

Research Fishery Biologist GS 14  
Updated September 2016

**Christine M. Moffitt**  
**Detailed Vitae (Resume)**

**ADDRESS:**

**Work :**

USGS Cooperative Fish and Wildlife Research Unit  
Department of Fish and Wildlife Resources  
University of Idaho  
Moscow, ID 83844-1141  
208- 885-7047 Daytime  
208-995-9080 Work Fax  
[cmoffitt@uidaho.edu](mailto:cmoffitt@uidaho.edu) - email at home and work

**Home:**

419 Sunset Drive  
Moscow, ID 83843  
208-882-8985 Evenings

**EDUCATION:**

High School Diploma, 1965, Earl Warren Senior High School, Downey, California  
B.A., Biology, 1969, University of California, Santa Cruz, California  
M.A., Biological Sciences, 1973, Smith College, Northampton, Massachusetts  
Ph.D., Fisheries Biology, 1979, University of Massachusetts, Amherst

**Additional Formal Training & Short Courses (recent 6 yrs):**

Making the Connection Between Human Rights and Ecology, November 25, 2014  
Webinar training AAAS and ESA. 1 hr. Jessica Wyndham Associate Director of  
the Scientific Responsibility, Human Rights and Law Program of AAAS  
Adaptive Management of Natural Resources. 7-11 June 2010. USGS Webinar. James  
Nichols and Julien Martin, instructors. 10 h.  
Aquatic Invasive Species-Hazard Analysis and Critical Control Point Workshop. Sea Grant  
and FWS. 10 September 2006 Lake Placid, NY. 8 h.  
Decision Analysis Seminar, June 19-23, 2006, NCTC/ Shepherdstown, WV. 24 h  
Fish Nutrition Workshop. AFS Meeting. Twin Falls, Idaho. 16 February 2006. 8 h  
Applying Risk Assessment Principles to Fish Health Situations. 27 June 2005. Boise  
Idaho. 8 h  
Emerging Animal Health Issues Identification and Analysis, Training Course, US  
Department of Agriculture. September 14 – 17, 2004, Fort Collins, CO 20 h.

**Work Experience: See also supporting information in Courses Taught; Graduate Students**

2002-present. Professor and Assistant Unit Leader, Idaho Cooperative Fish and Wildlife  
Research Unit, Department of Fish and Wildlife Resources, University of Idaho,  
Moscow, Idaho 83844-1141.  
2011 (June- August) Professor and Acting Unit Leader, Idaho Cooperative Fish and  
Wildlife Research Unit, Department of Fish and Wildlife Resources, University of

Idaho. I served, as unit leader while the position was vacant.  
 2000-2003, Research Professor, Department of Fish and Wildlife Resources, University of Idaho. Moscow, Idaho 83844-1136.  
 1999-2000. President, American Fisheries Society. 5410 Grosvenor Lane, Bethesda, MD 20814.  
 1989-99, Adjunct Associate Professor, Department of Fish and Wildlife Resources, University of Idaho, Moscow, Idaho 83844-1136.  
 1983-89, Adjunct Assistant Professor Department of Fish and Wildlife Resources, University of Idaho, Moscow, Idaho 83844-1136  
 1981-83, Visiting Research Assistant Professor, Fishery Resources, University of Idaho  
 1980-81, Postdoctoral Associate for Anadromous Fish Research, Connecticut River Fishways, Massachusetts Cooperative Fishery Research Unit, University of Massachusetts, Amherst, MA 01003  
 1978-80, Instructor, Department of Biological Sciences, Smith College, Northampton, MA 01060.  
 1977, Teaching Assistant, Department of Forestry and Wildlife Management, University of Massachusetts, Amherst, Massachusetts. 01003.  
 1975-78, Graduate Research Assistant, Department of Forestry and Wildlife Management, University of Massachusetts  
 1971-75, Research Associate, Amherst College  
 1969-71, Teaching Fellow in the Biological Sciences, Smith College, Northampton, Massachusetts.

