understand how natural populations of fish are subdivided genetically and the relative roles of genetic drift, migration, and natural selection in structuring populations. Identifying the roles of these processes in natural population divergence contributes to evolutionary biology particularly because they are often cast as opposing paradigms of divergence (e.g., Dick et al. 2014). Other work (*Keeley* et al. 2005, 2007; May-McNally et al. 2014; *Grummer* et al. 2019, 2021) has extended traditional approaches by linking genetic subdivision at neutral and adaptive loci, differences in phenotypes and habitat structure across populations of salmonids to disentangle their influences on population diversification, with important conservation implications (e.g., Taylor et al. 2021). Many of our molecular studies involve species for which genetic markers are not available. Consequently, we have developed our own set of markers (e.g., for various species at risk, Curtis and Taylor 2000; O'Bryhim et al. 2013; Beasley et al. 2014), at least some of which are being used in other labs in the USA and Europe. A major collaboration continues with Dr. Andrew Hendry (McGill University) to study the interaction between gene flow and selection in pairs of sticklebacks that inhabit lakes and inlet streams (see Thompson et al. 1997; *Hendry* et al. 2002; *Hendry* and Taylor 2004). In collaboration with Dr. Troy Day (University of Toronto), we developed theoretical models of how gene flow and selection interact to influence divergence (see Hendry et al. 2001). We have tested these models both with both my own data collected in sticklebacks (see Taylor and McPhail 2000; *Hendry* et al. 2002) and data published by others. We have found that our models make strikingly better fits to empirical data. This work has recently expanded to include the role of contemporary and historical physical landscape features in structuring populations genetically (e.g., Costello et al. 2003; Taylor et al. 2003; Taylor et al. 2011; Moore et al. 2015; Ruppert et al. 2017). This work has made major contributions to understanding the processes of divergence in populations interacting among themselves and with their physical environment and I was invited to contribute to a recent review on the subject (*Grummer* et al. 2019). I have expanded my approach to include genomic approaches (RNAseq) to investigate the molecular basis of ionoregulatory adaptation in sculpin (with S. Liu and J. Richards).

(2) **Molecular zoogeography of a regional fauna**

Understanding how geography may have driven the divergence of major evolutionary groups is a central goal of "phylogeography". Using molecular markers in phylogenetic reconstruction, my lab has been a major contributor to phylogeography by addressing questions such as: (i) how many distinct lineages exist in the geographic range of particular species? (ii) did these lineages originate from different geographic areas and what were their colonization routes? (iii) is there evidence that the groups resolved at the molecular level are distinct at the organismal level (and perhaps be incipient species)? In several papers in the major specialist journals such as *Molecular Ecology*, *Evolution*, *Can. J. of Fisheries and Aquatic Sciences* (e.g., Taylor et al. 1994, 1996, 1999; Redenbach and Taylor 1999; Stamford and Taylor 2004; Ilves and Taylor 2009; Mee and Taylor 2012; Woodruff and Taylor 2013; Blanchfield et al. 2014; Taylor and May-McNally 2015; Taylor et al. 2015; Whitely et al. 2018), work from my lab has clearly demonstrated the importance of biogeographic isolation in structuring genetic variation in fishes. Recent work in my lab has contributed importantly to understanding of the evolution of salmonid fishes using phylogenomic approaches (Lecaudey et al. 2018; Weiss et al. 2020).

(3) **The where and how of speciation**

Speciation is considered complete when two populations are incapable of interbreeding or, if they do interbreed, genetic exchange is opposed by selection to the extent that the two populations remain as distinct

gene pools. Understanding speciation events is the most compelling problem in evolutionary biology. Populations that coexist as distinct gene pools but are still capable of some gene exchange provide superb opportunities to study speciation in progress. The sticklebacks and char that I work on represent systems that are helping to answer fundamental questions about species formation: (i) in what geographic context did the species originate (was geographic isolation necessary)? (iii) how long did speciation take? (iii) is the process repeatable? and (iii) what genetic and ecological factors can explain the persistence of distinct gene pools despite some interbreeding?

By examining DNA sequences and their geographic distributions I have tested hypotheses concerning whether sticklebacks species have arisen after a period of isolation or while associated in a common gene pool. Demonstrating how any particular pair of species has arisen would make a major contribution to evolutionary theory. My work on northern fishes (Taylor and Bentzen 1993a,b; Taylor *et al.* 1996; Taylor *et al.* 1997a,b; Taylor and McPhail 1999; Taylor and McPhail 2000) has been important in reinvigorating the roles of sympatric speciation and historical contingency in speciation and in highlighting the utility of this group of vertebrates in speciation research. My stickleback work (Taylor and McPhail 1999; Taylor and McPhail 2000) has further indicated the rapidity with which species can form and explicitly tested and supported the hypothesis of replicate (parallel) evolution. This work was cited in a special news report in *Science* (Volume **273**:1496-1502) and has been instrumental in providing a crucial phylogenetic framework for some related stickleback research conducted by colleagues (e.g. Dr. D. Schluter,. e.g., *Science* **287**:306-308; *PloS Biology* **2**:635-640, May 2004). The major volume on speciation cited my stickleback work as the best example of phylogenetic evidence for parallel speciation (see Coyne and Orr (2004) *Speciation*, Sinauer Assoc. 2004) and our work has led to major insights into processes of post-zygotic selection in hybrids (*Gow* et al. 2006, 2007; Taylor et al. 2012) as a way in which reproductive isolation can evolve.

My students and I also work on two species of char that hybridize along the coastal mountain range of northwestern Canada and the USA. Hybrid zones have long been recognized as "living laboratories" in evolutionary research, which can be used to address basic questions in population divergence and speciation (see *TREE* (2004) **19:** 198-207). We examine how the char hybrid zones are structured (i.e. are they structured by inherent genetic differences between the species or by the local ecological conditions?), and the genetic and ecological factors that prevent the collapse of these hybridizing species into a single gene pool. This research speaks to the very essence of how species distinctions are maintained in the face of gene flow – a fundamental unknown in evolutionary biology. The initial analysis of one hybrid zone was reported by Baxter et al. (1997), in which I provided the bulk of molecular data and analysis. This publication also was the first genetic data that substantiated the validity of recognizing the two char as distinct species - a longstanding issue in the biology of this group of fish with important consequences for their conservation in Canada and the USA. I view the char hybrid work as an area of growth for my laboratory (see Taylor et al. 2001; Hagen and Taylor 2001; Taylor et al. 2008; May-McNally et al. 2015b; Taylor 2016) where we are now applying genomic analyses (genotyping-by-sequencing - the basis of my successful 2018 NSERC DG renewal, collaborative work with *A. Geraldes*). It combines historical phylogenetic analysis with extant population genetic (Redenbach and Taylor 2002, 2003) and ecological analyses that will provide answers to key questions on the origin and conservation of species (Hansen et al. 2016). Our hybrid zone work also involves cases of artificial secondary contact between native and introduced fishes (e.g., Rubidge *et al*. 2001; Rubidge and Taylor 2004, 2005; Yau and Taylor 2013) and more recently provided evidence of repeated adaptive introgression (Bay et al. 2019). The generality of my impact on the evolutionary biology of northern fishes was explicitly recognized when I was asked by the editors of *Reviews in Fish Biology and Fisheries* to review the evolution and conservation of species pairs (Taylor 1999a, > 900 citation). In addition, I wrote a book chapter on the contributions of salmonid fishes to the study of evolutionary processes (Taylor 2004) and am currently involved in projects to complete a book on salmonid fishes of North America (Rosenberger et al. 2025) and a to chapters for a book on zoogeography and conservation of Canadian freshwater fishes (Taylor et al. 2023, Mandrak et al. 2023).

(4) Molecular contributions to conservation

Molecular assays of natural populations are increasingly viewed as important components of biodiversity conservation (e.g. Moritz and Faith 1998*, Molecular Ecology* **8**: 419-431). My work on population structure (Taylor et al*.* 2003; Taylor et al. 2013), phylogeography (Taylor *et al.* 1999; Mee and Taylor 2012), exotic species invasions and faunal homogenization (Volpe *et al.* 2000; Taylor 2004, 2010), and hybridization (Rubidge et al. 2001; Rubidge and Taylor 2004, 2005; *Gow* et al. 2006, 2007; Rudolfsen et al. 2019; Bay et al. 2019) has made important contributions to conservation of native Canadian fishes. For instance, our studies of hybridization between native westslope cutthroat trout and exotic rainbow trout in the East Kootenay region of BC (see Rubidge et al. 2001) was a major factor resulting in the cessation of stocking of rainbow trout in this region after 2002 (see also Yau and Taylor 2013). Phylogeographic and population genetic studies of native fishes (e.g., Taylor *et al*. 1999; McPhail and Taylor 1999; Taylor 2001; Taylor et al. 2011; Taylor et al. 2013) have been used to help establish conservation designations for threatened fishes. For example, justifications for the provincial "blue-listing" for bull trout in BC, the Threatened status of Lake Utopia dwarf smelt in New Brunswick, and the Endangered category (designations under Canada's *Species at Risk Act*) for Enos Lake sticklebacks, were all based, in part, on my research. The latter work (Taylor et al. 2006) was featured in *Current Biology Dispatch* (Seehausen [2006] **16**(9): 334-337) and *The New York Times* (May 23, 2006) and an August 2015 article in *New York Times Magazine*. The most recent analysis (Taylor and Piercey 2018) suggests that an Extinct assessment is warranted. Very recent work ranges from genetic assessments of population mixture that are actively being applied to problems in fishery mixture analyses (Taylor et al. 2019, 2021) to genomic approaches providing compelling evidence of parallel selection for heterospecific alleles in hybrid zones (Bay et al. 2019). My expertise and experience in these areas is reflected in my invitation to contribute to two review of genomics in conservation issues in aquatic (*Grummer* et al. 2019) and Arctic ecosystems (Colella et al. 2019) for *Trends in Ecology and Evolution*. We (myself and *A. Geraldes*) also have a major project with BC Hydro that is employing various genomic techniques to inform mitigation measures for the Site C Hydroelectric development in northeastern BC (see *Geraldes* and Taylor 2020, 2021).

(b) Research or equivalent grants (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC)

Summary: Five grants held over the last five years (2021).
Career total: > $4.0 million (sole PI), $48.6 million as part of team

Granting Agency	Subject	COMP	$ Per Year	Year(s)	Principal Investigator	Co-Investi-gator(s)
BC Ministry of Water, Land and Resource Stewardship	White sturgeon parentage analysis	NC	$12,000	2026	E. Taylor	
BC Ministry of Environment and Climate Change	Shuswap Lake Bull Trout Population Genomics	C	$28,000	2023-2024	E. Taylor	

BC Ministry of Environment and Climate Change	White sturgeon population genomics	C	$76,000[5]	2021-2024	E. Taylor	
BC Min. of Environment	White sturgeon hatchery modelling project	NC	$55,000	2021-2023	Taylor	M. Baskett (UC-Davis)
NSERC Individual Discovery Grant	Phylogeny and speciation within a regional fauna	C	$62,300	2018-2024	Taylor	
Alberta East Slopes Fish Habitat and Native Fish Recovery Research Fund	Rising to the challenge: recovering native salmonids in the Alberta east Slopes in the face of multiple stressors	C	$499,072	2018-2021	J. Post (U Calgary)	E. Taylor and 5 others
BC Min. of Environment	Salish sucker hypoxia and stream flows	C	$11,660	2018-2019	Taylor	
BC Ministry of Lands, Parks, and Resource Operations	Somass River steelhead trout genetics	C	$31,000	2018	E. Taylor	
Yukon Territorial Government	Lake trout genetics and telemetry	C	$25,000	2017	E. Taylor	
Freshwater Fisheries Society of BC	Kootenay Lake Rainbow Trout Genetics	NC	$15,000	2017	E. Taylor	
Genome Canada	Sustaining freshwater recreational fisheries in a changing environment	C	$4,437,261 ($708,934 for project lead by EBT)	2016-2019	P. Schulte	E. Taylor and 11 others
Freshwater Fisheries Society of BC	Kootenay Lake Rainbow Trout Genetics	C	$29,000	2016	E. Taylor	
Freshwater Fisheries Society of BC	Nechako/Fraser Bull Trout Genetics	C	$11,520	2016	E. Taylor	
BC Ministry of Environment	Population structure in Nechako River bull trout	NC	$22,500	2015	E. Taylor	

BC Ministry of Environment	Population structure in Nechako River bull trout	NC	$17,000	2014	E. Taylor	
Freshwater Fisheries Society of BC	Genetic management of rainbow trout broodstock lakes	C	$10,000	2014	E. Taylor	
BC Ministry of Environment	Genetic assessment of Enos Lake Threespine sticklebacks	C	$10,000	2014	E. Taylor	
Canadian Wildlife Federation	Molecular and morphological assessment of cryptic species in dace (*Rhinichthys*)	C	$9,300	2013	E. Taylor	
Parks Canada Agency	Genetic analysis of westslope cutthroat trout	C	$22,000	2013	E. Taylor	
Northern Scientific Training Program (Arctic Inst. of North America)	Hybridization in northern char	C	$2,500	2013	S. McNally	Taylor
UBC Faculty of Science	General research support as Director of Beaty Biodiversity Museum	NC	$20,000	2013	E. Taylor	
NSERC Individual Discovery Grant	Phylogeny and speciation within a regional fauna	C	$50,000	2012-2017	Taylor	
Alberta Sustainable Development and Parks Canada	Genetic assessment of native status of rainbow trout in Alberta's Athabasca River system	C	$11,800	2012-2013	Taylor	
Parks Canada	Genetic analysis of hybridization in westslope cutthroat trout	C	$8,600	2012	E. Taylor	
Northern Scientific Training Program (Arctic Inst. of North America)	Hybridization in northern char	C	$2,800	2012	S. McNally	Taylor

Canadian Wildlife Federation	Physiology and landscape genetics of trout hybridization	C	$13,200	2011-2012	E. Taylor	
Habitat Conservation Trust Fund	UBC Fish Museum Internship	C	$14,000	2011-2012	E. Taylor	
NSERC (RTI)	Ultracold freezer for Beaty Biodiversity Museum	C	$15,327	2011-2012	E. Taylor	
Canadian Wildlife Federation	Abundance estimates for BC freshwater fishes at risk	C	$11,500	2011-2012	E. Taylor	
BC Hydro	Peace River Site C Fish Genetics	C	$74,000	2010-2012	E. Taylor	
Alberta Sustainable Resource Development	Genetic status of Alberta westslope cutthroat trout	C	$14,950	2010-2011	Taylor	
Indian and Northern Affairs Canada	Dispersal in Arctic char	C	$4,000	2009 2012	J-S. Moore	Taylor
NSERC Strategic Grant	Effectiveness, ecosystem consequences and connectivity of BC Rockfish Conservation Areas	C	$99,250	2008-2010	Shurin	Taylor and five others
Triton Environmental Consultants Ltd	Genetic monitoring of recovery of fishes in the Cheakamus River	C	$32,500	2008-2009	Taylor	
Alberta Sustainable Development and Parks Canada	Genetic status of westslope cutthrout trout in Canada's National Mountain Parks	C	$70,000	2008-2009	Taylor	
NSERC Equipment Grant	DNA analysis infrastructure	C	$17,500	2008-2009	Taylor	
Canada Foundation for Innovation	Global Change Assessment Laboratory	C`	$325,000	2008-2009	Richards	Farrell, Taylor
Parks Canada	Genetic status of westslope cutthrout trout in Canada's National Mountain Parks	C	$36,215	2008-2009	Taylor	

BC Ministry of the Environment	Lamprey research: Phase II: Genetic analysis	C	$15,000	2008	Taylor	
NSERC	Molecular phylogeny and speciation of a regional fish fauna	C	$50,400	2007-2011	Taylor	
Columbia Basin Fish and Wildlife Compensation Program	Genetic structure of Arrow Lakes kokanee	C	$15,000	2007	Taylor	
Environment Canada	Science Horizons Grant (salary for mentoring young scientist)	C	$12,000	2007	Taylor	
BC Ministry of the Environment	Stickleback hybridization and critical habitat	C	$37,800	2007	Taylor	
BC Ministry of the Environment	Lamprey research: Phase I	C	$15,000	2007	Taylor	
Habitat Conservation Trust Fund	Thermal Hot Springs: unique habitats for lake chub?	C	$7,900	2006-2007	Taylor	
Northern Research Institute	Research Fellowship	C	$1,200	2006-2007	Taylor	
World Wildlife Fund Canada	Taxonomic status of the Cultus Lake Pygmy Sculpin	C	$9,500	2006-2007	Taylor	
Parks Canada	Genetic status of westslope cutthrout trout in Canada's National Mountain Parks	C	$36,000	2006-2007	Taylor	
Klohn-Crippen-Berger, Ltd	Genetic analysis of Dolly Varden in the Toodoggone/Thutade watersheds	C	$14,600	2006	Taylor	
BC Ministry of the Environment	Upper Fraser River bull trout genetics	C	$10,000	2006	Taylor	
Living Rivers Program (BC MWLAP)	Genetic analysis of hatchery populations of steelhead trout	C	$57,000	2005-2007	Taylor	
Peace-Williston Pgm.	Peace-Williston Pygmy Whitefish Genetics	C	$20,000	2005-2007	Taylor	

World Wildlife Fund Canada	Genetic analysis of endangered sticklebacks	C	$16,600	2005-2007	Taylor	
NSERC Research Tools and Infrastructure – Category 1	Ultracold freezers	C	$47,148	2005	MC Whitlock	EB Taylor and five others
BC Habitat Conservation Trust Fund	Lake trout genetic analysis in "Southern Lakes"	C	$5,000	2004-2005	Taylor	
US Fish and Wildlife Service	Standardization of Genetic Data on Bull Trout	C	$10,000	2004-2005	Taylor	
Columbia Basin Pgm.	Microsatellite analysis of piscivorous rainbow trout	C	$6000	2004-2005	Taylor	
Department of Indian Affairs and Northern Development	Genetic structure of broad whitefish in the Mackenzie Valley (Pipeline Readiness Program)	C	$12,820	2004-2005	Gwich'in Renewable Resource Board (Les Harris)	Taylor
Dept. Fish. Oceans Canada	Life History of Duncan Lake Dolly Varden	C	$20,000	2004	Taylor	
Agricultural University of Norway	Genetic signatures of hatchery supplementation in steelhead trout[3]	C	$5,300	2004	Heggenes	Taylor
Parks Canada (Jasper)	Genetic analysis of native rainbow trout	C	$8,300	2003-2005	Taylor	
B.C. Habitat Conservation Trust Fund	Genetic analysis of coastal bull trout	C	$5,000	2003-2004	Taylor	Taylor
B.C. Habitat Conservation Trust Fund	Landscape genetic analysis of coastal cutthroat trout	C	$25,000	2003-2004	A.B. Costello (PhD student of EBT)	
Parks Canada	Genetics of native char in National Parks	C	$39,000	2002-2006	Taylor	
NSERC	Molecular phylogeny and speciation of a regional fish fauna	C	$54,000	2002-2006	Taylor	

Canada Foundation for Innovation and BCKDF (50% split)	An Integrated Biodiversity Laboratory at UBC[3]	C	$33 million	2002-2005	ARE Sinclair	E.B. Taylor and 8 others
Canada Foundation for Innovation	The Origin and Persistence of Species	C	$3.1 million	2002-2005	D. Schluter	E.B. Taylor and 6 others
NSERC Equipment	An automated genotyper	C	$138,054	2002	Taylor	
B.C. Ministry of Fisheries	Rainbow trout population structure	C	$26,000	2001-2002	Taylor	
Alberta Dept. of Renewable Resources	Genetic introgression of native rainbow trout by exotic populations	C	$19,000	2001-2002	Taylor	
B.C. Habitat Conservation Trust Fund	Population structure and status of westslope cutthroat trout	C	$48,000	2001-2002	Taylor	J.S. Baxter
Sto:lo First Nation Fisheries	Lower Fraser River Cutthroat trout population structure	C	$4,000	2001-2002	Taylor	
Columbia-Kootenay Fish. Renewal Partnership	Population origins of Genelle Sidechannel rainbow trout	C	$23,500	2001-2002	Taylor	
Science Council of BC	Development grant for CFI Proposal: An integrated biodiversity laboratory	C	$20,000	2001	Taylor	
B.C. Ministry of Fisheries	UBC Fish Museum Curation	C	$12,000	2001	Taylor	
Global Forest	Westslope cutthroat trout genetic conservation	C	$7,500	2001	Taylor	
B.C. Ministry of Fisheries	Population structure of coastal cutthroat trout	C	$65,000	2000-2002	Taylor	
Mirkwood Ecological Consultants	Molecular identification of westslope cutthroat trout x rainbow trout hybrids	NC	$10,000	1999-2001	Taylor	

BC Ministry of Fisheries	Rainbow trout population structure and habitat complexity	C	$34,000	1999-2001	Taylor	
Columbia Basin Pgm	Yellowfin rainbow trout genetic analysis	C	$18,500	1999 - 2000	Taylor	
Parks Canada	Genetics of bull trout in National Parks	C	$20,000	1998-2002	Taylor	
NSERC	Molecular phylogeny and speciation of a regional fish fauna	C	$32,340	1998-2002	Taylor	
BC Min. of Env.	Bull trout metapopulation analysis	C	$51,000	1997-1999	Taylor	
Peace-Williston Pgm.	Peace-Williston Grayling Genetics	C	$35,000	1996-99	Taylor	
Columbia Basin Pgm.	Arrow Lakes bull trout conservation genetics	C	$25,000	1996-99	Taylor	
Columbia Basin Pgm	Arrow Lakes bull trout life-history	C	$75,000	1996-99	Taylor	
BC Min. of Env.	Provincial Bull Trout genetics survey	NC	$17,000	1996-97	Taylor	
BC Min. of Env.	Okanagan Lake kokanee genetic analysis	C	$12,000	1995-96	Taylor	
BC Min. of Env.	Genetic structure of rainbow trout	C	$60,000	1995-96	Taylor	
BC Min. of Env.	Duncan Lake bull trout genetics	C	$5,000	1995-96	Taylor	
DFO	Eulachon genetics[2]	NC	$10,000	1995-96	McPhail/ Taylor	
NSERC	Molecular phylogeny and speciation of a regional fish fauna	C	$24,000	1994-98	Taylor	
Skagit Envir. Endowment	The Skagit char project[1]	C	$35,000	1994-95	McPhail	Taylor
BC Min. of Env.	Phenotypic & genotypic conser-vation of rainbow trout populations in BC	C	$20,000	1994-95	Taylor	
BC Min. of Env.	Morphological & genetic differen-tiation - kokanee in Okanagan	C	$12,000	1994-95	Taylor	

BC Min. of Env.	Minisatellite DNA variation in Skeena River steelhead trout	C	$8,000	1994-95	Taylor	

(1) The Skagit Char project (with J.D. McPhail). J.D. McPhail wrote and administered the grant. I was, however, responsible for data collection, analysis, and report writing concerning the molecular identification of species and hybrids (approximately 50% of total effort).