Courses Taught:

University of Idaho:

Fish 499 – Directed study in Tribal Fisheries Management. 1 credit, Spring 2016.  
 Fish 504. Fish and Wildlife Sciences' Invited Scientist Seminar series, 1 credit. Spring 2016.  
 Fish499 – Directed study Management issues in aquaculture and fish health, 3 credits, Fall 2015.  
 Env Sci 599 – Research Aquatic Invasive Species, 1 credit, Spring 2015  
 Fish 499 - Directed Study Aquatic Invasive Species, 1 credit  
 Env Sci 598 - Aquatic Invasive Species Internship, 3 credits, Spring 2015  
 Fish 599 - Contemporary Issues in Fisheries Management 1 credit, Spring 2014, Spring 2015  
 Fish 511. Fish Physiology, 2 credits, Fall 2008; Fall 2010, Fall 2012, Fall 2014  
 Fish/Wildlife 501, 1 credit, each Fall semester, 1990 - 2010.  
 Fish 510. Advanced Fisheries Management, 3 credits, Spring 2003; Spring 2005, Spring 2007, Spring 2009; Spring 2011. Spring 2013.  
 Environmental Science 599, varying credits 2004- present.  
 Special Topics Fish 499 1 credit, spring 2007  
 ECB Honors Project 2007 Fish 483 fall and spring, 1 credit  
 Fish 504. Sustainable Aquaculture. 1 credit, Fall 2004  
 Practicum in Environmental Science, 2 credits 2002  
 Fish 500 Masters Research, varying credits, 1983 - present  
 Fish & Env Sci 600, Dissertation Research, varying credits, 1993 – present.  
 Geography 500 Masters Research, 3 credits, 2008  
 Aquaculture and Fish Health, 4 credits with lab, 1999  
 Fish Diseases, with lab 3 credits, 1995

Fish 501 - Graduate Seminar, 1 credit, fall semester, 1989-2013  
 Principles of Fish and Wildlife Biology, 3 credits, 1981-83  
 Directed Study – Fish Pathology; Fish Pharmacology, 1 credit, 1992, 1994

Smith College:

Vertebrate Zoology, with lab 4 credits, 1978-79  
 Animal Behavior, with lab 3 credits, 1980  
 Introductory Biology, with lab 3 credits, 1979

University of Massachusetts

Techniques of Fisheries Management, with lab 1 credit, 1977

**Extension and Service including Workshops and Research Interns:**

- 2016. Organizer for special session “Actions to Increase the Engagement of Underrepresented Minorities in Fisheries and Aquatic Sciences (Symposium) American Fisheries Society, Kansas City, MO, August 2016.
- 2016. Meeting with Wood River Land Trust regarding studies at Rock Creek restoration site. Explore potential for internship program. Advising regarding temperature profiles, fish species, and invertebrate sampling. 6 June 2016.
- 2016. Faculty mentor for Doris Duke Scholars Program, arranging for summer interns in aquatic resources for Keala Bush (marine) and Viviana Baeza Nunez (freshwater).
- 2016. Understanding factors affecting the efficacy of KCl as a toxicant for adult and veliger quagga mussels. Webinar for Rapid Response Working Group, Columbia Basin Team. 18 February.
- 2015-16- Member of tribal natural resources team for outreach activities with tribes, outreach with visiting tribes, travel to meet with tribal educators.
- 2015 - Member of organizing and planning team for Natural Resources Tribal Engagement Educational Summit September-October 2015. Panel moderator.
- 2015. Co-organizer for two day workshop and presentations on multi-cultural inclusion with Dr. Carolyn Finney author of Black faces and White Spaces. 27-30 September. Panel moderator.
- 2015. Organizer for special session “Actions and dialog to change perceptions and increase engagement of underrepresented minorities in fisheries and aquatic sciences”. American Fisheries Society, Portland OR August 2015.
- 2015. Doris Duke Conservation Scholars. Co-PI and Mentor. Five interns for summer experience. Fieldtrip and interactions regarding anadromous fish and invasive species.
- 2015. Planning team for Western Region New Zealand mudsnail workshop. Seattle WA, June 16-17.
- 2015. Climate change and the potential effects on salmonid rearing in the future- Dr. Christine Moffitt, University of Idaho “Inflow-Outflow, Responsible and Efficient Aquaculture” Idaho Chapter American Fisheries Society. 3 March.
- 2014. Interactive workshop with Universidad Católica de Temuco, Presentation of program, tours of facilities and collaborative opportunities. August 2014.
- 2014-2015. Doris Duke Conservation Scholars. Co- PI and Mentor for Emily Rankin and Bethany Guzman. Field investigations of Asian clams in Lake Pend Oreille, ID. June – August. School year interactions, and placement for internships with tribal and agencies for summer 2015.
- 2014. Mentor for REU CRISSP student Jordan Rutland. Investigation of reproductive potential and genetics of Asian clams in the Snake/Columbia Rivers. June – August.