(2) Eulachon genetics (with J.D. McPhail). J.D. McPhail administered these funds. I was 100% responsible for recruiting a graduate student (Ms. Jennifer McLean) for this project and for training her in molecular data collection and analysis. I subsequently supported the bulk of the project (McLean, MSc thesis 1999) on my NSERC operating grant (1996-1999).

(3) I wrote many of the sections of the grant dealing with molecular assessments of biodiversity as well as designed and compiled the equipment list. I also was one of four applicants to attend the "face-to-face" meetings with reviewers in Ottawa and Burnaby (for the BCKDF matching funds application).

(4) I was responsible for writing and supervising the parts of the grant associated with the genetic analysis and interpretation.

(5) Award increased by $22,000 in March 2023

(c) ***Research or equivalent contracts (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC).***

Granting Agency	**Subject**	**COMP**	**$ Per Year**	**Years (N when > 1)**	**Principal Investigator**	**Co-Investigator(s)**
BC Hydro	Site C Fish Genomics	C	$150,000	2025-2031	E. Taylor	Drs. A. Geraldes and N. Bercovich
Triton Consulting	Blackwater Fish Genetics Project. II	NC	$35,000	2024-2025	E. Taylor	Drs. A. Geraldes and N. Bercovich
British Columbia Conservation Foundation	Shuswap Char Genomic Analyses	C	$14,000	2023-2025 (2)	E. Taylor	
Palmer Environmental Consulting Group	Blackwater Fish Genetics Project	NC	$21,880	2022-2023	E. Taylor	

Fisheries and Oceans Canada	Rainbow trout genotyping	NC	$16,588	2022	E. Taylor	
BC Hydro	Site C Fish Genomics Phase II	NC	$212,000	2019-2025 (5)	E. Taylor	Dr. A. Geraldes (RA, UBC)
BC Hydro	Site C Fish Genomics: Phase I	NC	$82,000	2018-2021(3)	E. Taylor	Dr. A. Geraldes (RA, UBC)
AMEC Environmental	Kokanee genetic assessment	NC	$11,800	2013	E. Taylor	
Limnotek Environmental	Trout genetics	NC	$6,600	2013	E. Taylor	

(d) Invited Presentations

Summary: Four presentations over the last five years (2021)

Place	Date	Title
Bull trout workshop, Vancouver, BC (Am Fish. Soc)	March 2025	*A precis of bull trout evolution and genetics*
British Columbia Institute of Technology, Habitat Restoration Program	Dec. 2021 Nov. 2023	*Evolutionary marvels in BC freshwater fishes*
Natural Resources Seminar, University of Northern British Columbia	March 2021	*Genomic analysis of western char: insights into speciation and management options*
Institute of Oceans and Fisheries Seminar Series	March 2018	*Science in the service of Canadian freshwater fish species at risk*
Les Ecologists seminar series (SFU)	March 2018	*Conservation implications of genetic analysis of contact zones in fishes*
British Columbia Institute of Technology	February 2018	*Conservation assessment of Canadian species at risk: the steelhead trout emergency assessment*
Provincial Government Fisheries Meeting, Kelowna	January 2018	*Genetic and genomic analyses in the service of rainbow trout conservation*
University of Toronto (Inaugural Seminar in new Conservation Biology Series)	February 2016	*Science in the service of freshwater species-at-risk*
School of Biological Sciences, The University of Queensland, Australia	March 2015	*Contact zones in fishes: evolutionary inferences and conservation implications*
Canadian Section The Wildlife Society (Webinar, Nationwide, 123 registrants)	March 2015	*COSEWIC and Assessment of Species at Risk in Canada: Structure, Process, Science, and Challenges*
University of Toronto (Professional MSc Program)	February 2015	*COSEWIC and Assessment of Species at Risk in Canada: Structure, Process, Science, and Challenges*

Beaty Biodiversity Museum (visiting Fisheries students from Hong Kong University)	August 2014	*Biodiversity of BC Fishes: Implications for Evolution and Fisheries Management*
Pacific Biological Station, Dept. of Fisheries and Oceans, Nanaimo, BC	March 2014	*Science in the service of freshwater species-at-risk*
BC Government Fisheries Branch Bull Trout Management Plan Workshop	March 2013	*Why char are like onions: Peeling away the layers of char biodiversity & their implications for conservation with special reference to bull trout*
Canadian Section The Wildlife Society (Webinar, Nationwide, 90 registrants)	November 2012	*The Harper Government's Changes to the Federal Fisheries Act: Why They are Steps in the Wrong Direction*
Asia Pacific research Universities Conference on University Museums, Kyoto, Japan	September 2012	*The Beaty Biodiversity Museum at UBC: An experiment in Research, Curation and Public Outreach.*
Department of Arctic and Marine Biology, University of Tromso, Norway	August 2012	*Contact zones in fishes: evolutionary inferences and conservation applications*
Department of Biological Sciences, University of Alberta	February 2012	*Contact zones in fishes: evolutionary inferences and conservation applications*
Department of Forest Sciences UBC	March 2010	*Fifteen years of collaborative research on rainbow trout: implications for conservation prioritization*
Department of Ecology and Evolution, Univ. of Oslo	November 2008	*Contact zones in char and sticklebacks: implications for processes of speciation*
Evolutionary Applications Symposium, CSEE	May 2008	*Habitat integrity and genetic integrity in fishes*
UCLA Summit on human-mediated Environmental changes and evolution	January 2007	*Speciation in reverse in threespine sticklebacks (delivered by J. Gow).*
Dalhousie University	April 2005	*Double trouble: historical and contemporary hybridization in stickleback species pairs*
University of Northern BC and Peace-Williston Fish and Wildlife Compensation Program	February 2005	*Genetic and faunal analysis of diversity of BC freshwater fishes: implications for conservation of a faunal legacy*
University of Umëa (Sweden)	May 2003 September 2004	***1.*** *Evolutionary and conservation implications of hybrid zones in northwestern North American trout and char* ***1.*** *Molecular studies of hybridization in sticklebacks: the collapse of a species pair* ***2.*** *Genetic studies of char and grayling: implications for evolution and conservation*
University of Helsinki	April 2003	*Evolutionary and conservation implications of hybrid zones in northwestern North American trout and char*
University of BC	February 2002	*Double trouble II: Is the Enos Lake stickleback species pair collapsing?*
National Marine Fisheries Service, Seattle	February 2002	*Evolutionary inferences and conservation consequences of analyses of salmonid hybrid zones*

University of Victoria	November 2001	*Evolution in mixed company: genetic analysis of trout and char hybrid zones*
University of Nevada-Reno	April 2001	*Evolution in mixed company: ecological and genetic studies of char and trout hybrid zones*
UBC Comparative Physiology Series	February 1999	*Recent divergences in northern fishes*
UBC Conservation Science Seminar	February 1999	*Conservation genetics of western char*
Simon Fraser University	January 1999	*History and determinism prime stickleback speciation*
UC-Davis	October 1998	*Speciation scenarios in sticklebacks*
Dalhousie University.	September 1997	*Evolution of stickleback species pairs*
Laval University	September 1997	*Speciation in Gasterosteus: double invasions of sympatric specation*
Univ. of South Carolina	December 1993	*Molecular studies of speciation in fish*
Univ. of B.C.	January 1993	*Speciation in smelts, Osmerus*
University of Washington	November 1992	*Speciation and the endangered species act*
University of Victoria	March 1992	*Multiple origins of smelt ecotypes*

(e) Other

Invited Symposium lectures: **Once in the last five years (2021)**

Conference	**Date**	**Title**
American Fisheries Society, BC-WA Chapter (**Plenary)**	March 2025	Char genomics and speciation
Freshwater Conservation Canada Conference (Invited Plenary)	February 2025	Conservation genomics of native fishes (declined owing to scheduling conflict)
Selective Fishing Forum (BC Wildlife Federation)	March 2019	Emergency assessment of Thompson and Chilcotin rivers' steelhead trout
BC Nature Annual Meeting (**Keynote address**)	May 2018	Making real progress for Canadian species at risk: A Sisyphusian task
BC Wildlife Federation AGM	April 2018	The emergency assessment of Chilcotin-Thompson rivers steelhead trout by COSEWIC
Canadian Museum of Nature Symposium on Sustainability	February 2018	The state of our nature: species at risk assessment in Canada
BC Invasive Species Forum	February 2017	Invasive species in assessments of species-at-risk in BC
First Zoology Faculty Research Symposium	August 2014	Fun with fishes: divergence and speciation with implication for understanding evolution and effecting conservation
Artists for Conservation (North Vancouver, BC)	October 2013	Public outreach at the Beaty Biodiversity Museum
APRU Research Symposium on University Museums: Forming a University Museum Collection	September 2012	The Beaty Biodiversity Museum at UBC: An experiment in curation, research, and public outreach.

Network as the Core of Frontier Research. Kyoto, Japan (**invited**)		
Bull trout Symposium, Olympia, WA (**Keynote invited address**)	August 2012	Why char are like onions: Peeling away the layers of char biodiversity & their implications for conservation with special reference to bull trout north of the 49th parallel
ASIH Symposium, Vancouver , BC (invited)	August 2012	Minding the gap: can phenotypic plasticity help salmon persist in a changing climate?
Arctic grayling conservation conference (Trout Unlimited/Alberta Environment) (**Keynote address**)	June 2011	From Siberia to Swan Hills: Evolutionary genetics of Arctic grayling with relevance to COSEWIC assessments and SARA listing
Society for Experimental Biology, Sête, France	June 2010	Intraspecific variation at different spatial scales: implications for the origin and persistence of biodiversity. Invited speaker
American Fisheries Society Symposiums, Ottawa	August 2008	Homogenization and differentiation of Canadian Freshwater Fish Faunas: A Five Year Update.
Origin of Biological Diversity, Hokkaido University (Sapporo, Japan)	October 2007	Contact zones in char and sticklebacks in northwestern North America: implications for speciation.
Evolution in human-altered environments (UCLA)	Feb. 2007	Evidence for speciation in reverse in threespine sticklebacks (*Gasterosteus*) in altered lake communities
Bamfield Marine Station (Coastal Biodiversity Workshop)	June 2001	Molecular biodiversity of coastal fishes: implications for speciation and conservation
Fourth International Charr Conference (**Keynote address**)	June 2000	Ecological genetic interactions between native char of northwestern North America
Molecular Aspects of Conservation, Canadian Wildlife Service, Ottawa	December 1998	Nested analysis of genetic diversity in char
American Society of Ichthyologists and Herpetologists, Seattle, WA	June 1997	Microsatellites test speciation scenarios in sticklebacks
Society for the Study of Evolution, McGill University	July 1995	History of adaptive radiation in sticklebacks
Conservation Genetics of Salmon, National Marine Fisheries Service, Seattle	May 1995	Local adaptation and conservation in salmon

Symposia Organized

1. Co-chair: Changes to Canadian Freshwater Fish Diversity, 1973-2008. American Fisheries Society Symposium, Ottawa, August 19th, 2008.

2. Chair, Aquatic Conservation Session, Canadian Conference for Fisheries Research, Montréal, January 2007

3. *Third International Conference on Stickleback Behaviour and Evolution*, UBC, Vancouver, June 12-14, 1999. I organized and hosted this conference at UBC. The conference was attended by 90 people and included participants from Canada, USA, Europe, and Japan. I am presently editing a special volume of the journal *Behaviour* that will publish the proceedings from the conference. A special report on the conference was featured in *Trends in Ecology and Evolution,* 14: 460-461.

Contributed papers at conferences

Summary: One presentation over the last 5 years (2018, not including those of students or colleagues where I was a co-author)

Conference	Date	Title
Canadian Society for Ecology and Evolution Annual Meeting (delivered by G. Owen, UVic)	May 2026	Evidence for adaptive introgression in a Pacific Rockfish
30th International Congress for Conservation Biology, Kigali, Rwanda (delivered by JR Post coauthor)	Dec. 2021	Appropriate scale of biodiversity for assessment and protection of at-risk freshwater fishes in Canada
Eighth International Charr Conference, Tromsø, Norway	June 2015	Evidence for a contact zone in North Pacific Dolly Varden
Canadian Conference for Fisheries Research, Moncton, NB	January 2012	Contact zones in fishes: evolutionary inferences and conservation applications
Annual Meeting American Fisheries Society, 16-24 August, 2008, Ottawa	August 2008	Homogenization and differentiation of Canadian Freshwater Fishes (2000-2005): a five year update. Taylor, E.B.
Annual Meeting American Fisheries Society, 2-6 September, San Francisco, California.	Sept. 2007	Status of imperiled freshwater fishes of North America: report of the American Fisheries Society's Endangered Species Committee. Burkhead, N.M., H.L. Jelks, S.J. Walsh, E.B. Taylor (and 13 other members).
Joint Meeting American Society Ichthyologists and Herpetologists, Fisheries Society, 7-11 July, St. Louis, Missouri.	July 2007	Status of imperiled freshwater fishes of North America: report of the American Fisheries Society's Endangered Species Committee. Burkhead, N.M., H.L. Jelks, S.J. Walsh, E.B. Taylor (and 13 other members).
International Biogeography Society, Canary Islands	January 2007	Phylogeography and speciation in Pan-Pacific smelts (Pisces: Osmeridae) (K. Ilves, PhD).
5th International Charr Symposium, Reykjavik	August 2006	Genetic analysis of sympatric char populations in western Alaska; Dolly Varden and Arctic char and not two sides of the same coin
Society for the Study of Evolution,	June 2006	Selection drives the evolution of morphological clines in stream stickleback despite high gene flow (with J.S. Moore, A.P. Hendry, and J.S. Gow)
American Fisheries Society Annual Meeting	June 2005	Revision and Update of the AFS List of Imperiled Freshwater and Diadromous Fishes of North

American Association of Ichthyologists and Herpetologists	July 2005	America: Synopsis of Findings. (with 15 co-authors)
Society for the Study of Evolution, Ft. Collins, CO	June 2004	Hybridization and introgression in species pairs of threespine stickleback (with J. Gow and C. Peichel)
Society for the Study of Evolution, Madison, WI	June 2002	Nested clade analysis of the formation of hybrid zones in char (with A. Elz)
Fisheries Society of the British Isles, Leicester	July, 2001	Molecular analysis of a trout hybrid zone in southeastern British Columbia (with E. Rubidge)
European Society of Evolutionary Biologists, Barcelona, Spain	August 1999	Genetic analysis of char hybrids (with Z.A. Redenbach)
Coastwide Genetics Meeting, Missoula, MT	June 1999	Nested analysis of genetic diversity in bull trout (with A. Costello and S. Pollard)
International Ecology Congress, Florence, Italy	July 1998	Microsatellite variation in eulachon (with J.E. McLean and D.E. Hay)
International Ecology Congress, Florence, Italy	July 1998	Historical analysis of biodiversity in rainbow trout (with M.E. McCusker and E.A. Parkinson)
Society for the Study of Evolution, Vancouver	June 1998	Paternity assessment in sockeye salmon (with D. Hoysak and N.R. Liley)
Society for the Study of Evolution, Vancouver	June 1998	Microsatellite analysis of speciation in sticklebacks
Endless forms speciation symposium, Monterey, CA	May 1996	Hybrid zones in char
Third International Symposium on Stickleback Behaviour	Oct. 1994	Speciation scenarios in sticklebacks
Gilbert Ichthyological Society, Newport Oregon	Sept. 1994	Molecular assessment of the status of the Salish Sucker

Note: Underlined author was presenter if not by EBT

(h) OTHER RELEVANT INFORMATION

Areas of special interest and accomplishment in discipline:

I have developed an international reputation concerning the study of patterns and processes involved in divergence in natural populations and its relevance to speciation using northern fishes as a model system. Not only does this work contribute to the fundamental goal of evolutionary biology – understanding the nature of biological diversity, but it also has direct and important implications for biodiversity conservation locally, nationally and internationally. In order to aid in protecting biodiversity, we must know how it originates and is maintained in natural systems. My work has helped to identify: (i) divergent populations at the molecular level (i.e. it has resolved cryptic species pairs in various fish species (e.g. Taylor and Bentzen 1993b; Taylor and McPhail 1999; Taylor 2000)), (ii) the historical basis for evolutionary divergence (e.g. Taylor *et al.* 1996; Taylor *et al*. 1999; McPhail and Taylor 1999; Taylor *et al*. 2003), and (iii) invasive exotic species in natural habitats (e.g. Volpe *et al*. 2000; Rubidge and Taylor 2004, 2005). Concrete implications of this work for conservation issues include the assignment of the species pair of smelt that I documented as threatened by COSEWIC (The Committee on the Status of Endangered Wildlife in Canada) (Taylor 2001). In addition, I have had a major impact on biodiversity issues for native fishes in British Columbia. I was instrumental in promoting the hiring of a provincial conservation geneticist by the BC Ministry of Fisheries. We have subsequently collaborated to place conservation of native fishes on a more rational basis, i.e. by objectively identifying native fishes diversity below the species level (e.g. Taylor and Haas 1996; Taylor *et al*. 1999; Taylor *et al*. 2003). Such molecular and ecological studies of diversity are the major components of Evolutionary Significant Unit (ESU) designation for conservation below the

species level. I view this work as a major (and ongoing) contribution to BC's natural heritage. These growing contributions have been recognized by my appointment to a number of positions relevant to conservation over the years (e.g., COSEWIC Freshwater Fish Specialist Committee, American Fisheries Society Endangered Species Committee, Vancouver Aquarium Board of Directors, National Recovery Teams for SARA listed species, and Associate Director of the UBC Biodiversity Research Centre). I have also served for six years as a co-chair of the freshwater fishes specialist subcommittee of COSEWIC (and full voting COSEWIC member, effective January 2008), and was elected as Chair of the whole committee in May 2014 and served two terms until Sept. 2018.

I also was a major contributor to the success of the Canada Foundation of Innovation (CFI) and BC Knowledge Development Fund grants (~$32 million) that lead to the new Biodiversity Research Centre and Beaty Biodiversity Museum buildings. I wrote much of the grant that concerned the rationale and plans for molecular assessment of biodiversity and for the need for new biological collections' infrastructure which were key to the success of the grant. In addition, I was one of four faculty to participate in presentations and face-to-face interviews with CFI and British Columbia Knowledge Development grant panels as the final and critical component of the review of these grants. A similar level of contribution and participation was involved in the 2018 Genome Canada/BC grant award (~$4.5 million) led by P. Schulte.