2014. Moffitt, C. M. Asian clam infestation in Lake Pend Oreille and Lake Tahoe. Special citizens meeting,. Panida Theater, Sandpoint, ID. June.
2014. 100<sup>th</sup> Meridian Initiative – Columbia River Basin Team Participant 13-14 May 2013.
2014. Aquatic Invasive Invertebrates Workshop. Attended by WDFW, Colville Tribe, Osoyoos Lake Managers, and Okanagon Nations. Oroville, WA, 4 March.
2013. 100th Meridian Initiative - Columbia River Basin Team Participants 3-4 October 2013.
2013. Mentor for REU CRISSP student Mary Frances Babrowicz. Ballast treatment studies of invasive mollusks, and zooplankton.
2013. HOIST (Helping Orient Indian Students and Teachers into STEM) workshop on stream invertebrates of Paradise Creek. Led four day workshop with 16 participants to introduce them to the function of freshwater streams.
2012. HOIST (Helping Orient Indian Students and Teachers into STEM). mentor for Marilena Gartiez June - July.
2012. Mentor for REU CRISSP student Mindy Torres. Summer student research.
2012. Mentor for REU EPSCoR student Justin Shearer. Summer, and will extend into fall of 2012 as he completes senior thesis.
- 2011-12. Mentor, Scholarships for Education and Economic Development (SEED) Program, USAID. Angel Tiburcio Suriel, Dominican Republic.
- 2011-12. Mentor. Environmental Science thesis students: Rhett Madsen (Monitoring dissolved gasses at Dworshak National Fish Hatchery) and Laura Hughes (Studies of control measures for invasive mollusks).
2011. Review of oral and injectable applications of erythromycin to control bacterial kidney disease. Presented in “Practical tools for managing bacterial kidney disease.” Continuing education workshop AFS Fish Health Section 52<sup>nd</sup> workshop. 14 June Nanaimo, BC.
2011. HOIST (Helping Orient Indian Students and Teachers into STEM).mentor for Janae Crispin. June – July.
2011. Mentor, REU, EPSCoR student, Heath Hewett. Summer and Fall 2011.
2011. Mentor, CRISSP-REU student. Veatasha Dorsey. Summer 2011. Physiology of steelhead kelts.
2011. 6<sup>th</sup> National New Zealand mudsnail conference. Moscow, Idaho. March 15-16.
2011. New Zealand mudsnails and invasive mollusks. Workshop for Idaho Department of Fish and Game and others. Nampa Research. January 2011.
- 2010- Mentor, CRISSP-REU students. Kousi Martin Perales, and Brittany Whitney
2010. Mentor, Water of West REU students. Tim Allan and Jessica Kohls
- 2010-2011. Mentor, REU student EPSCoR Will Schrader
2010. Webinar . Management of BKD and Erythromycin Drug Therapy. for Alaska Hatchery Managers, Anchorage, AK. 16 January 2010.
- 2009-2010. Mentor environmental science theses students: Amber Barenberg, Kristy Marks, Chelsea Merrill, Josh Peterson.
2010. Workshop on invasive mollusks for Idaho Department of Fish and Game. 2 day workshop on identification of invasive mollusks, HACCP process, and quality assurance. With graduate student Kelly Stockton.
2010. Minority Recruitment in the Cooperative Research Units. Breakout session. National Meeting Hotel Monteleone, New Orleans, Louisiana, March 1 – 5,
2009. HOIST (Helping Orient Indian Students and Teachers into STEM). Mentor for