11. SERVICE TO THE UNIVERSITY and COMMUNITY

(a) Memberships on committees, including offices held and dates

Departmental Services

Departmental/FOS/University committees

Position	Committee	Dates
Member	Beaty Biodiversity Centre Addition Steering Committee	2025-
Member	Merit Committee	2024, 2025
Member	Promotion and Tenure Committee for Dr. R. Germain	2024
Member	Killam Postdoctoral Fellowships and Research Prize	2023-2024
Member	Re-appointment committee for Dr. R. Germain	2023-2024
Member	Biology Curriculum Committee	2023-2024
Member	Biodiversity Research Centre Postdoctoral Fellowship Committee	2022
Member	Merit Committee	2022
Member	Mentorship Committee, Sarah Benson-Amram	2021-2023
Member	Killam Postdoctoral Fellowships and Research Prize	2022 2021
Member	Re-appointment committee for Dr. K. Marshall	2022
Member	Faculty Rep. Beaty Biodiversity Museum and BRC Expansion Committee	2020-2022
Member	Animal Biology Instructor Search Committee (Biology 204/205; Fung)	June 2020
Member	FoS Cluster Hiring Proposal: Restoring and Conserving Global Biodiversity, C. Kremen lead **(*Selected*)**	2019-2020

Member	Biodiversity Research Centre Expansion, BBM Curation Needs Subcommittee	2020-2021
Member	Promotion to Professor for M. O'Connor	January 2020
Member	Expedited appointment of C. Kremen, Professor with tenure	February 2019
Member	Biol Program Tenure Track Instructor Search (Biol 140, Steinwand)	Dec '18-May 2019
Member	Killam Postdoctoral Fellowships and Research Prize	2019 2018
Member	Head of Zoology Search Committee	January 2018
Member	CRC II (Evolutionary Biologist) Search Committee (M. Pennell)	August-Dec 2015
Member	Re-appointment committee for Dr. B. Couch (Instructor, Biology Teaching Program)	Jan.-April 2014
Member	Zoology mentoring committee for Dr. D. Close (Fisheries/Zoology)	2013-2014
Acting Dept. Head	Zoology	July 2012
Member	Merit Committee	2000, 2001, 2011 and 2012
G&PDS Adjudicator	Aboriginal Student Graduate Fellowships	2012-2014
Promotion and tenure mentor	Dean of Science Office for UBC-O	2011-2020
Advisor	Integrated Sciences Program	2011 (ongoing as of 2022)
Chair	Promotion to Professor for D. Srivastava	2010
Member	Zoology Graduate Committee (PhD Comp. exams' chair)	2010-2025
Member	Promotion/tenure for C. Harley (to Assoc. Professor)	2009
Judge	Zoology Graduate Student Symposium	2007
Member	Re-appointment committee for C. Harley (Assistant Professor)	2007
Member	Promotion committee for B. Leander (to Associate Professor)	2007
Member	Re-appointment committee for D. Irwin (Assistant Professor)	2007
Member	DACOPAT	2006-2009
Member	Promotion committee for M. Doebeli (for Full Professor)	2006
Member	Biodiversity Building Steering Committee	2004-2010
Member	Faculty of Science liaison to Faculty of Forestry	2004-2020
Member	Re-appointment committee, Dr. D. Srivastava	2004-2005
Member	Evolutionary Biologist Search (Dr. D. Irwin appointment)	2003
Member	Reorganization of Life Sciences Committee	2001-2002
Member	CRC Biosystematics Chair (Tier I) Search (W. Maddison)	2001-2002
Member	Integrated Biodiversity Laboratory CFI Application Team (project selected by CFI)	2001-2003
Member	Zoology graduate awards committee	2003-2010
Member	Zoology graduate admissions committee	2001-2003

Member	Experimental Field Ecologist Searches 1 and 2 (J. Shurin appt).	2001-2003
Advisor	Biology Program (Animal Biology)	2000-2003
Member	Comparative Physiologist Search Committee (P. Schulte appt.)	2000
Member	Departmental Planning Committee	2000-2001
Member	Biodiversity Centre Fundraising Steering Committee	2000-2003
Chair	Zoology Collections Committee	1999
Member	Instructor Positions Committee	1998
Host	Comparative Physiology Seminar Series	1997
Host	Ecology/Biodiversity Seminar Series	1996-

Departmental/University thesis defense committees: Ten times in past five years (2019)

Student	**Degree**	**Supervisor**	**Date**
T. Scarff	MSc	A. Trites	March 2024 (Chair)
B. Fazeh	MSc	M. Berbee	March 2024
P. Templeton	MSc	A. Vincent	Dec. 2023
J. Christiani	PhD	M. O'Connor	Aug. 2022
J. Eom	PhD	C. Wood	Feb. 2021
R. Penman	MSc	C. Brauner	Dec. 2021
O. Adams	MSc	T. Farrell	April 2020
E. Chricton	MSc	J. Richards	June 2020
D. Bell	PhD	S. Graham	July 2020
B. Landry	MSc	M. Berbee (Botany)	April 2019
M. Cashion	MSc	D. Pauly	Feb. 2018
E. Drummond	PhD	L. Rieseberg (Botany)	Feb. 2018
I. Fujii	MSc	A. Vincent	April 2018
Matt Regan	PhD	J. Richards	May 2017
G. Owens	PhD	L. Rieseberg (Botany)	April 2016
D. Toews	PhD	D. Irwin	April 2014
M. Delepine	MSc	R. Shadwick	Oct 2013
J. Lee-Yaw	PhD	D. Irwin	Dec 2013
A. Dalziel	PhD	T. Schulte	2012
S. Fortune	MSc	A. Trites	2012
E. Vassilenko	PhD	S. Baldwin (Chem. Biol. Engin.)	2012
J. Zhang	PhD	W. Maddison	2012
M. Donaldson	PhD	S. Hinch (Forest Sci)	May 2012

R. FitzJohn	PhD	S. Otto	July 2012
J. Burt	MSc	S. Hinch (Forest Sci)	2011
N. Lobo	MSc	S. Aitken	2011
Y. Change	PhD	S. Graham (Botany)	2011
E. Rechisky	PhD	C. Walters	2010
M. Sackville	MSc	C. Brauner/T. Farrell	2010
R. Crim	MSc	C. Harley	2010
D. Baker	PhD	C. Brauner	2010
N. Smith	MSc	J. Shurin	2010
B. Davis	PhD	M. Whitlock	2009
M. Bodnar	MSc	W. Maddison	2009
L. Nendick	MSc	C. Brauner/T. Farrell	2009
J. Clarke	MSc	D. Schluter	2009
A. Murakami	MSc	J. Richardson (Forest Sci.)	2009
M. Barrueto	MSc	D. Schluter	2009
S. Thompson	PhD	J. Whitton	2006
P. Raven	MSc	R. Devlin	2006
C. Beatty	MSc	T. Schulte	2005
H. Su	MSc	H. Kasinsky	2004
P. Smith	MSc	J. Smith	2003
A. Shlict	MSc (Agric.)	G. Iwama	2003
H. Bears	MSc	J. Smith	2002
E. Standon	MSc	S. Hinch (Forest Sci.)	2001
R. Roome	MSc	G. Iwama (An. Sci.)	2001
J. Taylor	MSc	J.D. McPhail	2001
Y. Chan	MSc	P. Arcese (Forest Sci.)	2000
M. Roberge	MSc	S. Hinch (Forest Sci.)	2000
B. Shields	MSc	L. Gass	2000
G. Burness	PhD	P. Hochachka	2000
A. Sussmann	PhD	R. DeWeede (Botany)	2000
S. Conner	PhD	M. Adamson	2000
L. Barrett-Lennard	PhD	J. Smith/J. Ford	2000
J. Wei Zhi	MSc	G. Namkoong (Forest Sci.)	1999
C. Wilhelmsen	MSc	L. Gass	1999
A. Benun	MSc	K. Cheng (Genetics)	1999

D. Donovan	PhD	T. Carefoot	1998
S. Pang	MSc	K. Cheng (Genetics)	1998
I. Burgetz	MSc	D. Randall	1997
J. Burrows	MSc	T. Northcote	1997
A. Prince	MSc	M.C. Healey	1997
G. Gilchrist	PhD	J. Smith	1997
T. Burg	MSc	A. Trites	1996
L. Pelletier	MSc	C. Krebs	1996
J. Degisi	MSc	C. Walters	1995
D. Quamme	MSc	T. Northcote	1995
S. Vamosi	MSc	D. Schluter	1995

Chair, PhD Qualifying Examination Committee: **In 2010 and until 2025, I assumed the position of Standing Chair for all Zoology PhD qualifying exams. Typically, I chaired between five and ten exams per year which I have not listed post-2010.**

Student	**Zoology Supervisor**	**Date**
K. Carbeck	P. Arcese (Forest Sciences)	2021 External examiner
J. Fenneman	J. Whitton (**Botany**)	2014 (non-Chair member of exam committee)
C. Ciahandu	B. Milson	2009 (Chair)
B. Speers-Roech	J. Richards	2008 (Chair)
S. Yeaman	M. Whitlock	2006 (Chair)
B. Bhathal	D. Pauley	2006 (Chair)
D. Baker	C. Brauner	2006 (Chair)
B. Davis	M. Whitlock	2004 (Chair)
A. Waldren	D. Schluter	2004 (Chair)

Chair, PhD Oral defenses: Thrice in the last five years (2022; asked several more times, but needed to decline)

Student	**Department**	**Date**
A. Loewen	Cell and Developmental Biology	March 2025
D. Loughnan	Forest Sciences	March 2024
D. Robb	Geography	Jan. 2022
Y. Qiu	Botany	Sept. 2018

R. Forestieri	Chemistry	Dec. 2013
D.A. Marsden	Fisheries	Dec. 2012
K. Eade	Cell and Developmental Biology	Feb. 2012
A. Alayon	Botany	Feb. 2011
T. Crossin	Forest Sci.	June 2008
N. Fangue	Zoology	Sept. 2007
B. Fedy	Forest Sci.	Dec. 2006
C. Yip	Biochem. and Mol. Biology	October 2006
A. Brown	Zoology	May 2005
M. Iddrisu	Forest Sci.	May 2005
H. Wittmer	Animal Science	March 2004
V. Craig	Forest Sci.	April 2002
J. Maina	Faculty of Agriculture	Jan. 2001

Undergraduate thesis examiner: I have sat on 15 + honours B.Sc. thesis defense examinations prior to 2010. During the 1996/97 and 2011 onwards, I co-chaired the examinations of about one-half honours theses (typically 10-30 total students per year).

Other contributions: I also served as the **Director** of Beaty Biodiversity Museum (May 2013 to September 2014, September 2015- July 2020 (5-year term) and continue to serve as **Director** of the Fish Collection (since 2001). As the Director the BBM, I am responsible for the overall scientific and academic direction of the BBM, supervise an administrative, public outreach and curatorial staff of 15, manage an annual budget of about $1.2 million, and liaise with the Faculty of Science and the Departments of Zoology and Botany. The fish collection began in the 1940s and is the second largest collection in Canada (over 850,000 specimens). As Director, I have obtained funding to support a curatorial assistant who has reorganized the physical specimens and updated the computer database. We have also helped to facilitate the placement of the museum database on the internet and helped reestablish its presence in the ichthyological community (see **http://www.beatymuseum.ubc.ca/fish-collection**). I also served as an **Associate Director** of the Biodiversity Research Centre at UBC (2003-2013).

University-wide Services

Killam Postdoctoral Fellowship Adjudication Committee, 2018, 2019, 2021, 2022, 2023
Killam Postdoctoral Research Prize Committee, 2018, 2019, 2021, 2022, 2023
Aboriginal Graduate Fellowships Adjudication Committee, 2012-2014
UBC Animal Care Committee: 1998 – 2002

(b) Other service, including dates

Hosted Genetics in Fisheries Workshop (B.C. Fish and Wildlife Branch (June 1995)
Hosted Rainbow Trout Biodiversity Workshop (B.C. Fish and Wildlife Branch (July 1997)
Appraiser: donated museum books, Faculty of Science, Development Office, 2007, 2009

11. SERVICE TO THE COMMUNITY

(a) Memberships on scholarly societies, including offices held and dates

Member, *Canadian Society for Ecology and Evolution*, 2005-
Member, *Canadian Society of Zoologists*, 2004-
Member, *Society for the Study of Evolution,* 1989-2009
Fellow, *Gilbert Ichthyological Society*, 1994-

(b) Memberships on other societies, including offices held and dates

Member, Wild Salmon Forever 2018-2025
Member, Board of Directors, Vancouver Aquarium and Marine Science Centre (VAMSC), 2000-2004
Member, Research and Conservation Committee, VAMSC, 2000-2004

(b) Memberships on scholarly committees, including offices held and dates

Advisor, Pacific Salmon Explorer Database and Website, https://www.salmonexplorer.ca/, Pacific Salmon Foundation, April 2022-Nov 2023.
Member, Expert Panel on Fish Genetics Skagit Reservoir and Dam Relicensing Program, Seattle City Light, 2021-2023
Member, Expert Panel on Fish Passage at Boundary Dam, Pend' Oreille River, Seattle City Light, 2013-2014; 2019-2022
Member, American Fisheries Society Imperiled Aquatic Species Committee (2006-2008; 2022-)
External Review Panel on Department of Fisheries and Oceans Aquaculture Science, 2019-2020 (resigned owing to philosophical differences on committee)
Chair, Committee on the Status of Endangered Wildlife in Canada, September 2014 – September 2018. Elected by committee members, two, 2-year terms served.
Co-Chair, Freshwater Fishes Specialist Group and member of Committee on the Status of Endangered Wildlife In Canada (COSEWIC). Jan 2008-2015.
Member**,** Freshwater Fishes Specialist Group, Committee on the Status of Endangered Wildlife In Canada (COSEWIC), Jan 2002-Dec 2015.
Member, Citizens Panel on the Northern Gateway Project, World Wildlife Fund, April 2012-2014.
Member, Delta Science Panel (Sacramento-San Joaquin River Delta smelt and adaptive management of flow, Sacramento, Calif.), 2011-2013
Member, Scientific Expert Panel. US Fish & Wildlife Service Panel on Endangered Species Status for Montana grayling, November 2009
Member Expert Panel for *BC Biodiversity Status Report and Action Plan,* 2003-2005
(see http://www.biodiversitybc.org/)
Member, E-Fauna BC Advisory Board: http://www.geog.ubc.ca/biodiversity/efauna, 2005-
Member, Science Advisory Committee, BC Pacific Salmon Forum (Hon. John Fraser, Chair), April 2007-2009
Member, Endangered Species Recovery Fund Review Committee, World Wildlife Fund, 2005-2007.
Member, Endangered Fish Species Committee, American Fisheries Society, October 2004- ongoing
Member, Species Recovery Team for Nooksack dace, Salish sucker, and Enos Lake stickleback species pairs, 2002-2010

(c) Memberships on other committees, including offices held and dates

Re-elected as Board Member at Large and Trustee of The Habitat Conservation Trust Foundation, Victoria, BC, April 2026-April 2029

Elected as Board Member at Large and Trustee for the Habitat Conservation Trust Foundation, Victoria, BC, Jan. 2024 (two-year, renewable term)
Member, External Advisory Committee for Hatchery Science Program, Fisheries and Oceans Canada, 2024-2025
Nominated at Commissioner on the Pacific Salmon Commission (international panel of Canada and the US); pending March 2024.
Chair, *Molecular Ecology Prize* Committee, 2010
Member, Independent Scientific Review Panel, Northwest Power and Conservation Council, Portland, Oregon, July 2005-Sept. 2009.
Member, Okanogan Lake Scientific Advisory Panel, 1995-2009
Member, Bull trout recovery monitoring and evaluation group, United States Department of the Interior, Fish and Wildlife Service, Vancouver, Washington, May 2003-2008
Member, National Recovery Team for stickleback species pairs, Jan 2002-2010
Member, National Recovery Team for Nooksack dace and Salish sucker, Sept. 2003-2010
Member, Douglas Park Community Association, 2000-2003
Registrar and Board Member, Douglas Park Soccer Club, 2004-2010
Vice-President, Vancouver Killarney Minor Lacrosse Association, 2003-2007
President, Vancouver-Killarney Minor Lacrosse Association, 2007-2009
Past-President, Vancouver-Killarney Minor Lacrosse Association, 2010-2011

(d) Editorships (list journal and dates)

Associate Editor, *Canadian Journal of Fisheries and Aquatic Sciences*, April 2005-January 2026
Editorial Review Board, *Journal of Evolutionary Biology*, August 2005-December 2013
Associate Editor, *Molecular Ecology*, January 2002-December, 2013
Editorial Review Board of *Molecular Ecology*, Jan. 2000-2002.
Guest Editor, *Behaviour*, Volume 137, parts 7-8, June 2000
Guest Associate Editor, *Environmental Biology of Fishes* (Fourth International Charr Symposium), June 2000

(e) Reviewer (journal, agency, etc. including dates):

I typically review 10-15 manuscripts and grant applications per year. These range from top line specialty journals (*Evolution, Molecular Ecology*) to major national granting agencies (NSERC, NSF).

Journals:

Science
Molecular Ecology
Evolution
Scientific Reports
Ecology and Evolution
American Naturalist
Conservation Genetics
Ichthyological Research
Transactions of the American Fisheries Society
Canadian Journal of Fisheries and Aquatic Sciences
Canadian Journal of Zoology
Arctic
Molecular Ecology
Marine Biology

Marine Ecology Progress Series
Molecular Biology and Evolution
Molecular Phylogenetics and Evolution
Comparative Biochemistry and Physiology
J. Fish Biology
Reviews in Fish Biology and Fisheries
Quarterly Review of Biology
Biological Reviews
North American Journal of Fisheries Management
Genome
Trends in Ecology and Evolution
Copeia
Heredity
Fisheries
National Marine Fisheries Service (USA NOAA)

Granting agencies

NSERC Discovery Grants (>25)
NSERC Strategic Grants (3)
NSERC Special Research Opportunity Program
Canada Foundation for Innovation
National Science Foundation (NSF, USA)
NSF (Sloan Fellowships, twice)
Formas (Swedish National Granting Agency)
Norwegian Research Council
Alaska-Yukon Fisheries Grants
Austrian Science Fund
World Wildlife Fund
U.S. Department of Agriculture
NMFS Saltonstall-Kennedy Research Grants
Wisconsin Sea Grant
Washington State Sea Grant
Minnesota Sea Grant College Program
National Geographic Society
NERC (UK) Small Grants Competition (2000)
NERC (UK) Research Grants Competition
BC Habitat Conservation Trust Fund
BC Oil and Gas Environmental Commission
Alberta Conservation Association, Challenge Grants in Biodiversity
Alberta Ingenuity Fund
Alberta Government Equipment Grants Program
Alaska Sea Grant

External reviewer (indicate universities and dates)

Faculty appointments & promotions: Four times in the past five years (2019)

University of Victoria, Promotion to Full Professor, Dr. John Taylor, Sept 2023
University of Wyoming, Promotion to Associate Professor, Dr. C. Wagner, Sept. 2021
Concordia University, Promotion to Full Professor, Dr. Dylan Fraser, Jan. 2020

University of Lethbridge, Dr. Teresa Burg promotion to Full Professor, Jan. 2019 (declined)
Ohio State University, Tenure for Dr. Suzanne Gray, July 2018
Univ. of Nevada-Reno: Dr. Mary Peacock promotion to Full Professor July 2018) (declined)
Trent University, Dr. Paul Wilson promotion to Full Professor March 2017 (declined)
University of South Florida, College of Marine Sciences, Dr. E. Peebles, tenure, August 2015
University of Calgary, Dr. S. Vamosi, promotion to Full Professor, October 2014
University of Calgary, Dr. S. Rogers, tenure, February 2014
Baylor University, Dr. P. Danley, tenure and promotion to Associate Professor, November 2013,
University of Minnesota, Dr. A.M. Simons, promotion to Full Professor, October 2013,
University of Western Ontario, Dr. Y. Morbey, tenure and promotion to Associate Professor, July 2012
University of Calif.-Santa Cruz, Dr. J.C. Garza, promotion to Associate Professor, Oct., 2011
Dalhousie University, Dr. D. Ruzzante, promotion to Full Professor, Oct 2009
University of California (Santa Cruz), Dr. Grant Pogson, promotion to Full Professor, January 2009
Idaho State University, Dr. Ernest Keeley, promotion to Full Professor, November 2008
University of Victoria, Dr. John Taylor, promotion and tenure, Sept. 2008
University of Guelph, Dr. P. Hebert, CRC Tier I Renewal, Sept. 2007
University of Utah, Dr. S. Pfrender, October 2006
University of Washington, Dr. L. Hauser, Sept. 2006
University of California-Berkeley, tenure and promotion, Dr. Per Palsbøll, Sept. 2005
University of Montreal, Dr. B. Angers, promotion and tenure, 2005
Laval University, Dr. L. Bernatchez, tenure and promotion committee, 2004
University of Alberta, Alberta Ingenuity Scholar, D. Coltman, May 2004
University of Alberta, Dr. J. Volpe, CRC Chair (Tier II), June, 2001
Laval University, Dr. L. Bernatchez, CRC Chair (Tier II), June 2001
Laval University, August 1999, Tenure and promotion for Dr. L. Bernatchez

External reviewer for non-UBC theses (all PhD unless otherwise indicated): **Twice in the past five years (2022)**

Western University, S. Dos Santos, April 2025
University of Victoria, N. Sykes, December 2024
University of Alberta, S. Zijian, January 2019
University of Waterloo, I. Mulder, Aug. 2018
University of Alberta, L. Charvarie, Sept, 2014 (declined)
University of Tromsø, Norway, A. Siewertsen, August 2012
University of Oslo, I.P. Helland, October 2008
University of Helsinki, H. Makinen, August 2007
Dalhousie University, MSc thesis, Tamara Darwish, August 2006
University of Helsinki, A. Audzijonytė, Dec. 2005
Laval University, S. Rogers, Dec. 2005
Dalhousie University, MSc external (K. Murray, 2005)
Laval University, Frederic Lécomte, Sept. 2005
Swedish Agricultural University, Umea, Sweden, A. Vasemägi, Sept. 2004)
McGill University, February 2004; S. Lourie
University of Helsinski, April 2003, Graduate Student Symposium, referee
University of Helsinski, July 2002, Mikko Koskinen
Laval University, October 2000, J. Turgeon
Simon Fraser University, Dec. 1999, J. Taylor
Dalhousie University, Sept. 1997, P. O'Reilly
Univ. of Lethbridge, July 1997, M.Sc. thesis of D. Groft

(f) Consultant (indicate organization and dates)

Organization	**Date**	**Nature of work**
DFO-Salmon Enhancement Program	2025	Science advice for experimental hatcheries (unpaid)
Alberta Environment and Parks	2025	Advisor and participant in workshop on genomic approaches to conservation of Athabasca rainbow trout (unpaid)
Pacific Salmon Foundation	2022-2023	Technical Working Group Member, Steelhead Trout on Pacific Salmon Explorer (https://www.salmonexplorer.ca/)
Office of the Auditor General of Canada	2022	Special advisor on AG's audit: *Protecting Aquatic Species at Risk.* Federal Commissioner of Environment and Sustainable Development Office
Seattle City Light	2021-2023 2019-2022 2013-2014	Skagit River dam re-licensing process Suitability of fish passage at Boundary Dam, Pend d'Oreille River.
Benton and Associates	2012	Stellar Sea Lion Genetics Report Reviewer
Mining Association of Canada and BC/McInnes-Cooper Law firm	2011	Expert witness deposition to federal court regarding adaptive variation in Sandy Pond (Nfld) brook trout
Cohen Judicial Commission on Sockeye Salmon	2010-11	Reviewer of commission reports
Sierra Legal Defense	2007	Affidavit provided on critical habitat needs for Nooksack dace.
Hatfield Consultants, OnStream Environmental Consultants, Klohn-Crippen-Berger, Triton Environmental Consultants Ltd, AMEC Inc, Seymour Salmonid Society, and several others	2000-	Genetic and morphological identification of native fishes
Bustard and Associates	1998-2014	Kemess Mine Char identification
Becher/Volker Law firm (Oakland, CA) and four WA State environmental groups	1998/99	Expert depositions on effects of escaped farmed Atlantic salmon on native Pacific salmonids
Yukon Territory Dept. Renewable Resources	1996-2020	Molecular identification of fish species
Hallam Knight Piésold Ltd (Engineering)	1995/96	Kemess Mine Char identification

B.C. Ministry of Water, Land, and Air Protection, Ministry of Environment and Climate Change	1993-	Advice concerning native fish conservation, fish identification

(g) Other service to the community

Media Interviews and coverage:

1. *The Tyee*. Scientists warn Carney's changes will bring "willful extinction". August 12, 2026. https://thetyee.ca/News/2026/08/12/Experts-Warn-Carney-Ports-Pipelines-Bring-Wilful-Extinction/ See also CBC, *As It Happens,* August 20, 2026.
2. CBC.ca. New species of crayfish in BC (*Zootaxa* article). June 4, 2025. https://www.cbc.ca/news/canada/british-columbia/okanagan-crayfish-1.7552557
3. *The History Channel (History.com).* Dave Roos: Interview regarding the five longest rivers in America. May 22, 2024. https://www.history.com/articles/longest-rivers-united-states
4. *Atlas Obscura*. Interview concerning new finding of fossil **"Spike-toothed" salmon.** April 2024. https://www.atlasobscura.com/articles/meet-the-giant-spike-toothed-salmon
5. **Media release** for Pacific Salmon Explorer incorporation of data on steelhead trout on the Pacific Salmon Explorer; featured a quotation from me, January 31, 2024 http://bit.ly/steelhead-press-release
6. *Radio-Canada/CBC:* Comment on **recent paper** on habitat mitigation of climate change in sockeye salmon. January 2024. https://ici.radio-canada.ca/nouvelle/2040233/poissons-changement-climatique-eau-douce?depuisRecherche=true
7. *West Coast Now: BC's drought and salmon survival,* August 9, 2023 https://westcoastnow.ca/2023/08/14/fish-impacted-by-drought/
8. *Global TV News*: Drought in BC and impacts on fish. August 6, 2023; https://globalnews.ca/news/9880849/impact-bc-drought-fish/
9. *CBC Radio Daybreak North*: Drought and impacts on salmon run, July 18, 2023
10. *Outdoor Life*. Bull trout biology and conservation, July 11, 2023.
11. *The Guardian* and *Canada's National Observer:* COP-15 biodiversity conference and salmon conservation. Dec 5, 2022 https://www.nationalobserver.com/2022/12/09/news/endangered-salmon-flounder-canada-hosts-cop15?fbclid=IwAR2PnNmvHzyhxiVA8_HFU1swg9j9IVxOqwh40ASfStaqc5ROtcIstBbCPg4
12. *The Narwhal. The federal government is less likely to protect an at-risk fish if people like to eat it.* Nov. 26, 2022. https://thenarwhal.ca/dfo-fish-species-at-risk/
13. *North Shore News*. Oct. 18, 2022. The impacts of Vancouver's drought on North Shore salmon. https://www.nsnews.com/local-news/north-shore-reservoirs-salmon-streams-drought-rain-forecast-5973060
14. CBC.ca, Oct. 9, 2022 (via Canadian Press). Drought impacts on salmon and other fishes. https://www.cbc.ca/news/canada/british-columbia/october-drought-conditions-british-columbia-1.6611816?cmp=newsletter_CBC%20British%20Columbia_1633_732209
15. *Vancouver Sun.* August 12, 2022. *Endangered steelhead trout.* https://vancouversun.com/news/imminent-extinction-of-interior-steelhead-runs-foretells-whats-to-*come-for-fraser-river-salmon-experts*
16. *CBC (Kelowna):* Steelhead trout conservation. July 22, 2022 (https://www.cbc.ca/news/canada/british-columbia/bc-interior-steelhead-trout-population-research-coverup-allegations-dfo-1.6533959)
17. *CFJC Today*. Citing record low returns, conservation groups lobby government for steelhead protection. Jan. 25, 2022. https://cfjctoday.com/2022/01/25/citing-record-low-return-estimates-conservation-groups-lobby-government-for-steelhead-protection/

18. *The Vancouver Sun.* Imminent extinction of Interior Fraser River Steelhead Trout. August 13, 2021.
19. *Globe & Mail*. DFO and the non-listing of salmon under SARA. July 20, 2021. How Ottawa thwarted efforts to help an endangered species (Justine Hunter, May 15, 2021)
20. *The Narwhal*. DFO ignored pleas from scientists, altered report to downplay risks to imperilled steelhead: docs DFO Mis-management of Steelhead Trout (Stephanie Wood, May 15, 2021)
21. Canadian Press. Salmon declines and the Big Bar Rock Slide. June 2020, https://nationalpost.com/pmn/news-pmn/canada-news-pmn/almost-complete-loss-of-early-salmon-runs-at-fraser-river-slide-last-year-dfo (also Vancouver Sun and CBC.ca/bc)
22. *Maple Ridge Times,* Fish kills on drainage screens, March 2020
23. *Fly Fisherman* Magazine, Bull trout conservation. Dec. 2019 (Flyfisherman.com)
24. Fishingwithrod.com. Conservation issues for southern BC salmon and steelhead. June 9, 2019.
25. CBC podcast (Ash Kelly). The state of BC's salmon. November 2019.
26. CBC Radio One. *The World at Six*. UN Report on Biodiversity and *Canada's Species at Risk Act,* May 7, 2019
27. *The Narwhal.* Why Canada's *Species at Risk Act* is Failing Salmon and Steelhead Trout, April 2019. https://thenarwhal.ca/it-just-takes-too-damn-long-how-canadas-law-for-protecting-at-risk-species-is-failing/
28. *National Observer*, Emergency listing of steelhead trout in Canada. March 2019.
29. CBC *Quirks and Quarks* What to save? Sept 8, 2018. https://www.cbc.ca/1.4813305
30. BC's salmon at risk. CBC Radio *Daybreak* (Prince Rupert, May 11, 2018)
31. Canadian Turtles in Trouble. *Canadian Geographic*, May 5, 2018
32. Species at risk in southwestern Ontario, CBC Radio (Windsor). May 3, 2018
33. Emergency assessment for interior steelhead trout, Vancouver Sun, Feb. 13, 2018
34. Mating behavior of fishes in Canadian Cottage Country. Cottage Life, Spring 2018
35. Endangered sockeye salmon may not be legally listed. Vancouver Sun, Dec 14, 2017
36. Emergency assessment for interior steelhead trout, Vancouver Sun, Dec. 13, 2017
37. Parks Canada multispecies species at risk action plan. Jasper fitzHUGH. July 12, 2017
38. The Wildlife Society. Results of species at risk assessments, April 2017. May 22, 2017
39. CBC.ca: Northern species at risk in Canada, May 9, 2017
40. *The Globe and Mail.* Listing of nine aquatic species under the Species at Risk Act, May 3, 2017
41. *Whistler Peak*. October 6, 2016. Impacts of invasive fish species in Whistler area lakes
42. *CBC Radio (North): Airplay with Dave White.* August 27, 2016. Conservation status of western Arctic Dolly Varden (https://soundcloud.com/cbcyukon/western-arctic-dolly-varden-now-a-species-at-risk
43. *The Telegram* (St. John's, Nfld). Letter to editor on species at risk, Feb. 12, 2016
44. *Vice Media*, January 2016. Delays in listing of Canada's species at risk
45. *Radio-Canada* (Montréal). January 2016. Delays in listing Canada's species at risk
46. *Yahoo News Canada*, May 2015. Comments on COSEWIC Endangered Species Meeting
47. *Calgary Herald*, May 2015. Comments on COSEWIC Endangered Species Meeting
48. *Ryerson Review of Journalism*, *Where the wild Things Are*, Spring 2015
49. *BBC Interview on Status of Humpback Whales in Canada's Pacific Waters,* Oct 18th, 2014
50. *New York Times Magazine*: Hybridization threats to Fish Conservation, August 17th, 2014
51. CBC Radio (BC): Mt. Polly Mine Tailings Breach and Effects on Sockeye Salmon, *The Early Edition*, August 11th, 2014
52. *The Province* Newspaper: Large skate found at Spanish Banks, August 7, 2014.
53. *CTV NewsNetwork:* Scientists letter against Joint review Panel Report on Northern Gateway, June 2014
54. *CBC Morning Break (Northern BC):* Scientists letter against Joint review Panel Report on Northern Gateway, June 2014

55. *The Simi Sara Show* (CKNW 980) Scientists' letter against Joint review Panel Report on Northern Gateway, June 2014 (EBT one of the authors of letter to Prime Minister that received national attention)
56. *The Toronto Star:* Scientists letter against Joint review Panel Report on Northern Gateway, June 2014
57. *The Toronto Star,* Humpback Whale downlisting under SARA*, April 2014*
58. *Al Jazzera (America).* Humpback whale downlisting; May 2014
59. *Maclean's Magazine,* Changes to the *Fisheries Act*, March, 2014
60. UBC FoS *Synergy*, Legislative changes to SARA, Jan 2013
61. *Nature News*: Comment on Cohen Commission Report, Nov. 2012
62. *Omni TV* (National), *CTV* (National), *Surrey Leader* newspaper: Invasive Asian carp in the Fraser River. August 2012
63. Radio 96.1 FM. Effects of snakehead fish found in Central Park Burnaby, BC, June 2012
64. *Fisheries Act* regulation changes, *Vancouver Sun*, June 6, 2012
65. Comments on changes to federal *Fisheries Act* (section 35). *Vancouver Sun*, May 2012
66. *Nature News*: Role of judicial inquiries in scientific debate (Cohen Commission), Sept. 2011
67. *Discovery News* (Discovery Channel Online), Sept. 2008: release of American Fisheries Society list of imperiled fishes
68. *CBC Radio One*, Sept. 2008. Eleven radio interviews on release of American Fisheries Society list of imperiled fishes
69. *Globe and Mail*, April 2008: Endangered Dolly Varden in the Arctic
70. *CBC Radio I*, July, 2006. Low salmon returns to Fraser River
71. *New York Times*. May 2006, stickleback species collapse
72. *Whistler Peak*, April 2006; Cheakamus River steelhead recovery.
73. *Edmonton Journal*, May 24, 2005. Status of westslope cutthroat trout in Alberta
74. *North Shore Outlook*, Feb. 2005. Seymour River steelhead
75. *BCTV*, March 2005. Beaty Museum of Natural History
76. *Tofino Times*, Dec. 2004. Salmon farms

Public outreach and education:

Beaty Biodiversity Museum (BBM)

1. FishingwithRod.com. Diversity of BC Freshwater Fishes (50 min video). April 5, 2021. https://www.youtube.com/watch?v=JweMmuS2jb0
2. Fish Identification Course: a two-day, lecture lab course on identification of freshwater fishes of BC. March 17-18, 2025, Revelstoke, BC (20 participants); May 14-15, 2018 (hosted by Columbia Mountains Institute, Revelstoke, BC, 14 participants); May 16-17, 2016, (hosted by Selkirk College, Castlegar, BC, 16 participants); May (20 participants, hosted at UBC) and August 2014 (24 participants, hosted at UBC).
3. STEM mentor, Open Science Network, Pharmaceutical Sciences, May 7, 2018 (40 Grade 8 students from Norma Rose Point School, Vancouver)
4. *Biodiversity of freshwater fishes*. British Columbia Institute of Technology, Habitat Ecosystem Restoration Program, April 2014, and April 2018.
5. BBM talk in Way Cool series: *Frigus modo pisces*; Fishes are Way Cool because…, March 2, 2014
6. BRC Photo Competition Judge, 2016-2018
7. The Beaty Museum at UBC. Part of Simon Fraser University Continuing Education Course: *Keeping It! What Museums and Archives Do*. March 15, 2014
8. Envirothon Tutorial (Identification of Fishes) for Chilliwack SS. June 2012, 2013

9. Blog posts: **More than 30.** Examples: March 2021 (International Rivers Day), January 2020 (State of BC salmon and steelhead trout), November 2017 (Sockeye salmon at risk), May 2017 (Northern species at risk), March 2017 (One Hundred (fish)), Dec. 2016 (Endangered Species Update), Nov. 2016 (Gray Jay as Canada's National Bird), July 2016 (Queen Mary School Museum), May 2016 (The Pacific Ocean Blob), May 2016 (Endangered Species Update), May 2015 (Endangered Species Update), February 2015 (Coral Reef Biodiversity), January 2015 (Australian Lungfish), November 2014 (River City: Brisbane, Australia), October,2014 (Elwha River Restoration), August 2014 (Shark Week), July 2014 (**North to Alaska [associated video with >24 million YouTube views**]; Fish Powerhouses), June 2014 (Countdown to Northern Gateway Decision Day), April 2014 (Humpback whale down-listing; How wolves change rivers; Widespread species under threat in Canada), Dec 2013-March 2014 (Mackenzie River; Big court decision for a small fish; Biodiversity issues for BC; Fish as Art; Blobfish; Bizarre Biodiversity), April 2013 (Invasive goldfish at UBC), January 2013 (AR Wallace); Nov. 2012 (SeaLife exhibit; COSEWIC meeting); Oct 2012 (Kyoto Museum Symposium; Changes to the *Fisheries Act** **Underlined blogs are ranked as top two of all BBM posts (2,107-4,002 page views as of 22/03/2016)**
10. American Association for the Advancement of Science (AAAS) Press Tour of Beaty Biodiversity Museum, Feb. 15, 2012.
11. American Junior Academy of Sciences Speed-OLOGY Research Roundtable at Beaty Biodiversity Museum, Feb. 16, 2012
12. Helped photographer David Ellingsen in facilitating and advising on award winning photography of collections (see http://www.davidellingsen.com/blog/2012/07/awards-first-place-at-px3-paris/), 2011-2012
13. Talk on Fishes and Beaty Biodiversity Centre and Museum, BCIT Wildlife Management Class, Nov. 2011
14. Talk on Fishes and Beaty Biodiversity Centre and Museum, Musqueam 101 series, Musqueam First Nation, Sept. 2011
15. Talk for Wet Coast Aquarium Society, July 2011: Evolutionary Marvels Revealed by BC Fishes
16. Provided draft content and proofed text and photographs for all the fish cabinets (89) and collection introduction for the Beaty Biodiversity Museum, 2009-2011
17. Biodiversity Bites talk. Beaty Biodiversity Museum, May 2010
18. Beaty Museum Public Event: Our Heritage, July 2010
19. Beaty Museum Public Event: Aquatic Worlds, August 2010
20. Beaty Museum, Volunteer training lectures and tour (Two-three times per year since Oct. 2010)
21. Beaty Museum FestEvolve Talk: Feb. 21, 2011

Other:

1. Provided an endorsement ("burb") for E. Whol's new book *Following the Bend* (2025) for Princeton University Press. March 2025
2. Invited Book Review Essay for ***Nature and Culture*** on two new books: Scott, J.C. 2025. *In Praise of Floods: The Untamed River and the Life It Brings*. New Haven, Yale University Press. and Most, S. 2024. *River of Renewal: Myth and History in the Klamath Basin*. Oregon State University Press. March 2025.
3. Participant: DFO Ministerial Roundtable on the Pacific Salmon Strategy Initiative, July 21, 2022
4. Listing process for fishes under Canada's *Species at Risk Act.* Speakeasy Lunch seminar, Pacific Salmon Commission, Vancouver, March 2022.
5. *Faces of the Fraser*. The Fraser River Discovery Centre, Jan 13, 2022 (1 hr talk)

6. *On Earth podcast.* Pacific Museum of Earth, UBC. Nov 25, 2021. **https://pme.ubc.ca/learn/podcast/**
7. *Rising Laterally* Podcast: Exploring Rivers, August 2021. https://www.youtube.com/watch?v=svJd381mYcE
8. Exploring Rivers (talk): The Explorers Club (New York City), Sept. 27, 2021
9. Interviewed by Canada's Auditor-General's office regarding potential audit of federal government's performance in protecting aquatic species at risk of extinction. August 2021.
10. Submitted Statement of Impact for court case on mortality associated with illegal seized salmon gill nets. In support of DFO Fishery officers. June 2020. Update May 2022: The case was won by DFO resulting in a 40K fine and a three-year suspension from fishing for the convicted fisher.
11. Invited expert participant, Workshop on identifying Freshwater Key Biodiversity Areas (Canada, *sensu* International Union for the Conservation of Nature, IUCN), Feb. 2020
12. Witness, Parliamentary Fisheries Committee. Endangered BC steelhead trout. June 5, 2019.
13. Public talk to Steelhead Society of BC. Emergency listing request for Chilcotin-Thompson rivers steelhead trout. Feb 13, 2018.
14. Advisor and editor for fishes to the E-Fauna BC project: http://www.geog.ubc.ca/biodiversity/efauna/. Ongoing, became editor in 2014.
15. Talk to Current Affairs Debating Society (West Vancouver): Do Canadians care (enough) about endangered species? March 2017
16. BC Freshwater Fishes Identification Course. Okanagan College, Castlegar, BC. May 10-11, 2016 (18 participants)
17. BC Freshwater Fishes Identification Course. UBC, May 13,14 and June 1, 2014 (30 participants)
18. *Café Scientifique* talk: (*Fluviatilis Pisces Diversi*): Railway Club, Vancouver, Jan 28th, 2014
19. Interview on effects of Acid Rain on aquatic communities, *Joel Quenneville Elementary School*, Feb. 2007.
20. Appeared before the Federal House of Commons Standing Committee on Fisheries and Oceans to comment on threats to native fish from salmon farming. Vancouver, Feb 22, 2000.
21. Invited to join board of directors of the Vancouver Aquarium and Marine Science Centre (VAMSC). Jan. 2000.
22. Member VAMSC Research and Conservation Committee (2000-2003)
23. Presentation to the Vancouver Club BC Roundtable. Glaciation and biodiversity of BC freshwater fishes. Sept. 1998.
24. Prepared report on status of smelt populations of Lake Utopia, New Brunswick at request of COSEWIC (Committee on Status of Endangered Wildlife in Canada). 1997
25. External reviewer for Status of the Chinook salmon (*Oncorhynchus tshawytscha*) from Washington, Oregon, California, and Idaho under the U.S. Endangered Species Act. West Coast Chinook Salmon Biological Review Team (NMFS, USGS-National Biological Survey). 1996.

THE UNIVERSITY OF BRITISH COLUMBIA

Publications Record

SURNAME: Taylor **FIRST NAME**:Eric **Initials**:
MIDDLE NAME(S): Burke

Date: August 15, 2026

Summary

Category	1a	1b	1c	2	3	4	5
Last 5 yrs. (2022-2026)	13	0		10(b, c)	2(a) 2(c)		
Career Total	180	9		10(b, c)	11(a,c)		

1. **REFEREED PUBLICATIONS** - See below
(a) Journals
(b) Conference Proceedings
(c)Other
2. **NON-REFEREED PUBLICATIONS**
(a) Journals
(b) Conference Proceedings
(c)Other
3. **BOOKS**
(a) Authored
(b) Edited
(c)Chapters
4. **PATENTS**
5. **SPECIAL COPYRIGHTS**
6. **ARTISTIC WORKS, PERFORMANCES, DESIGNS**
7. **OTHER WORKS**
8. **WORK SUBMITTED (including publisher and date of submission, see below)**
9. **WORK IN PROGRESS (including degree of completion, see below)**

Primary Journal Publications:

Note: Students from my lab have been underlined, postdocs, research associates, and/or visiting scientists are *underlined and italicized*. Where my students or I are the first or senior authors, the work was conceived or completed wholly in my lab. Other authors contributed funding, data, or assisted with writing. Papers in which my students or I are interior authors represent work initiated in another lab, but to which I made a substantial contribution. I do not accept authorship to papers in which I did not contribute substantially either in the conception or execution of the study. The use of an asterisk (*) denotes the papers that I consider represent my most important recent work (post 2019), and contributions highlighted in green are new since April 2024.

All papers numbered **1 through 180** are published in primary, peer-reviewed journals or peer-reviewed book chapters (Nos. **7,8, 20**, **15, 59, 115,** and **149**).

Google Scholar (31/03/2025) reports 15,516 citations (3,439 since 2020, h-index (64 = largest number of h papers that have at least h (= 64) citations, i10-index = 150 (= #papers with at least 10 citations).

1. Taylor. E.B. 2026. Rivers reimagined. Invited review essay for *Nature and Culture*. **21**(1): 104-111.

2. **E.B. Taylor,** M. Sandler, S. Narum, and P. Schulte. 2026. Genomic variation in *Oncorhynchus mykiss* in the Pacific Northwest: regional population structure, historical demography, and variation at trait-associated loci. *Canadian Journal of Fisheries and Aquatic Sciences.* In press, Oct 2026

3. **Taylor, E.B.** and M.P. Pearson. 2026. Recovery strategy initiatives under Canada's Species at Risk Act contribute to a better understanding of geographic distribution and diversity within the Endangered Nooksack dace (*Rhinichthys cataractae*). *Can. J. Zool.* **104:**10.1139/cjz-2026-0013.

4. **Taylor, E.B.,** *A. Geraldes,* N. Burnett, and B. Mossop. 2026. Multispecies genomic assessment and monitoring of fish biodiversity in response to a major hydroelectric development. *Canadian Journal of Fisheries and Aquatic Sciences* **83:**10.1139/cjfas-2025-0399. *****Editors' Choice August 2026*****

5. **Taylor, E**.B and *A.M. Geraldes.* 2026. Comparative analysis of genomic differentiation and outcomes of contact between taxa within a species complex of north temperate fishes. *Ecology and Evolution* **16**(7):e73685.

6. **Taylor, E.B.,** *A.M. Geraldes*, and J. Shen. 2025. History of speciation inferred from genomic analysis of a species complex of north temperate fishes. *Evolution* **79**:1789-1806.

7. Buckner, J.H., T. Davies, S. McAdam, **Eric B. Taylor**, R.S. Waples, and M. Baskett. 2025. Long life spans can mitigate the genetic effects of strays from temporary conservation hatchery programs. In Press, *Can. J. Fish. Aquat. Sci*. **82**: DOI: 10.1139/cjfas-2023-0355. Note: UBC-UC-Davis collaboration with UC-D student as first author. *****Editors' Choice January 2025*****

8. *Liu, A., *A. Geraldes*, and **E.B. Taylor.** 2024. Spatial admixture analysis within a contact zone between subspecies of a north temperate diadromous fish. *Molecular Ecology* **33**(15): e17459. doi.org/10.1111/mec.17459

9. Liu, A., *A. Geraldes*, and **E.B. Taylor.** 2023. Development and testing of diagnostic molecular markers to differentiate among three species of *Salvelinus*: Arctic char, Dolly Varden, and bull trout. *Conservation Genetic Resources* **15**(3): 83-96. doi.org/10.1007/s12686-023-01305-7.

10. Secci-Petretto, G., Englmeier, G.K., S.J. Weiss, Antonov, A., Persat, H. Denys, G., Schenekar, T., V.I. Romanov, **E.B. Taylor**, and E. Froufe. 2023. Evaluating a species phylogeny using ddRAD SNPs: cytonuclear discordance and introgression in the salmonid genus *Thymallus* (grayling). *Mol. Phylog. Evol.* **178***:* 107654. https://doi.org/10.1016/j.ympev.2022.107654

11. Liu, S., **E.B. Taylor**, and J.G. Richards. 2023. Osmoregulatory trade-offs among estuarine and freshwater-resident prickly sculpin (*Cottus asper*). *Physiological and Biochemical Zoology* **96(3)**: 233-246. doi: 10.1086/725208

12. ***Taylor, E.B.,** N.E. Mandrak, J.R. Post, and J.D. Reynolds. 2023. Conservation of Canadian freshwater fishes: current status, challenges, and research needs. pp. 353-378, **In**: Hasler, C., J. Imhof, N.E. Mandrak, and S.J. Cooke (eds.). *Freshwater fisheries in Canada: historical and contemporary perspectives on the resources and their management*. American Fisheries Society, Bethesda, MD. doi: https://doi.org/10.47886/9781934874707.ch12

13. Mandrak, N.M., R.A. Curry, P. Dumont, J.D. Reist, **E.B. Taylor,** and D. Watkinson. 2023. The zoogeography of Canadian freshwater fishes. pp. 1-56, **In**: Hasler, C., J. Imhof, N.E. Mandrak, and S.J. Cooke (eds.).

Freshwater fisheries in Canada: historical and contemporary perspectives on the resources and their management. American Fisheries Society, Bethesda, MD. https://doi.org/10.47886/9781934874707.ch1

14. *Liu, S., J.M. Wilson, **E.B. Taylor**, and J.G. Richards. 2022. Freshwater adaptation in prickly sculpin (Pisces: Cottidae): intraspecific comparisons reveal evidence for water pH and Na concentration driving diversity in ionoregulation. *J. Experimental Biology*. **225(18)**: Published online, Sept 5, 2022. https://doi.org/10.1242/jeb.243500

15. Siegle, M.R., **E.B. Taylor**, and M.I. O'Connor. 2022. Heat wave intensity drives fitness trade-offs consistent with effects on energy balance in a tidepool copepod. *Integrative and Comparative Biology,* **4**(1): https://doi.org/10.1093/iob/obac005

16. *Post, J.R., H.G.M. Ward, K. Wilson, G.L. Sterling, A. Cantin, and **E.B. Taylor**. 2021. Assessing conservation status with extensive but low-resolution data: application of Bayesian hierarchical modelling to Endangered Athabasca River Rainbow Trout (*Oncorhynchus mykiss*). *Conservation Biology* **36**(3):e13783

17. Zinn, K., J. Rosenfeld, and **E.B. Taylor.** 2021. Effects of water flow, water quality, and hypoxia on Threatened Salish sucker (*Catostomus* sp. cf. *catostomus*) and juvenile coho salmon (*Oncorhynchus kisutch*). *Can. J. Fish. Aquat. Sci.* **78:**1234-1246.

18. **Grummer, J.A.,* Whitlock, M., Schulte, P.M., and **E.B. Taylor.** 2021. Growth factor genes are associated with the evolutionary divergence of sympatric piscivorous and insectivorous rainbow trout (*Oncorhynchus mykiss*). *BMC Ecology and Evolution* **21**: 63. https://doi.org/10.1186/s12862-021-01795-9

19. **Taylor, E.B.,** R. Chudnow, I. Spendlow, R. Pillapow, and B. van Poorten. 2021. Microsatellite DNA analysis of overwintering bull trout (*Salvelinus confluentus*) and its implications for harvest regulation and habitat management. *Fisheries Management and Ecology* **28**:219-229. DOI: 10.1111/fme.12473

20. Weiss, S.J, **E.B. Taylor**, and eight co-authors. 2020. Global systematic diversity, range distributions, conservation and taxonomic assessments of graylings (Teleostei: Salmonidae; *Thymallus* spp.). *Organisms, Diversity and Evolution* **21**:25-42. https://doi.org/10.1007/s13127-020-00468-7

21. Christensen, K.A., Rondeau, E.B., Minkley, D.R., Sakhrani, D, Biagi, C.A., Flores, A-M., Withler, R.E. Beacham, T.D., Godin, T., **Taylor, E.B**., Russello, M.A., Devlin, R.H., and Koop, B.F. 2020. The sockeye salmon (*Oncorhynchus nerka*) genome, transcriptome, and analyses identifying population defining regions of the genome and sex chromosomes. PLoS One **15**(10):e0240935. https://doi.org/10.1371/journal.pone.0240935

22. Melnik, N., G. Markevich, **E.B. Taylor,** A. Loktyushukin, and E. Esin. 2020. Evidence for divergence between sympatric stone charr and Dolly Varden along unique environmental gradients in Kamchatka. *J. Zool. Systematics Evol. Res.* **58**:1135-1150. DOI: 10.1111/jzs.12367

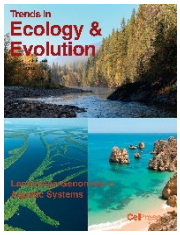
23. **Taylor, E.B.** 2020. *Fishes of the Salish Sea* (by T.W. Pietsch and J.W. Orr). Heritage House Publishing. **Invited book review**. *Trans. Am. Fish Soc.* **149**:421-421.

24. Colella, J.P., Talbot, S.L., Brochmann, C., **Taylor, E.B.,** Hoberg, E.P., and J.A. Cook. 2020. Using genomics to monitor, predict, and mitigate Arctic change. *Trends in Ecol. Evol.* **35**:149-162.

25. Whiteley A.R., B.E. Penaluna, **E.B. Taylor**, S. Weiss, A. Abadia-Cardoso, D. Gomez-Uchida, I. Koizumi, and P. Trotter. 2019. Trout and char taxonomy, systematics, and phylogeography. Chapter 6 in: *Trout and Char of the World*. America Fisheries Society, pp. 95-140.

26. **Taylor, E.B.** 2019. Behavior and ecology of Pacific salmon and trout (by T.P. Quinn). Second ed. UBC Press. **Invited book review**. *Quart. Rev. Biol.* **94**:296-297.

27. **Taylor, E.B.** C. Foley, and M. Neufeld. 2019. Genetic mixture analysis in support of restoration of a high value recreational fishery for rainbow trout (*Oncorhynchus mykiss*) from a large lake in interior British Columbia. *Conservation Genetics* **20**:891-902.



28. *Bay, R.A., **E.B. Taylor**, and D. Schluter. 2019. Selection and introgression on introduced alleles in a native species. *Molecular Ecology* **28**:2802-2813.

29. **Grummer, J.A.,* L.B. Beheregaray, L. Bernatchez, B.K. Hand, G. Luikart, Gordon, S. Narum, and **E.B. Taylor.** 2019. Landscape genomics and understanding environmental effects on genetic variation in aquatic systems. *Trends in Ecology and Evolution* **34**:641-654. After first author, others are listed alphabetically. ***Journal cover image***

30. Rudolfsen, T.R., Ruppert, J.L.W., **Taylor, E.B**., Davis, C.S. Watkinson, D., and Poesch, M.S., 2019. Habitat use and hybridization between Rocky Mountain Sculpin (*Cottus* sp.) and Slimy Sculpin (*Cottus cognatus*). *Freshwater Biology* **64**:391-404.

31. Fukui, S., S.L. May-McNally, **E.B. Taylor**, and I Koizumi. 2018. Maladaptive secondary sexual characteristics reduce the reproductive success of hybrids between native and non-native salmonids. *Ecology and Evolution* **8**(23): 12173-12182.

32. Moore, J-S., J.M. Chapman, M.J. Mazerolle, L.N. Harris, and **E.B. Taylor.** 2018. Correspondence - Too early to sound the alarm on the impacts of climate change on Arctic Char in Lake Hazen: a comment on Lehnherr et al. 2018. *Nature Communications* **9**:1-2.

33. Siegle, M.R, **E.B. Taylor,** and M.I. O'Connor. 2018. Prior heat accumulation reduces survival during subsequent experimental heat waves. *Journal of Experimental Marine Biology and Ecology* **501**:109-117.

34. Lecaudey, L.A, U.K. Schliewen, A.G. Osinov, **E.B. Taylor**, L. Bernatchez, and S.J. Weiss. 2018. Inferring phylogenetic structure, hybridization and divergence times within Salmoninae (Teleostei: Salmonidae) using RAD-sequencing. *Molecular Phylogenetics and Evolution* **124**:82-99.

35. **Taylor, E.B**., and R.S. Piercey. 2018. Going, going, gone: evidence for extinction of an endemic species pair of threespine sticklebacks (*Gasterosteus aculeatus*) with implications for protection under species at risk legislation. *Conservation Genetics.* **19***:*297-308.

36. Ruppert, J.L.W., James, P.M.A, **Taylor, E.B**., Rudolfsen, T. Veillard, M., Davis, C., Watkinson, D. and M. Poesch. 2017. Riverscape genetic structure of a threatened and dispersal limited freshwater species, the Rocky Mountain Sculpin (*Cottus* sp.). *Conservation Genetics* **18**:925–937. DOI: 10.1007/s10592-017-0938-6

37. Dennert, A., S.L. May-McNally, M. Bond, T.P Quinn, and **E.B. Taylor**. 2016. The ecology of co-existence: trophic niches, feeding morphology, and migratory life-history of sympatric Dolly Varden (*Salvelinus malma*) and Arctic char (*S. alpinus*). *Can. J. Zool*. 94:529-539.

38. Hansen, D., J.S. Moore, **E.B. Taylor**, R. Barrett, and A.P. Hendry. 2016. Assessing reproductive barriers using a contact zone between parapatric lake-stream stickleback ecotypes. *J. Evol. Biol.* **29**: 2491–2501. Much of the field work for this paper was completed by J.S. Moore when he was a PhD student of mine.

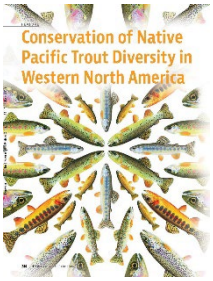
39. Harris; L.N., F.P., Palstra, R. Bajno, C.P. Gallagher, K. Howland, **E.B. Taylor**, and J.D. Reist. 2016. Assessing conservation risks to populations of an anadromous Arctic salmonid, the Northern Dolly Varden

(*Salvelinus malma malma*), via estimates of effective and census population sizes and Approximate Bayesian computation. *Conservation Genetics* 18:393–410. DOI 10.1007/s10592-016-0915-5

40. Parkinson, E.A., C. Perrin, D. Ramos-Espinosa, and **E.B. Taylor.** 2016. Evidence for freshwater residualism in coho salmon (*Oncorhynchus kisutch*) from a watershed on the north coast of British Columbia. *Canadian Field Naturalist* **130**(4): 336–343.

41. Crossman, C.A., **E.B. Taylor**, and L.G. Barrett-Leonard. 2016. An analysis of factors driving widespread hybridization in the Cetacea. *Ecology and Evolution* **6**: 1293-1303. doi: 10.1002/ece3.1913).

42. **Taylor, E.B.** 2016. The Arctic char (*Salvelinus alpinus*) species complex in North America revisited. *Hydrobiologica* **783**: 283-293. doi:10.1007/s10750-015-2613-6



43. Penaluna, B.E., **E.B. Taylor**, and 20 co-authors. 2016. Conservation of native Pacific trout diversity in western North America: Past, present, and future. *Fisheries* **41**: 286-300. ***Journal cover image***

44. Ruskey, J.A., and **E.B. Taylor** 2016. Morphological and genetic analysis of sympatric dace within the *Rhinichthys cataractae* species complex: a case of isolation lost. *Biol. J. Linn. Soc.* **117**: 547-563.

45. **Taylor, E.B.,** McPhail, J.D., and J. Ruskey**.** 2015**.** The phylogeography of the longnose dace (*Rhinichthys cataractae*) species group in northwestern North America – the Nooksack dace. *Can. J. Zool*. **93**: 724-734. doi: 10.1139/cjz-2015-0014.

46. Harris, L.N., R. Bajno, C.P. Gallagher, I. Koizumi, L.K. Johnson, K.L. Howland, **E.B. Taylor** and J.D. Reist. 2015. Life-history characteristics and landscape attributes as drivers of genetic variation, gene flow and fine-scale population structure in Northern Dolly Varden (*Salvelinus malma malma*) in Canada. *Can. J. Fish. Aquat. Sci.* **72**: 1477-1493. doi:10.1139/cjfas-2015-0016.

47. May-McNally, S.L., T.P. Quinn, and **E.B. Taylor**. 2015. Low levels of hybridization between sympatric Arctic char (*Salvelinus alpinus*) and Dolly Varden char (*Salvelinus malma*) highlights their genetic and spatial distinctiveness. *Ecology and Evolution* **5**: 3031-3045. doi: 10.1002/ece3.1583.



48. Moore, J-S., R. Bajno, J.D. Reist, and **E.B. Taylor**. 2015. Post-glacial re-colonization of the North American Arctic by Arctic char (*Salvelinus alpinus*): genetic evidence of multiple northern refugia and hybridization between glacial lineages. *J. Biogeography* **42**: 2089-2100. ***Journal cover image***

49. Moreira, A.L. and **E.B. Taylor.** 2015. The origin and genetic divergence of black kokanee, a novel reproductive ecotype of *Oncorhynchus nerka. Can. J. Fish. Aquat. Sci*. **72**: 1584-1595.

50. **Taylor, E.B**., and S.L. May-McNally. 2015. Genetic analysis of Dolly Varden (*Salvelinus malma*) across its North American range: evidence for a contact zone in southcentral Alaska. *Can. J. Fish. Aquat. Sci.* **72**: 1048-1057. DOI:101139/cjfas-2015-003.

51. Mee, J.A., L. Bernatchez, J.D. Reist, *S.M. Rogers*, and **E.B. Taylor**. 2015. Identifying evolutionarily significant units for intraspecific conservation prioritization: an hierarchical approach applied to the lake whitefish species complex (*Coregonus* spp.). *Evolutionary Applications* **8**: 423-441. (Shared first authorship

among Mee, Rogers, Taylor. Majority of work done when Rogers was a pdf with D. Schluter, but working under my direction for this MS).

52. Harris L.N., Chavarie L., Bajno R., Howland, K.L., Wiley, S.H., Tonn, W.M., and **E.B. Taylor**. 2015. Evolution and origin of sympatric shallow-water morphotypes of lake trout, *Salvelinus namaycush*, in Canada's Great Bear Lake. *Heredity* **114**: 94-106. doi:10.1038/hdy.2014.74

53. Crossman, C.A, L.G. Barrett-Leonard, and **E.B. Taylor**. 2014. Population structure and intergeneric hybridization in harbour porpoises (*Phocoena phocoena*) in British Columbia, Canada. *Endangered Species Research* **26**: 1-12.

54. Beasley, R., S.L. Lance, J. Ruskey, and **E.B. Taylor**. 2014. Development and characterization of twenty-five microsatellite markers for the longnose dace (Cyprinidae: *Rhinichthys*) using paired-end Illumina shotgun sequencing. *Conservation Genetics Resources* **6**:1011-1013. DOI 10.1007/s12686-014-0272-y

55. Yau, M.M., and **E.B. Taylor**. 2014. Cold tolerance performance of westslope cutthroat trout (*Oncorhynchus clarkii lewisi*) and rainbow trout (*O. mykiss*) and its potential role in influencing interspecific hybridization. *Can. J. Zool.* **92**:777-784.

56. May-McNally, S., T.P. Quinn, P.J. Woods and **E.B. Taylor.** 2014. Evidence for genetic distinctions among morphotypes of Arctic char (*Salvelinus alpinus*) in western Alaska. *Ecology of Freshwater Fish* **24**: 562-574. DOI: 10.1111/eff.12169

57. Blanchfield, P.J., **E.B. Taylor**, and D.J. Watkinson. 2014. Morphological and genetic analyses identify a new record of a glacial relict; pygmy whitefish (*Prosopium coulterii*) from northwestern Ontario. *Can. J. Zool*. **92**:267-271.

58. Harris, L.N., J-S. Moore, P. Galpern, R. Tallman, and **E.B. Taylor.** 2014. Geographic influences on fine-scale, hierarchical population structure in northern Canadian populations of anadromous Arctic char (*Salvelinus alpinus*). *Environmental Biology of Fishes* **97**:1233-1252.

59. **Taylor E.B.**, Yau, M.M., and Mattock B. 2014. Population structure in three species of co-distributed salmonid fishes in the Peace River and tributaries near a major proposed hydroelectric development in northeastern British Columbia, Canada. *River Research and Applications* **30**: 1120-1133. DOI: 10.1002/rra.2712

60. Dick, S., J.B. Shurin, and **E.B. Taylor**. 2014. Replicate divergence within and between sounds in a marine fish: the copper rockfish (*Sebastes caurinus*). *Molecular Ecology* **23**: 575-590.

61. Moore, J-S., L.N. Harris., R. Tallman, and **E.B. Taylor**. 2013. The interplay between dispersal and gene flow in anadromous Arctic char (*Salvelinus alpinus*): implications for potential for local adaptation**.** *Can. J. Fish. Aquat. Sci*. **70**: 1327-1338. dx.doi.org/10.1139/cjfas-2013-0138.

62. Siegle M.R., **Taylor E.B.**, Miller K.M., Withler R.E., and K.L. Yamanaka. 2013. Subtle population genetic structure in yelloweye rockfish (*Sebastes ruberrimus*) is consistent with a major oceanographic division in British Columbia, Canada. PLoS ONE **8**(8): e71083.

63. **Taylor, E.B.** and S. Pinkus. 2013. Influence of court rulings and recovery team membership on science advice for species at risk in Canada. *Environmental Reviews* **21**: 93-102.

64. Cook, J.A., M. Kholodova, C. Brochmann, V. Fedorov, S. L. Talbot, **E.B. Taylor,** R. Väinölä, E.P. Hoberg, and K.P. Magnusson. 2013. Genetic perspectives on Arctic biodiversity. Chapter 17, pp. 567-591, In: Meltofte, H. et al. (ed.) 2013. Arctic Biodiversity Assessment. Status and trends in Arctic biodiversity. Conservation of Arctic Flora and Fauna (CAFF), Akureyri, Iceland. http://www.arcticbiodiversity.is/index.php/the-report

65. Yau, M.M. and **E.B. Taylor**. 2013. Environmental and anthropogenic correlates of hybridization between westslope cutthroat trout (*Oncorhynchus clarkii lewisi*) and introduced rainbow trout (*O. mykiss*). *Conservation Genetics* **14**: 885-900. DOI 10.1007/s10592-013-0485-8

66. **Taylor, E.B.,** *C. Darveau*, and P. Schulte. 2013. Setting conservation priorities in a widespread species: phylogeographic and physiological variation in the lake chub, *Couesius plumbeus* (Pisces: Cyprinidae) *Diversity* **5**:149-165.

67. Woodruff, P., and **E.B. Taylor.** 2013. Assessing the distinctiveness of the endemic Cultus pygmy sculpin from its widespread ancestor the coastrange sculpin (*Cottus aleuticus*). *Endangered Species Research* **20**:181-194. doi: 10.3354/esr00493.

68. Harris, L.N., M. Kowalchuk, R. Bajno, M. Lindsay, K.L. Howland, and **E.B. Taylor.** 2013. Microsatellite and mtDNA analysis of lake trout, *Salvelinus namaycush*, from Great Bear Lake, Northwest Territories: a lack of intra-lake population structure revealed among post-glacial populations. *Ecol and Evol.* **3**:146-161.

69. O'Bryhim, J., S.L. Lance, K.L. Jones, C. Somers, M.M. Yau, and **E.B. Taylor**. 2013. Development and characterization of twenty-two novel microsatellite markers for the mountain whitefish, *Prosopium williamsoni*, and cross-amplification in the round whitefish, *P. cylindraceum*, using paired-end Illumina shotgun sequencing. *Conserv. Genet. Res*. **5**:89-91.

70. Nowosad, D., and **E.B. Taylor**. 2013. The influence of habitat variables and invasive species on the distribution and ecology of brassy minnow, *Hybognathus hankinsoni*, in the lower Fraser River, British Columbia. *Can. J. Zool.* **91**:71-81.

71. Mee, J.A., C. Chan, and **E.B. Taylor**. 2013. Coexistence between sperm-dependent asexuals and their sexual hosts: the role of differences in fitness-related traits. *Env. Biol. Fishes* **96**:1111-1121.

72. Harris, L.N., **E.B. Taylor**, R.F. Tallman, and J.D. Reist. 2012. Asymmetric contemporary gene flow and effective population size in an Arctic coregonine. *J. Fish. Biol*. **81**:288-307.

73. Velema, G.J, J.R. Rosenfeld, and **E.B. Taylor.** 2012. Effects of invasive American signal crayfish (*Pascifasticus leniusculus*) on the reproductive behaviour of threespine stickleback (*Gasterosteus* aculeatus) species pairs. *Can. J. Zool.* **90**:1328-1338.

74. *Gowell, C.P., T.P. Quinn, and **E.B. Taylor**. 2012. Coexistence and origin of trophic ecotypes of pygmy whitefish (*Prosopium coulterii*) in a southwestern Alaskan lake. *J. Evol. Biol*. **58**:2432-2448.

75. *Darveau,* C., **E.B. Taylor** and P.M. Schulte. 2012. Thermal physiology of warm spring colonists: variation among Lake Chub (Cyprinidae: *Couesius plumbeus*) populations. *Physiol. Biochem. Zool*. **85**: 607-617.

76. Mee, J.A. and **E.B. Taylor.** 2012. The cybrid invasion: widespread postglacial dispersal by *Phoxinus* (Pisces: Cyprinidae) cytoplasmic hybrids. *Can. J. Zool.* **90**:577-584.

77. McKinnon, J., and **E. B. Taylor** 2012. Species choked and blended. *Nature Research News and Views* (**invited commentary**, Feb. 16th, 2012). **482**:313-314.

78. **Taylor, E.B.,** L.N. Harris, E.K. Spice, and M.F. Docker. 2012. Microsatellite DNA analysis of parapatric lamprey (*Entosphenus* spp.) populations: implications for evolution, taxonomy and conservation of a Canadian endemic. *Can. J. Zool.* **90**:291-303.

79. ***Taylor, E.B**., C. Gerlinsky, N. Farrell, and *J.L. Gow*. 2012. A test of hybrid growth disadvantage in wild, free-ranging species pairs of threespine stickleback (*Gasterosteus aculeatus*) and its implications for ecological speciation. *Evolution* **66**:240-251. DOI: 10.1111/j.1558-5646.2011.01439.x

80. *Gow, J.L.***,** P. Tamkee, J. Heggenes, G. Wilson, and **E.B. Taylor**. 2011. Limited impact of hatchery supplementation that uses native broodstock on the genetic structure and diversity of steelhead trout revealed by a large scale spatio-temporal microsatellite survey. *Evolutionary Applications* **4**:763-782. doi:10.1111/j.1752-4571.2011.00198.x

81. Ormond, C., J. Rosenfeld, and **E.B. Taylor.** 2011. Environmental determinants of threespine stickleback species pair evolution and persistence. *Can. J. Fish. Aquat. Sci.* **68**:1983-1997.

82. **Taylor, E.B.,** *J.L. Gow, J. Witt*, and R. Zemlak. 2011. Connectivity among populations of pygmy whitefish (*Prosopium coulterii*) in northwestern North America inferred from microsatellite DNA analyses. *Canadian Journal of Zoology*. **89**:255-266.

83. *Witt, J.*, R. Zemlak, and **E.B. Taylor**. 2011. Phylogeography and the origins of range disjunctions in a north temperate fish, the pygmy whitefish (*Prosopium coulterii*) inferred from mitochondiral and nuclear DNA sequence analysis. *J. Biogeography* **38**:1557-1569.

84. Popowich, R.C.,Venturelli, P.A., Stelfox, J.D., and **E.B. Taylor**. 2011. Validation of a morphological characteristics used for field identification of bull trout x brook trout hybrids. *North Am. J. Fish. Mgmt*. **31**:548-553.

85. Ardren, W.R., **E.B. Taylor** and 11 coauthors. 2011. Genetic structure, evolutionary history, and conservation units of bull trout in the coterminous United States. *Trans. Am. Fish. Soc*. **140**:506-525.

86. Heggenes, J., M. Beere, P. Tamkee, and **E.B. Taylor**. 2011. Estimation of within and among population genetic diversity of *Oncorhynchus mykiss* in a coastal river experiencing spatially variable hatchery augmentation. *Trans. Am. Fish. Soc*. **140**:123-135.

87. Mee, J., C. Brauner, and **E.B. Taylor.** 2011. Repeat swimming performance and its implications for inferring the relative fitness of asexual hybrid dace (Pisces: *Phoxinus*) and their sexually reproducing parental species. Physiological and Biochemical Zoology **84**:306-315.

88. **Taylor, E.B.,** P. Tamkee, *E. Keeley*, and E. A. Parkinson. 2011. Conservation prioritization in widespread species: the use of genetic and morphological data to assess population distinctiveness in rainbow trout (*Oncorhynchus mykiss*) from British Columbia, Canada. *Evolutionary Applications* **4**: 100-115.

89. Fraser, D.J., Weir, L.K., Bernatchez, L., Hansen, M.M. and **E.B. Taylor.** 2011. The extent, scale, extent, speed, and molecular basis of local adaptation in salmonid fishes. *Heredity*, **106**:404-420. **Featured on *Science Daily*, *The Vancouver Sun*, *The Montréal Gazette***.

90. Warnock, W.G., J.B. Rasmussen, and **E.B. Taylor.** 2010. Genetic clustering methods reveal bull trout (*Salvelinus confluentus*) fine-scale population structure as a spatially nested hierarchy. *Cons. Genetics* 11:1421-1433. doi 10.1007/s10592-009-9969-7.

91. Richardson, J.S., **E.B. Taylor**, D. Schluter, M. Pearson, and T. Hatfield. 2010. Do riparian zones qualify as critical habitat for freshwater fishes *Can. J. Fish. Aqua. Sci*. **67**:1197-1204. (Perspective article).

92. Harris, L.N., and E.B. Taylor. 2010. Pleistocene glaciations and contemporary genetic diversity in a Beringian fish, the broad whitefish, *Coregonus nasus* (Pallas): inferences from microsatellite DNA variation. *Journal of Evolutionary Biology* **23**:72-86.

93. Harris, L.N. and **E.B. Taylor**. 2010. Population structure of broad whitefish, *Coregonus nasus* (Pallas), from the Mackenzie River system, NT: evolutionary inferences and conservation implications for subsistence fishery management. *Can. J. Fish. Aquat. Sci* **67**:905-918.

94. Northrup, S., M. Connor, and **E.B. Taylor**. 2010. Population structure of lake trout (*Salvelinus namaycush*) in Atlin Lake, British Columbia and contributions to local fisheries. *Can. J. Fish. Aquat. Sci.* **67:**1171-1186

95. Tamkee, P., E.A. Parkinson, and **E.B. Taylor**. 2010. The influence of Wisconsinan glaciation and contemporary stream hydrology on microsatellite DNA variation in rainbow trout (*Oncorhynchus mykiss*). *Can. J. Fish. Aquat. Sci*. 67:919-935

96. Taylor, E.B. 2010. Changes in taxonomy and species distributions and their influence on estimates of homogenization and differentiation in freshwater fish faunas. *Diversity and Distributions* 16:676-689.

97. Ilves, K**. and E.B. Taylor.** 2009**.** Molecular resolution of systematics of the northern hemisphere smelt family Osmeridae and evidence for homoplasy of morphoogical characters. *Mol. Phylo. Evol.* **50**:163-178.

98. McPhail, J.D., and **E.B. Taylor**. 2009. The phylogeography of the longnose dace (*Rhinichthys cataractae*) species group in northwestern North America – the origin and evolution of the Umpqua and Millicoma dace. *Can. J. Zool.* **87**:491-497.

99. Ilves, K. and **E.B. Taylor**. 2008. Evolution in the North Pacific Ocean: trans-Pacific distributions and comparative biogeography of the smelt genus *Hypomesus* (Pisces: Osmeridae). *J. Biogeography* **35**:48-64.

100. Dunham, J.E., C. Baxter, K. Fausch, W. Fredenberg, K. Morita, S. Kitano, I. Koizumi, T,. Nakamura, B. Reiman, K. Savvaitiova, J. Stanford, and **E. B. Taylor.** 2008. Ecology and conservation of Dolly Varden, white-spotted char, and bull trout. *Fisheries* **33**:537-550.

101. Jelks, H.L., SJ. Walsh, NM. Burkhead, S. Contreras-Balderas, E. Díaz-Pardo, DA. Hendrickson, J. Lyons, N.E. Mandrak, F. McCormick, J.S. Nelson, S.P. Platania, B.A. Porter, C.B. Renaud, J.J. Schmitter-Soto, **E.B. Taylor**, and M.L. Warren. 2008. Conservation Status of Imperiled North American Freshwater and Diadromous Fishes. *Fisheries* **33**:372-407.

102. Taylor, E.B., A. Lilliestrale, E.D. Lowery, and T. Quinn. 2008. Genetic analysis of sympatric char in western Alaska: an acid test of biological species status for Dolly Varden and Arctic char. *J. Evol. Biol.* **21**:1609–1625.

103. Hubert, N., R. Hanner, E. Holm, N. Mandrak, **E.B. Taylor**, M. Burridge, D. Watkinson, P. Dumont, A. Curry, P. Bentzen, J. Zhang, J. April, and L. Bernatchez. 2008. Identifying Canadian freshwater fishes through DNA barcodes. *PloS* ONE **3**: e2490.(plus appendices).

104. *Gow, J.L.*, C.L. Peichel and **E.B. Taylor.** 2007. Selection against hybrids in natural populations of sympatric threespine sticklebacks. *J. Evol. Biol*. **20**:2173-2180.

105. Taylor, E.B., P. Tamkee, G. Sterling, and W. Hughson. 2007. Microsatellite DNA analysis of rainbow trout (*Oncorhynchus mykiss*) from western Alberta, Canada: native status and evolutionary distinctiveness of Athabasca rainbow trout. *Conservation Genetics* **8**:1-15.

106. Moore, J.-S-., *J.L. Gow*, **E.B. Taylor,** and A.P. Hendry. 2007. Quantifying the constraining influence of gene flow on adaptive divergence in lake-stream stickleback populations. *Evolution* **61**: 2015-2026.

107. *Keeley, E*., E. Parkinson, and **E.B. Taylor.** 2007. An experimental assessment of environmental versus genetically based differences in morphology among rainbow trout ecotypes. *J. Evol. Biol.* **20**: 725–736

108. Ilves, K.L., and **E.B. Taylor**. 2007. Are *Hypomesus chishimaensis* and *H. nipponensis* (Pisces: Osmeridae) distinct species? A molecular assessment using comparative sequence data from five genes. *Copeia* **2007**:180-185.

109. *Gow, J.L.,* C. Peichel, and **E.B. Taylor**. 2006. Mining the threespine stickleback (*Gasterosteus aculeatus*) microsatellite linkage map for genetic markers in functional ecological and evolutionary studies. *Molecular Ecology* **15**:739-752.

110. Taylor, E.B., J.W. Boughman, M. Groenenboom, M. Sniatynski, D. Schluter, and *J.L. Gow*. 2006. Speciation in reverse: morphological and genetic evidence for the collapse of a threespine stickleback (*Gasterosteus aculeatus*) species pair. *Molecular Ecology* **15**:343-355.

111. Taylor, E.B. and A.B. Costello. 2006. Microsatellite analysis of coastal bull trout (*Salvelinus confluentus*): zoogeographic implications and applications to recreational fisheries management. Submitted to *Canadian Journal of Fisheries and Aquatic Sciences* **63**:1153-1171.

112. *Heggenes, J.,* T. Qvenild, M.D. Stamford, and **E.B. Taylor**. 2006. Population structure and genetic diversity in relation to movements in wild European grayling (*Thymallus thymallus*, Salmonidae). *Canadian Journal of Fisheries and Aquatic Sciences* **63**:1309-1319.

113. *Heggenes, J.,* M. Beere, P. Tamkee**,** and **E.B. Taylor.** 2006. Temporal comparisons of genetic diversity in steelhead (*Oncorhynchus mykiss*) before and after conservation hatchery operation in a coastal, boreal river. *Trans. Am. Fish. Soc*. **135**:251-267.

114. Stamford, M.D. and **E.B. Taylor**. 2005. Population subdivision and genetic signatures of demographic changes in Arctic grayling (*Thymallus arcticus*) from an impounded watershed. *Canadian Journal of Fisheries and Aquatic Sciences* **62**:2548-2559.

115. Rubidge, E.M. and **E.B. Taylor**. 2005. An analysis of spatial and environmental factors influencing hybridization between native westslope cutthroat trout (*Oncorhynchus clarki lewisi*) and introduced rainbow trout (*O. mykiss*) in the upper Kootenay River drainage, British Columbia. *Conservation Genetics* **6**: 369-384.

116. Keeley, E.R., E.A. Parkinson**,** and **E.B. Taylor.** 2005. Ecotypic differentiation of rainbow trout (*Oncorhynchus mykiss*) populations from British Columbia. *Can. J. Fish. Aquat. Sci.* **62**: 1523–1539.

117. Rubidge, E.R. and **E.B. Taylor.** 2004. Hybrid zone structure and the potential role of selection in hybridizing populations of native westslope cutthroat trout (*Oncorhynchus clarki lewisi*) and introduced rainbow trout (*O. mykiss*). *Molecular Ecology* **13**: 3735-3749.

118. Hendry, A.P. and **E.B. Taylor**. 2004. How much of the variation in adaptive divergence can be explained by gene flow? An evaluation using lake/stream stickleback. *Evolution* **58**: 2319-2331.

119. Hoysak, D.J., N.R. Liley, and **E. B. Taylor**. 2004. Raffles, roles, and the outcome of sperm competition in sockeye salmon. *Canadian Journal of Zoology* **82**:1017-1026.

120. Taylor, E.B. 2004. Evolution in mixed company: evolutionary inferences from studies of natural hybridization in Salmonidae a review of hybridization in salmonid fishes. Pp. 232-263. *in* A.P. Hendry and S. Stearns, eds. *Evolution illuminated*. *Salmon and their relatives.* Oxford University Press, Oxford.

121. Taylor, E.B. 2004. An analysis of homogenization and differentiation of Canadian freshwater fish faunas with an emphasis on British Columbia. *Can. J. Fish. Aquat. Sci.* **61**:68-79.

122. Johnson L.S. and **E.B. Taylor** 2004. The distribution of divergent mitochondrial DNA lineages of threespine stickleback (*Gasterosteus aculeatus*) in the northeastern Pacific Basin: postglacial dispersal and lake accessibility. *J. Biogeography* **31**: 073-1083.

123. Stamford, M.D. and **E.B. Taylor**. 2004. Phylogeographic lineages of Arctic grayling (*Thymallus arcticus*) in North America: divergence, origins, and affinities with Eurasian *Thymallus*. *Molecular Ecology* **13**:1533-1549.

124. Taylor, E.B., M.D. Stamford, and J.S. Baxter. 2003. Population subdivision in westslope cutthroat trout (*Oncorhynchus clarki lewisi*) at the northern periphery of its range: evolutionary inferences and conservation implications. *Molecular Ecology* **12**:2609-2622.

125. Costello, A.B., T. Down, S. Pollard, C.J. Pacas, and **E.B. Taylor**. 2003. The influence of history and contemporary stream hydrology on the evolution of genetic diversity within species: an examination of microsatellite DNA variation in bull trout, *Salvelinus confluentus* (Pisces: Salmonidae). *Evolution* **57**: 328-344.

126. Curtis, J. and **E.B. Taylor**. 2003. The impacts of forest management practices on the population structure of coastal giant salamanders (*Dicamptodon tenebrosus*). *Biological Conservation* **115:**45-54.

127. Redenbach, Z. and **E.B. Taylor**. 2003. A bimodal hybrid zone between two species of char (*Salvelinus*) in northwestern North America. *J. Evol. Biol.* **16**:1135-1148.

128. Altman, A., and **E.B. Taylor**. 2003. A molecular assessment of homing in an intertidal fish: the tidepool sculpin (*Oligocottus maculosus*) Girard. *J. Fish Biol.* **62**:623-640.

129. Burton, C., C.J. Krebs, and **E.B. Taylor.** 2002. Population genetic structure of the cyclic snowshoe hares *(Lepus americanu*s) in southwestern Yukon, Canada. *Molecular Ecology* **11**: 1689-1701.

130. Redenbach, Z., and **E.B. Taylor**. 2002. Evidence for historical introgression along a contact zone between two species of char (Pisces: Salmonidae) in northwestern North America. *Evolution* **56**: 1021-1035.

131. *Hendry, A.P.*, J.D. McPhail, and **E.B. Taylor**. 2002. Adaptive divergence and the balance between selection and gene flow: lake and stream stickleback in the Misty system. *Evolution* **56**: 1199-1216.

132. Magnan, P., C. Audet, H. Glemet, M. Legault, M.A. Rodríguez and **E.B. Taylor**. 2002. Recent developments in the ecology, behaviour and evolution of *Salvelinus* species and their impact on population management and conservation. *Env. Biol. Fish.* **64**: 9-14.

133. Magnan, P., C. Audet, H. Glémet, M. Legault, M.A. Rodríguez and **E.B. Taylor** (Eds.). 2002. Ecology, evolution and behavior of *Salvelinus* species. Special issue of *Env. Biol. Fish.* **64**: 1-360.

134. Rubidge, E., P. Corbett, and **E.B. Taylor**. 2001. A molecular analysis of hybridization between native westslope cutthroat trout (*Oncorhynchus clarki lewisi*) and introduced rainbow trout (*O. mykiss*) in southeastern British Columbia, Canada. *J. Fish Biology* **59**(Suppl. A)*:* 42-54.

135. Hagen, J. and **E.B. Taylor**. 2001. Habitat partitioning as a factor limiting gene flow in hybridizing populations of Dolly Varden char (*Salvelinus malma*) and bull trout (*S. confluentus*). *Canadian Journal of Fisheries and Aquatic Sciences* **58**: 2037-2047.

136. *Hendry, A.P.*, T. Day, and **E.B. Taylor**. 2001. Population mixing and the adaptive divergence of quantitative characters in discrete populations: a theoretical framework for empirical tests. *Evolution* **55**: 459-466.

137. Taylor, E.B., A. Costello, Z. Redenbach, S. Pollard, and C. Pacas. 2001a. Nested analysis of genetic diversity in western char: speciation, biogeography, and conservation. *Canadian Journal of Fisheries and Aquatic Sciences* **58**: 406-420.

138. McLean, J. and **E.B. Taylor.** 2001. Resolution of population structure in a species with high gene flow: microsatellite variation in the eulachon (Osmeridae: *Thaleichthys pacificus*). *Marine Biology* **139**:411-420.

139. Taylor, E.B. 2001. Status of the sympatric smelt, *Osmerus*, populations of Lake Utopia, New Brunswick. *Canadian Field Naturalist* **115**:131-137.

140. Taylor, E.B., A. Kuiper, P.M. Troffe, D.J. Hoysak, and S. Pollard. 2000. Variation in developmental biology and microsatellite DNA in reproductive ecoptypes opf kokanee, *Oncorhynchus nerka*: implications for declining populations in a large British Columbia lake. *Conserv. Genetics* **1**:231-249.

141. Taylor, E.B. and J.D. McPhail. 2000. Historical contingency and ecological determinism interact to prime speciation in sticklebacks, *Gasterosteus*. *Proceedings of the Royal Society B.*, **267** (1460): 2375–2384.

142. Volpe, J., **E.B. Taylor**, D.W. Rimmer, and B.W. Glickman. 2000. Evidence for natural reproduction of escaped Atlantic salmon (*Salmo salar*) in coastal British Columbia. *Conservation Biology* **14**: 899-903.

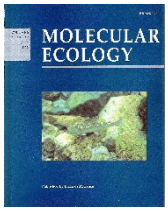
143. Taylor, E.B. 2000. Preface to Proceedings of the Third International Conference on Stickleback Behaviour. *Behaviour* **137**: 829-831.

144. Curtis, J.M. and **E.B. Taylor**. 2000. Isolation and characterization of microsatellite loci in the Pacific giant salamander *Dicamptodon tenebrosus*. *Molecular Ecology* **9**: 116-117.

145. McCusker, M. Parkinson, E., and **E.B. Taylor**. 2000. Phylogeography of rainbow trout (*Oncorhynchus mykiss* and its implications for taxonomy, biogeography, and conservation. Molecular Ecology **9**: 2089-2108.

146. McLean, J., D.E. Hay, and **E.B. Taylor**. 1999. Marine fish population structure in an anadromous fish: life history influences mitochondrial DNA variation in the eulachon, *Thaleichthyes pacificus*. *Molecular Ecology* **8**: S143-158.

147. Taylor, E.B. 1999. Species pairs of north temperate freshwater fishes: evolution, taxonomy, and conservation. *Reviews in Fish Biology and Fisheries* **9**: 299-324. (**Invited review**).



148. Taylor, E.B., Pollard, S., and D. Louie. 1999. Mitochondrial DNA variation in bull trout (*Salvelinus confluentus*) from northwestern North America: implications for zoogeography and conservation. *Molecular Ecology* **8**: 1155-1170. ***Journal Cover Image***

149. McPhail, J.D. and **E.B. Taylor**. 1999. Morphological and genetic variation in northwestern longnose suckers, *Catostomus catostomus* – the Salish sucker problem. *Copeia* **1999** (No. 4): 884-893.

150. Murphy, W.J., *Nguyen, T.N.P.,* **Taylor, E.B**. and G.E. Collier. 1999. Mitochondrial DNA phylogeny of West African Aplocheiloid killifishes (Cyprinodontiformes, Aplocheilidae). *Molecular Phylogenetics and Evolution*, **11**: 343-350.

151. Taylor, E.B. and J.D. McPhail. 1999. Evolutionary history of an adaptive radiation in species pairs of threespine sticklebacks (*Gasterosteus aculeatus*). *Biological Journal of the Linnean Society.* **66**: 271-299.

152. Redenbach, Z. and **E.B. Taylor**. 1999. Zoogeographical implications of variation in mitochondrial DNA of Arctic grayling *Thymallus arcticus*). *Molecular Ecology* **8**: 23-35.

153. Taylor, E.B. 1998. Microsatellites isolated from the threespine stickleback, *Gasterosteus aculeatus*. *Molecular Ecology* **7**:930-931.

154. Taylor, E.B., D. Schluter, and J.D. McPhail. 1997a. History of ecological selection in sticklebacks: uniting experimental and phylogenetic approaches. Pages 511-534 *In*: T.J. Givnish & and K.J. Sytsma [eds.]. *Molecular Evolution and Adaptive Radiation*. Cambridge University Press, Cambridge, UK.

155. Taylor, E.B., S. Harvey, S. Pollard, and J. Volpe. 1997b. Postglacial genetic differentiation between reproductive ecotypes of kokanee, *Oncorhynchus nerka*, in Okanagan Lake, British Columbia. *Molecular Ecology* **6:** 503-518.

156. Thompson, C.E., **E.B. Taylor** and J.D. McPhail. 1997. Parallel evolution of parapatric stream-lake pairs of sticklebacks (*Gasterosteus*) inferred from mtDNA variation. *Evolution* **51**:1955-1965.

157. Baxter, J.S., **E.B. Taylor**, R.H. Devlin, J. Hagen, and J.D. McPhail. 1997. Evidence for natural hybridization between Dolly Varden (*Salvelinus malma*) and bull trout (*S. confluentus*) in a northcentral British Columbia watershed. *Canadian Journal of Fisheries and Aquatic Sciences* **54**: 421-429.

158. Taylor, E.B., Foote, C.J., and C.C. Wood. 1996. Molecular genetic evidence for parallel life history evolution within a Pacific salmon (sockeye salmon and kokanee, *Oncorhynchus nerka*). *Evolution* **50**: 401-416.

159. Taylor, E.B. 1995. Genetic variation at minisatellite DNA loci among North Pacific populations of steelhead and rainbow trout (*Oncorhynchus mykiss*). *Journal of Heredity* **86**: 354-363.

160. Taylor, E.B. and J.J. Dodson. 1994. A molecular analysis of relationships and biogeography within a species complex of Holarctic fish (genus *Osmerus*). *Molecular Ecology* **3**: 235-248.

161. Taylor, E.B., T.D. Beacham, and M. Kaeriyama. 1994. Population genetic structure and identification of North Pacific chum salmon (*Oncorhynchus keta*) as revealed by an analysis of minisatellite DNA variation. *Canadian Journal of Fisheries and Aquatic Sciences* **51**: 1430-1442.

162. Taylor, E.B. and P. Bentzen. 1993a. Evidence for multiple origins and sympatric divergence in trophic ecotypes of smelt, *Osmerus*, in northeastern North America. *Evolution* **47**:813-832.

163. Taylor, E.B. and P. Bentzen. 1993b. Molecular genetic evidence for reproductive isolation between sympatric populations of smelt, *Osmerus*, in Lake Utopia, southwestern New Brunswick, Canada. *Molecular Ecology* **2**:345-357.

164. Bentzen, P., **Taylor, E.B**., & J.M Wright. 1993. A novel synthetic probe for DNA fingerprinting salmonid fishes. *Journal of Fish Biology* **43**:313-316.

165. Taylor, E.B. 1991a. A review of local adaptation in Salmonidae with particular reference to Pacific and Atlantic salmon. *Aquaculture* **98**:185-207.

166. Taylor, E.B. 1991b. Behavioural interaction and habitat use in juvenile chinook (*Oncorhynchus tshawytscha*) and coho (*O. kisutch*) salmon. *Animal Behaviour* **42**:729-744.

167. Taylor, E.B. and C.J. Foote. 1991. Critical swimming velocities of juvenile sockeye salmon and kokanee, the anadromous and nonanadromous forms of *Oncorhynchus nerka* (Walbaum). *Journal of Fish Biology* **38**:407-419.

168. Taylor, E.B. 1990a. Variation in agonistic behaviour and salinity tolerance between and within two populations of juvenile chinook salmon, *Oncorhynchus tshawytscha*, with contrasting life histories. *Can. J. Fish. Aquat. Sci.* **47**:2172-2180.

169. Taylor, E.B. 1990b. Phenotypic correlates of life history variation in juvenile chinook salmon, *Oncorhynchus tshawytscha*. *Journal of Animal Ecology* 5**9**:455-468.

170. Taylor, E.B. 1990c. Environmental correlates of life history variation in juvenile chinook salmon, *Oncorhynchus tshawytscha. Journal of Fish Biology* **37**:1-17.

171. Taylor, E.B. 1989. Precocial male maturation in laboratory-reared populations of chinook salmon, *Oncorhynchus tshawytscha*. *Canadian Journal of Zoology* **67**:1665-1669.

172. Taylor, E.B. 1988. Water tempertaure and velocity as determinants of microhabitats of juvenile coho and chinook salmon in a laboratory stream. *Transactions of the American Fisheries Society* **117**:22-28.

173. Taylor, E.B. 1988. Adaptive variation in rheotactic and agonistic behavior in newly-emerged fry of chinook, salmon, *Oncorhynchus tshawytscha*, from ocean- and stream-type populations. *Canadian Journal of Fisheries and Aquatic Sciences* **45**:237-243.

174. Taylor, E.B. 1986. Differences in body morphology between wild and hatchery populations of juvenile coho salmon. *Progressive Fish Culturist* **48**:171-176.

175. Taylor, E.B. and P.A. Larkin. 1986. Current response and agonistic behavior in newly-emerged fry of chinook salmon, *Oncorhynchus tshawytscha*, from ocean- and stream-type populations. *Canadian Journal of Fisheries and Aquatic Sciences* **43**:565-573.

176. Taylor, E.B. and J.D. McPhail. 1986. Prolonged and burst swimming performance in anadromous and freshwater threespine stickleback, *Gasterosteus aculeatus. Canadian Journal of Zoology* **64**:416-420.

177. Taylor, E.B. and J.D. McPhail. 1985. Variation in body morphology among British Columbia populations of coho salmon, *Oncorhynchus kisutch*. *Canadian Journal of Fisheries and Aquatic Sciences* **42**:2020-2028.

178. Taylor, E.B. and J.D. McPhail. 1985. Variation in burst and prolonged swimming performance among British Columbia populations of coho salmon, *Oncorhynchus kisutch. Canadian Journal of Fisheries and Aquatic Sciences* **42**:2029-2033.

179. Taylor, E.B. and J.D. McPhail. 1985. Burst swimming performance and size-related predation in newly-emerged coho salmon, *Oncorhynchus kisutch*. *Transactions of the American Fisheries Society* **114**:546-551.

180. Taylor, E.B. and J.D. McPhail. 1985. Ontogeny of the startle response in young coho salmon, *Oncorhynchus kisutch*. *Transactions of the American Fisheries Society* **114**:552-556.

181. Thomas, T.E., P.J. Harrison and **E.B. Taylor**. 1985. Nitrogen uptake and growth of the germlings and mature thalli of *Fucus distichus*. *Marine Biology* **84:**267-274.

Published Symposium Proceedings or reviewed (non-primary) work:

1. **Taylor, E.B.** 2012. The Beaty Biodiversity Museum at UBC: An experiment in curation, research, and public outreach. Proceedings of APRU Research Symposium on University Museums: Forming a University Museum Collection Network as the Core of Frontier Research. Kyoto University, Kyoto, Japan, pp. 65-68.

2. NRTSSP (**Taylor, E.B.** and seven co-authors). 2005. National Recovery Team for Stickleback Species Pairs. 2005. National Recovery Strategy for Stickleback Species Pairs (*Gasterosteus* spp.). Prepared for British Columbia Ministry of Water, Land and Air Protection, and Fisheries and Oceans Canada by Solander Ecological Research, Victoria.

3. Parkinson, E.A., E.R. Keeley, **E.B. Taylor**, S. Pollard, and A.F. Tautz. 2005. A population database for defining conservation units in steelhead trout. Province of BC Fish. Mgmt. Report 119. 71 pp.

4**.** Northrup, S., M. Connor, and **E.B. Taylor.** 2005. Population structure and contributions to local fisheries by lake trout in Atlin Lake, British Columbia: a microsatellite DNA-based assessment. Extended Abstract in the Second International Lake trout Symposium, Yellowknife, NWT.

5. Costello, A.B., **Taylor, E.B.,** Pollard, S. and R. Devlin. 2001. Cutthroat trout in British Columbia: a phylogenetic assessment of provincial coastal and westslope populations. Pp. 249-254, In: Proceedings of the Ecology and Management of Northwest Salmonids: Bull Trout II Conference, Trout Unlimited.

6. Latham, S.J. and **E.B. Taylor.** 2001. Hatchery-mediated reduction of genetic differentiation among bull trout populations: assessment of mechanisms and consequences using neutral genetic markers. Pp. 89-98, In: Proceedings of the Bull Trout II Conference, Trout Unlimited, Calgary, Alberta.

7**. Taylor, E.B**., Redenbach, Z., Costello, A.B., Pollard, S.J., and Pacas, C.J. 2001. Nested analysis of Genetic Diversity in Dolly Varden *(Salvelinus malma)* and Bull Trout (*S. confluentus*): Implications for Speciation, Biogeography, and Conservation. Pp. 99-101, In: Proceedings of the Bull Trout II Conference, Trout Unlimited, Calgary, Alberta.

8**. Taylor, E.B.** 1996. Local adaptation. *In*: Grant, W.S. (ed.) Genetic effects of straying of non-native hatchery fish into natural populations. *U.S. Department of Commerce NOAA Technical Memorandum* NMFS-NWFSC-00: 101-109.

9. **Taylor, E.B.** 1993. Contrasting patterns of genetic variation at two minisatellite DNA loci in steelhead trout (*Oncorhynchus mykiss*) and sockeye salmon and kokanee (*O. nerka*). L. Park, P. Moran, and R. Waples [eds.] Application of DNA Technology to the Management of Pacific Salmon. *U.S. Department of Commerce NOAA Technical Memorandum* NMFS-NWFSC-17:39-44.

10. **Taylor, E.B.** 1993. Genetic variation, habitat diversity, and production of juvenile salmonids in freshwater. *Canadian Special Publication of Fisheries and Aquatic Sciences* 118:261.

Non-referred publications and reports (> 100: some examples below)

Geraldes, A., and **Taylor, E.B.** 2025. Site C fish genomics project. Annual report to British Columbia Hydro Authority: construction year 10 Vancouver, BC. 66 pp + iv Appendices. https://www.sitecproject.com/sites/default/files/BCH_report_2025_final_Jul15_2025.pdf

Taylor, E.B. 2025. Blackwater Gold salmonid genomics assessment. Report for Triton Environmental Consultants. 8 pp. plus appendices.

Geraldes, A., and **Taylor, E.B.** 2024. Site C fish genomics project. Annual report to British Columbia Hydro Authority: construction year 9 Vancouver, BC. 66 pp + iv Appendices. https://www.sitecproject.com/sites/default/files/Fish-Genetics-Study-2023vAnnual-Report.pdf

Taylor, E.B. and *A. Geraldes.* 2024. Shuswap River drainage bull trout genomics. Report for BC Conservation Foundation and BC Ministry of Environment and Climate Change Strategy. 20 pp.

Taylor, E.B. and T.W Pietsch. 2023. Obituary: John Donald ("JD") McPhail (1934-2023). *Can. J. Zool*. **102**: 100-102.

Geraldes, A., and **Taylor, E.B.** 2023. Site C fish genomics project. Annual report to British Columbia Hydro Authority: construction year 8 Vancouver, BC. 66 pp + iv Appendices. https://www.sitecproject.com/sites/default/files/Fish-Genetics-Study-2022-Annual-Report.pdf

Geraldes, A., and **Taylor, E.B.** 2022. Site C fish genomics project. Annual report to British Columbia Hydro Authority: construction year 7 Vancouver, BC. 48 pp + iii Appendices. https://www.sitecproject.com/sites/default/files/fish-genetics-study-2021-annual-report.pdf

Dunham, J.B., **E.B. Taylor**, and E.R. Keeley. 2022. Evolutionary and ecological connectivity in westslope cutthroat trout (*Oncorhynchus clarkii lewisi*) and mountain whitefish (*Prosopium williamsoni*) in relation to the potential influences of Boundary Dam, Washington, Idaho, and parts of British Columbia: U.S. Geological Survey Open-File Report 2022–1084, 22 pp., https://doi.org/ 10.3133/ ofr20221084.

Geraldes, A., **and Taylor, E.B.** 2021. Site C fish genomics project. Annual report to British Columbia Hydro Authority: construction year 6 Vancouver, BC. 52 pp + iii Appendices. https://www.sitecproject.com/sites/default/files/Fish-Genetics-Study-2020-Annual-Report.pdf

Geraldes, A., **and Taylor, E.B.** 2020. Site C fish genomics project. Annual report to British Columbia Hydro Authority: construction year 5. Vancouver, BC. 46 pp + ii Appendices. https://www.sitecproject.com/sites/default/files/Fish-Genetics-Study-2019-Annual-Report.pdf

Taylor, E.B. 2018. Genetic mixture analysis of bull trout (*Salvelinus confluentus*) overwintering in the Nechako River, British Columbia. Report to BC Ministry of Environment, March 2018.

Taylor, E.B. 2017. Use of microsatellite DNA analysis to differentiate piscivorous from insectivorous rainbow trout (*Oncorhynchus mykiss*) in the Kootenay Lake recreational fishery. Report the Ministry of Forests, Lands, and Natural Resource Operations, Nelson, BC.

Bailly, N., R. Stibravy, and **E.B. Taylor. 2017.** Data archaeology and rescue with FishBase: The example of the BC Institute of Fisheries Field Records and UBC Fish Collection datasets. Fishbase symposium proceedings. Stockholm.

Taylor, E.B. and M. Yau. 2015. Analysis of introgression between indigenous and introduced rainbow trout (*Oncorhynchus mykiss*) in western Alberta: 2014 update analyses. Report to Alberta Sustainable Resource Development, Edson, Alberta.

Taylor, E.B. 2015. An introduction to the freshwater fishes of British Columbia. In: Klinkenberg, Brian. (Editor) 2015. *E-Fauna BC: Electronic Atlas of the Fauna of British Columbia* [www.efauna.bc.ca]. Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver. Electronic Atlas of the Wildlife of BC. http://ibis.geog.ubc.ca/biodiversity/efauna/introductiontothefishofbc.html

Taylor, E.B. 2014. An introduction to the fishes of British Columbia. In: Klinkenberg, Brian. (Editor) 2014. *E-Fauna BC: Electronic Atlas of the Fauna of British Columbia* [www.efauna.bc.ca]. Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver. Electronic Atlas of the Wildlife of BC. http://ibis.geog.ubc.ca/biodiversity/efauna/introductiontothefishofbc.html

Taylor, E.B. 2014. Microsatellite DNA Analysis of Populations of Rainbow Trout (*Oncorhynchus mykiss*) from the Blackwater River and Dragon Lake, central British Columbia. Report to the Freshwater Fisheries Society of BC, Vancouver, BC.

Taylor, E.B. 2014. Genetic variation at microsatellite DNA loci in bull trout (*Salvelinus confluentus*) from two high alpine lakes in western Alberta. Report to Alberta Department of Sustainable Resource Development, Rocky Mountain House, AB.

Dunham, J.B., **Taylor, E.B**., and Allendorf, F.W. 2014. Bull trout in the Boundary System—Managing connectivity and the feasibility of a reintroduction in the lower Pend Oreille River, northeastern Washington: U.S. Geological Survey Open-File Report 2014-1229, 28 pp. http://dx.doi.org/10.3133/ofr20141229. https://pubs.usgs.gov.of/2014/1229/pdf/ofr2014-1229.pdf

Taylor, E.B. 2014. Microsatellite DNA analysis of overwintering bull trout (*Salvelinus confluentus*) in the Nechako River, British Columbia. Report to BC Ministry of Environment, March 2014.

Taylor, E.B., and M. Yau. 2013. Microsatellite DNA analysis of bull trout (*Salvelinus confluentus*), Arctic grayling (*Thymallus arcticus*), and mountain whitefish (*Prosopium williamsoni*) in the Peace River and tributaries near the proposed BC Hydro Site C hydroelectric development in northeastern British Columbia. Final Report to BC Hydro (Vancouver). Dept. of Zoology and Beaty Biodiversity Centre and Museum, Vancouver.

Taylor, E.B. and M. Yau. 2013. Analysis of introgression between indigenous and introduced rainbow trout (*Oncorhynchus mykiss*) in western Alberta. Report to Alberta Sustainable Resource Development, Edson, Alberta.

Stables, T. B., **E. B. Taylor**, and C. J. Perrin. 2013. John Hart Entrainment Action Plan Monitoring Study 1: John Hart Reservoir fish stock and genetics assessment in August 2013. Draft report prepared by Limnotek Research and Development Inc. for BC Hydro. 61p.

Taylor, E.B. 2013. Microsatellite DNA Analysis of Populations of Bull Trout (*Salvelinus confluentus*) in the Upper Red Deer River Drainage, Alberta. Report to Alberta Conservation Association, Red Deer, AB.

Taylor, E.B. 2012. Microsatellite DNA Analysis of Populations of Steelhead/Rainbow Trout (*Oncorhynchus mykiss*) in the Franklin River watershed, Vancouver Island, British Columbia. Report to Ecofish Research, Courtenay, BC.

Taylor, E.B. 2012. Changes to the *Fisheries Act* and what it means for freshwater biodiversity. *Discovery* **41**: 50-55.

Goodwin, P., H. Paerl, E. Peeples, D. Read, and **E.B. Taylor.** 2011. Review Panel Summary Report: Draft Plan for Adaptive Management of Fall Outflow for Delta Smelt Protection and Water Supply Reliability in the Sacramento-San-Joaquin Delta. Report to the Delta Science Program, Sacramento, CA.

Tautz, A.F., S. Pollard, R.S. Hooton, R.A. Ptolmey, and **E.B. Taylor.** 2011. Skeena River steelhead trout conservation units. A report for the Skeena Watershed Initiative and the Gordon and Betty Moore and Pacific Salmon Foundations, Vancouver. 110 pp.

Mayhood, D., and **E.B. Taylor.** 2011. Contributions towards a recovery plan for westslope cutthroat trout (*Oncorhynchus clarkii lewisi*) in Alberta. Distribution, population size, and trends. Freshwater Res. Tech. Rpt. 2011/06-1. Calgary, Alberta. http://dx.doi.org/10.6084/m9.figshare.11967582

Taylor, E.B., and M. Yau. 2011. Microsatellite DNA analysis of bull trout (*Salvelinus confluentus*), Arctic grayling (*Thymallus arcticus*), and mountain whitefish (*Prosopium williamsoni*) in the Peace River and tributaries near the proposed BC Hydro Site C hydroelectric development in northeastern British Columbia. Unpubl. report to BC Hydro (Vancouver). Dept. of Zoology and Beaty Biodiversity Centre and Museum, Vancouver.

Taylor, E.B. 2011. Microsatellite DNA analysis of populations of bull trout (*Salvelinus confluentus*) in the upper Lillooet River system, British Columbia, and implications for independent power 84production developments in the watershed. UBC Zoology, 20 pp.

Taylor, E.B. 2010. Microsatellite DNA analysis of populations of bull trout (*Salvelinus confluentus*) in the North Saskatchewan River system, Alberta. Unpublished report from University of British Columbia Department of Zoology to Alberta Conservation Association, Rocky Mountain House, Alberta. Available from EBT.

Rasmussen, J. and **E.B. Taylor.** 2009. Status of the Athabasca Rainbow trout (*Oncorhynchus mykiss*) in Alberta. Alberta Wildlife Status Report No. 66. Alberta Conservation Association, Edmonton.

Taylor, E.B., and *J.L. Gow*. 2008. An Analysis of Hybridization Between Native Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*) and Introduced Yellowstone Cutthroat Trout (*O .c. bouvieri*) and

Rainbow Trout (*O. mykiss*) in Canada's Mountain Parks and Adjacent Watersheds In Alberta: Summer 2007 Data. Report to Alberta Sustainable Resource Development and Parks Canada. 15 pp.

Taylor, E.B., and *J.L. Gow*. 2008**.** Molecular Species Identification and Population Structure Analysis of Sculpin (Pisces: Cottidae) species in the Cheakamus River, British Columbia. Report to Triton Environmental Consultants Ltd., Richmond, BC. 33 pp.

Taylor, E.B., and *J.L. Gow*. 2008. Identification of species and evolutionary lineages in species-at-risk in Canada: DNA sequence variation in Eastslope sculpin (*Cottus* sp.) and Mountain suckers (*Catostomus platyrhynchus*). Report to Department of Fisheries and Oceans, Winnipeg, Manitoba. 25 pp.

Taylor, E.B., and A.D. Clarke. 2007. Microsatellite DNA and otolith microchemistry analysis of populations of bull trout (*Salvelinus confluentus*) in tributaries to the upper Fraser River, British Columbia. Unpubl. report from University of British Columbia Dept. of Zoology and Freshwater Fisheries Society of BC. Available from EBT.

Taylor, E.B., *J.L. Gow*, P. Tamkee, and J. Heggenes. 2006. A microsatellite DNA assessment of genetic variation in steelhead trout (*Oncorhynchus mykiss*) populations in southwestern British Columbia before and after hatchery supplementation. Final Report to the *Living Rivers Trust Fund*, Victoria, BC.

Taylor, E.B. and A. Clarke. 2006. Microsatellite DNA and otolith microchemistry analysis of populations of bull trout (*Salvelinus confluentus*) in tributaries to the upper Fraser River, British Columbia. Report to the BC Ministry of Highways, October 2006. 30 pp.

Taylor, E.B. 2006. A key to identify designatable units for COSEWIC under Canada's Species at Risk Act. Unpublished report to the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). April 2006.

Taylor, E.B. 2005. Towards a Conservation Strategy for Arctic grayling (*Thymallus arcticus*) in British Columbia. Report to the BC Ministry of Water, Land, and Air Protection, Prince George, BC. Feb. 2005**.**

Parkinson, E.A., E. Keeley, **E.B.Taylor** and A.F. Tautz. 2005. Conservation units for steelhead base on phylogenetic and adaptive distinctions among populations. Fish. Mgmt. Report, Biodiversity Branch, BC Ministry of Water Land, and Air Protection.

Pearson M., Hatfield, T., Rosenfeld, J., Sneep, D., Stepjovic, M., McPhail, J.D., Richardson, J., Schreier, H., Schluter, D., **Taylor, E.B.,** and Wood, P. 2005. National Recovery Strategy for Nooksack Dace (*Rhinichthys cataractae* ssp.). Prepared for British Columbia Ministry of Water, Land and Air Protection, and Fisheries and Oceans Canada.

Taylor, E.B. and P. Tamkee. 2005. Microsatellite DNA polymorphism in rainbow trout (*Oncorhynchus mykiss*) from the Arrow Lakes, British Columbia. Part III: Analysis of historical samples to assess introgression between introduced Kootenay Lake trout and native Arrow Lakes trout. Final Report to The Columbia Basin Fish and Wildlife Compensation Program, Nelson, BC.

Pearson M., Hatfield, T., Rosenfeld, J., Sneep, D., Stepjovic, M., McPhail, J.D., Richardson,J., Schreier, H., Schluter, D., **Taylor, E.B.,** and Wood, P. 2005. National Recovery Strategy for Salish Sucker (*Catostomus* sp.). Prepared for British Columbia Ministry of Water, Land and Air Protection, and Fisheries and Oceans Canada.

Taylor, E.B. and A.B. Costello. 2004. Microsatellite DNA analysis of coastal populations of bull trout (*Salvelinus confluentus*) in British Columbia. Report to BC Habitat Conservation Trust Fund. Victoria, BC. 37 pp.

Taylor, E.B. and P. Tamkee. 2003. A genetic analysis of differentiation among populations of rainbow trout (*Oncorhynchus mykiss*) spawning in the vicinity of Genelle, Columbia River, BC: implications for habitat management. Report to the Columbia-Kootenay Fisheries Renewal Program, Cranbrook, BC.

Baxter, J.S., J. Hagen, P. Corbett, and **E.B. Taylor**. 2003. A review of the status and conservation of westslope cutthroat trout in British Columbia. Report to the BC Habitat Conservation Trust Fund, Victoria, BC.

Roberge, M., **E.B. Taylor**, and T.L. Slaney. 2002. Movement and genetic differentiation of coastal cutthroat trout from tributaries of the lower Fraser River. Report for the BC Ministry of Land, Water, and Air Protection. Aquatic Resources Limited and Dept. of Zoology, University of BC, Vancouver.

Costello, A.B., Latham, S.J., and **E.B. Taylor**. 2001. Hybridization and population structure in bull trout (*Salvelinus confluentus*) from Glacier National Park, BC. Report No. BT-GNP001.1 Dept. of Zoology and Native Fish Research Group, Univ. of B.C., Vancouver, B.C. 11 pp.

Taylor, E.B. and P. Tamkee. 2001. Microsatellite DNA polymorphism in Alberta rainbow trout (*Oncorhynchus mykiss*): molecular identification of indigenous populations. Report to Alberta Environment, Fisheries and Wildlife Management, Edson, Alta.

Taylor, E.B. and M.D. Stamford. 2000. A preliminary assessment of hybridization between native westslope cutthroat trout (*Oncorhynchus clarki lewisi*) and introduced rainbow trout (*O. mykiss*) in selected East Kootenay watersheds. Report to Mirkwood Ecological Consultants Ltd., Winlaw, B.C. 25 pp.

McCusker, M.R., Parkinson, E.A., and **E.B. Taylor**. 2000. Phylogenetic conservation units for rainbow trout in British Columbia. Province of B.C. Fisheries Management Report No. 112.

Ashley, K., **E.B. Taylor** and 20 co-authors. 1999. Okanagan Lake Action Plan Year 3 (1998) Report. Fisheries Project Report RD 78. B.C. Ministry of Fisheries, Victoria. 338 pp.

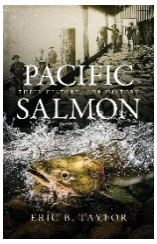
Taylor, E.B. and J. E. McLean. 1999. Microsatellite DNA polymorphism in rainbow trout (*Oncorhynchus mykiss*) from the Upper Arrow and Kinbasket watersheds in British Columbia: can yellowfin rainbow trout be identified genetically? Report to the Columbia Basin Fish and Wildlife Compensation Program, Revelstoke, B.C. 26 pp.

Ashley, K., **E.B. Taylor** and 16 co-authors. 1998. Okanagan Lake Action Plan Year 1 (1996-97) and Year 2 (1997-98) report. Fisheries Project Report RD 73. B.C. Ministry of Fisheries, Victoria. 396 pp.

Taylor, E.B. and A. Costello. 1999. Microsatellite DNA polymorphism in bull trout (*Salvelinus confluentus*) from watersheds in British Columbia and western Alberta. Report to The B.C. Ministry of Fisheries, Conservation Branch and Parks Canada (western region). 29 pp.

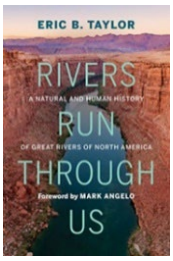
Taylor, E.B. and G.R. Haas. 1996. Maintaining a species tapestry: a plan for the conservation of genetic diversity in British Columbia rainbow trout, *Oncorhynchus mykiss*. Fisheries Tech. Circular No. 99. B.C. Ministry of Environment, Lands and Parks, Victoria. 51 pp.

Books, guides, popular articles, software:



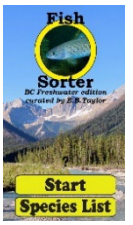
Taylor, E.B. 2024. Three guys named Eric. *Up Here Magazine*. July-August 2024. Uphere.ca

Taylor, E.B. 2024. ***Pacific salmon: Their History, Our History*.** Hancock House Publishers. Nov. 2026. Eight chapters, Foreword, Introduction, Afterword. 275 pp.



Taylor, E.B. 2021. *Rivers Run Through Us: A Natural and Human History of Great Rivers of North America*. Thirteen chapters, 465 pp. + Appendices. *Rocky Mountain Books*. https://rmbooks.com/book/rivers-run-through-us/ A total of 1,806 copies sold to Feb. 2026.

Taylor, E.B. *Fish Sorter*. BC Freshwater Edition. Fish identification app designed for iPhone and Android devices. Developed with D. Tan and P. Martone. Public version released January 2021 on **Apple Store** and **Google Play**.





Taylor, E.B., and D. Tan. 2016-2021. *A guide to the freshwater fishes of British Columbia*. Beaty Biodiversity Museum Misc. Publ. No. 1 (now in third printing, over 1,000 copies sold or distributed. The guide as well as *Fish Sorter* are used in instructional classes at BCIT, Vancouver Island University, University of Northern BC, and Thompson Rivers University). Fifth edition in print.

Taylor, E.B. 2015. Protecting species-at-risk in Canada. COSEWIC and the first ten years of SARA. *Decision Point* No. **88**: 12-13. [*Decision Point* is the monthly magazine of the Environmental Decisions Group (EDG, based in Canberra, Australia). It presents news and views on environmental decision making, biodiversity, conservation planning and monitoring. http://www.decision-point.com.au/

Work in Review or Progress: All in manuscript form, several other projects in the initial stages of manuscript preparation. I have not included details on work in progress that are not at least in manuscript form (least six projects of students and PDFs). Students are underlined, PDFs *underlined and italicized.*

Kotulska, K., P. Studmant, W. Larson, **Taylor, E.B.,** and G.L Owens. 2026. Multi-species introgression drives local adaptation to inlets in Copper Rockfish. MS complete, submitted to PNAS, Nov. 2026.

Liu, S., **E.B. Taylor**, and J. Richards. 2024. Gill transcriptomic responses to salinity acclimation differentiate freshwater populations of prickly sculpins (Cottidae: *Cottus asper*). In revision, *Molecular Ecology*, March 2025.

Rosenberger, A.E, **E.B. Taylor**, A.A. Echelle, M.L. Warren, Jr., E. Keeley, J. Musick, M.V. McPhee, S.R. Narum, C. Zimmerman, M. Neilson, A.Z. Horodysky, and Tammy Hoem Neher. 2026. Salmonidae: Trouts and Salmons. In: *North American Freshwater Fishes*. Vol. American Fisheries Society. In review. Authorship in order of contribution.

Work done by others that I support/ed at UBC: I also support, in part, the work of Dr Nicolas Bailly who works in in the Fish Collection of the Beaty Bodiversity Museum and in the past, I have supported the work of professors *emeriti* at UBC: Dr. J.D. McPhail and N.R. Liley. Both of these researchers adopted molecular aspects to their research late in their careers and my lab has supported them with space, technical assistance, and supplies to complete some projects on fish identification and distribution (JDM) and aspects of sperm competition in trout and guppies (N.R. Liley, see **Hoysak** *et al*. 2004.). R. Aidan Martin, MSc, Director of *ReefQuest Centre for Shark Research* in Vancouver served as a research associate under my direction.

Although he is now deceased, while at UBC he published a number of papers on shark biology (see below for some examples).

Bailly, N. 2023. Fish global information infrastructure: Linking existing fish biodiversity information systems. 11th Indo-fish Pacific Fish Conference, Auckland, New-Zealand, 20-25 Nov. 2023. [Poster]

Bailly, N.; Mukohyama, Y.†; Isfeld, L.; Howard, A.; Bertoluzzo, B.; Guo, E.; Taylor, E.B. 2023. The UBC Fish Collection under the Beaty Biodiversity Museum: Status, challenges, and perspectives. 11th Indo-fish Pacific Fish Conference, Auckland, New-Zealand, 20-25 Nov. 2023. [Poster]

Pruvost, P., Causse, R., Bailly, N., 2023. Historical review of the computerization of the MNHN Fish Collection and its collaboration with FishBase. Cybium **47**(3): 225-248.
[This will serve as a model for an equivalent paper about the BBM Fish collection.]

Hnytka, S., 2023. Physiological and behavioural performance metrics of Athabasca rainbow trout (*Oncorhynchus mykiss*) across varying thermal regimes in the Athabasca river watershed (MSc dissertation, University of British Columbia [Oceans & Fisheries]). Our lab provided genetic identification of non-hybridized trout used in the physiological experiments.

Bailly, N. 2021. Challenges et choix pour les bases de données ichtyologiques. Comment servir tout le monde? 8ème Rencontres de l'Ichthyologie en France, 13-18 March 2022, FIAC, Paris, France. [Poster]

Pauly, D., Piroddi, C., Hood, L., *Bailly*, N., Chu, E. Lam, V., Pakhomov, E.A., Pshenichnov, L.K., Radchenko, V.I., and Palomares. M.L.D. 2021. The biology of mesopelagic fishes and their catches (1950–2018) by commercial and experimental fisheries. *Journal of Marine Science and Engineering* **9**: 057.

Bourgoin, T., *Bailly,* N., Zaragueta, R. and R. Vignes-Lebbe. 2021. Complete formalization of taxa with their names, contents and descriptions improves taxonomic databases and access to the taxonomic knowledge they support. *Systematics and Biodiversity*: **19**:738-746.

Hay, A., Xian, W., *Bailly, N.,* Liang, C., and Pauly, D. 2020. The why and how of determining length-weight relationships of fish from preserved museum specimens. *Journal of Applied Ichthyology* **36**: 373-379.

Cashion, M. S.; *Bailly, N.,* Pauly, D. 2019. Official catch data underrepresent shark and ray taxa caught in Mediterranean and Black Sea fisheries. *Marine Policy*, **105** 1-9. doi: 10.1016/j.marpol.2019.02.041

Thomson, S.A., Pyle, R.L., Ahyong, S.T., Alonso-Zarazaga, M., Ammirati, J., Araya, J.F., Ascher, J.S., Audisio, T.L., Azevedo-Santos, V.M., *Bailly, N.* and Baker, W.J., 2018. Taxonomy based on science is necessary for global conservation. *PLoS biology*, **16(**3), p.e2005075.

De Pooter, D., Appeltans, W., *Bailly, N.,* Bristol, S., Deneudt, K., Eliezer, M., Fujioka, E., Giorgetti, A., Goldstein, P., Lewis, M. and Lipizer, M., 2017. Toward a new data standard for combined marine biological and environmental datasets-expanding OBIS beyond species occurrences. *Biodiversity Data Journal* (5) e10989.

Betancur-R, R., Wiley, E.O., Arratia, G., Acero, A., *Bailly, N*., Miya, M., Lecointre, G. and Orti, G., 2017. Phylogenetic classification of bony fishes. *BMC Evolutionary Biology* **17**(1), p.162.

Fukui, S., May-McNally, S.L., Katahira, H., Kitano, S., Koizumi, I. 2016. Temporal change in the distribution and composition of native, introduced, and hybrid charrs in northern Japan. *Hydrobiologia* **783**: 309-316. DOI 10.1007/s10750-016-2688-8

Siegle, M.R., Robinson, C.L.K., and J. Yakimishyn. 2014. The effect of region, body size, and sample size on the weight-length relationships of small-bodied fishes found in eelgrass meadows. *Northwest Science* **88**: 140-154.

Hart, L.M., M.H. Bond, S.L. May-McNally, J.A., Miller, and T.P. Quinn. 2015. Use of stable isotopes and otolith microchemistry to investigate the ecology and migrations of Northern Dolly Varden from the Egegik River, Bristol Bay, Alaska. *Environ. Biol. Fishes* **98**: 1633-1643.

Moore, J.-S., T.N. Loewen, L.N. Harris, and R.F. Tallman. 2014. Genetic analysis of sympatric migratory ecotypes of Arctic charr, *Salvelinus alpinus*: alternative mating tactics or reproductively isolated strategies? *Journal of Fish Biology* **84**: 145-162.

Vines T.H., A.Y.K. Albert, R.L. Andrew, F. Débarre, D. Bock, M.T. Franklin, K.J. Gilbert, J-S. Moore, S. Renaut, and D.J. Rennison. 2014. How does the availability of research data change with article age? *Current Biology* **24**: 1-4.

Mee, J.A. 2014. Host size matching in a sperm-dependent asexual fish species: a test of the host mimicry hypothesis. *Evolutionary Ecology* 10.1007/s11692-014-9279-2.

Baker, J.A., Räsänen, K., J.-S. Moore and A.P. Hendry. 2013. Genetic and plastic contributions to trait divergence between parapatric habitats: female life-history traits in threespine stickleback within the Misty Lake system. *Evolutionary Ecology Research* **15**: 473-487.

Mee, J.A., and Moore, J.-S. 2013. Evolutionary consequences of cryptic refugia or microrefugia: from definitions to hypothesis generation. *Journal of Biogeography* **41**: 837-841.

Mee, J.A., Hanisch, J.R., Nodin, F., Tonn, W.M., and Paszkowski, C.A. 2013. Diets of sexual and sperm-dependent asexual dace: relevance to the niche differentiation and mate choice hypotheses for coexistence. *Oikos* **122**: 998-1008. Featured on the Oikos blog.

Vines T.H., R.L. Andrew, D.G. Bock, M.T. Franklin, K.J. Gilbert, N.C. Kane, E.J. Kleynhans, J.-S. Moore, B.T. Moyers, S. Renaut, D.J. Rennison, T. Veen, S. Yeaman. 2013. Mandated archiving greatly improves access to research data. *FASEB Journal* **27**:1304-1308.

Gilbert, K.J., R.L. Andrew, D.G. Bock, M.T. Franklin, N.C. Kane, J.-S. Moore, B.T. Moyers, S. Renaut, D.J. Rennison, T. Veen, and T.H. Vines. 2012. Recommendations for utilizing and reporting population genetic analyses: the reproducibility of genetic clustering using the program STRUCTURE. *Molecular Ecology* **21**: 4925-4930.

Gerstein, A., and J.-S. Moore. 2011. *Perspective*: Small is the new big: Assessing the population structure of microorganisms. *Molecular Ecology* **20**: 4385-4387.

Crispo, E*, J.-S. Moore*, J. Lee-Yaw, S.M. Gray, & B. Haller. 2011. Broken barriers: Human-induced changes to gene flow and introgression in animals. *BioEssays* **33**: 508-518. *Contributed equally

Mee, J.A**.,** and L. Rowe. 2010. Distribution of *Phoxinus eos*, *Phoxinus neogaeus*, and their asexually-reproducing hybrids (Pisces: Cyprinidae) in Algonquin Provincial Park, Ontario. *PLoS ONE* **5**(10): e13185. I provided editing and analytical support while this paper was being produced.

Mee, J. and S.P. Otto. 2010. Variation in the strength of male mate choice allows long-term co-existence of sperm –dependent asexuals and their sexual hosts. *Evolution* **64**: 2808–2819. (JM is my PhD student who does some theoretical work with SPO). I declined co-authorship, and helped to foster and encourage this collaboration.

Gow J.L., R.M. Rogers, M. Jackson and D. Schluter. 2008. Ecological predictions lead to the discovery of a benthic-limnetic sympatric species pair of threespine stickleback in Little Quarry Lake, British Columbia. *Can. J. Zool.* **86**: 564-571. JL Gow was employed as my research associate at the time of this research and paper production. I provided time, logistical, and laboratory support that was critical to this work.

McPhail, J.D. 2007. *The Freshwater Fishes of British Columbia*. University of Alberta Press, Edmonton. I provided support with space, technical assistance, and supplies to complete projects on fish identification and distribution.

Martin, R.A. and S. Wallace. 2005. COSEWIC status report on white shark, *Carcharodon carcharias*. COSEWIC, Ottawa.

Martin, R.A., N. Hammerschlag, R.S. Collier, and C. Fallows. 2005. Predatory behaviour of white sharks (*Carcharodon carcharias*) at Seal Island, South Africa. *Journal of the Marine Biological Association of the United Kingdom*, 85: 1121-1135.

Martin, R.A., and S. Rekdal. 2006. Hedgehog: a novel defensive posture in juvenile *Amblyraja radiata*. *Journal of Fish Biology*, 68: 613-617.