- Effie Hernandez.
2009. Mentor. Water of the West REU student interns: Jonathan Megli and Amanda Eckhart.
2009. Mentor. CRISSP REU student, Liz Marchio. Studies of invasive New Zealand mudsnails.
2009. USFWS, USGS & USFWS Webinar Participants across USA “Ecology and Management of New Zealand Mud Snails:” June 18  
[http://training.fws.gov/branchsites/CSP/WebSeminarSeries/june\\_09/information\\_page.html](http://training.fws.gov/branchsites/CSP/WebSeminarSeries/june_09/information_page.html).
2008. Mentor, Water footprints and sustainability. Water of the West REU student intern, Anthony Lopez.
- 2008 HOIST (Helping Orient Indian Students and Teachers into STEM). mentor research on invasive species. June – July. Kristine Atto
- 2008- Co- organizer. Control of New Zealand Mudsnails in Hatcheries. 1.5 d workshop, Hagerman Fish Culture Experiment Station, and Hagerman National Fish Hatchery, 13-14 May 2008.
2008. Workshop leader. Determining future location for AFS offices, Governing Board Retreat, Annapolis, MD. March.
2007. Summer Intern mentor. Research Experience for Undergraduates, National Science Foundation. One undergraduate intern, Kala Hamilton.
2006. Control of NZMS in Hatcheries. Workshop for Interested Partners. Sponsored by USFWS, and U of Idaho Coop Research Unit. 4-5 May 2006.
2006. AFS Enhancement of Value Retreat, 8 September, Lake Placid. American Fisheries Society Governing Board Retreat Leader.
2006. Summer Intern mentor. Research Experience for Undergraduates, National Science Foundation. One undergraduate intern.
2006. Summer Intern mentor. Center for Research on Invasive Species and Small Populations. One undergraduate intern.
2004. Universidad de Concepcion – University of Idaho Academic Collaboration. October 31-November 5. Delegation visits Idaho. Patagonia ecosystems research center with University of Montana. Claudio Meier, Dr. Pedro Real, Hugo Romeo, Evelyn Habit, Oscar Parra.
- 1995-2005, University of Idaho Hoist Program, Helping Orient Indian Student to Sciences- Mentor for 6-week summer interns every year.
- 1996-99, Girls with Natural Resources Workshop for junior high school girls – Aquatic Ecology Field Day.
- 1994, University of Idaho Hoist Program - 6-week program with Nez Perce Tribal Young Women.
- 1993, Development of Regional INADs for erythromycin. New Orleans, Louisiana. January 26-28. Short Course for U.S. Fish and Wildlife Service to assist in development of regional INADs for aquaculture drugs.
- 1991, 4-H Teen Conference: Aquatic Biology Fisheries and Aquaculture. June.
- 1991, Moscow High School Environmental Symposium. October.
- 1990, Expanding Your Horizons: Workshop for young women. March. Careers in Science.
- 1990, 4-H Teen Conference Science and Technology Workshop. June 11-15. Aquatic Biology, Fisheries and Aquaculture.
- 1990, FFA Conference. July. Fisheries and Aquaculture.

- 1990, Science by Mail - pen pal with 6 young children from New Hampshire to California. Program run by the Boston Museum of Science.
- 1989-90, Moscow High School Gifted and Talented Program, Mentor Program
- 1982, Short course presentation “Environmental effects of small scale hydro,” in small scale hydro shortcourse, University of Idaho, June
- 1979 and 1980, Workshop Leader, “Fishes of the Pond,” Massachusetts Audubon Society, Focus Outdoors, Mt. Holyoke College
- 1974 Instructor, University of California Extension Service, Davis, California, “Floods and Rivers”

**Research Review Panels, and Advisory Boards:**

- 2016. Member Lower Klamath Independent Scientific Review Team for review of implementation criteria of long term plan for protection of late summer adult salmon. US Bureau of Reclamation.
- 2015- present. Scientist Expert Panel for Delta Science Program- Review of feasibility of use of shore-based ballast water reception and treatment facilities in California. Delta Stewardship Council, and the California State Lands Commission.  
<http://deltacouncil.ca.gov/feasibility-study-shore-based-ballast-water-reception-and-treatment-facilities-california-0>
- 2016. Great Lakes Fisheries Commission Science Board. Reviewer for research proposals. May-July
- 2015. Invited participant to establish Dreissenid mussel research priorities. Portland State University. Organized by Pacific States, USGS, and USFWS. 4-5 November.
- 2015. Chair, Research Grade Evaluation Aquatic Scientists, 7 panel members, 19 scientist in review, USGS. January – May.
- 2015. Outside reviewer for tenure and promotion, University of Michigan-Flint. August.
- 2015. Reviewer, Great Lakes Fisheries Commission Science Board. Peer reviewer for 2 research proposals.
- 2015. Peer Review of Asian Clam Risk Assessment, BC Ministry of Environment. May.
- 2015- present, Member, USGS Emerging Wildlife Diseases work group
- 2013 –present. Proposal reviewer for North Pacific Research Board (NPRB). (1-2 proposals per year).
- 2014- present. Member at large, Western Regional Panel Aquatic Nuisance Species. Quarterly Conference calls, Panel committee participation. Annual in Person Meetings. <http://www.fws.gov/answest/>
- 2012- present. Member and participant. Idaho Invasive Species Council. Meetings twice yearly.
- 2012- present. Columbia River Basin Team of the 100<sup>th</sup> Meridian Initiative. Meetings twice yearly. [http://www.100thmeridian.org/Columbia\\_RBT.asp](http://www.100thmeridian.org/Columbia_RBT.asp)
- 2014-15. Primary Reviewer and Panel Member US. Department of Agriculture, Agricultural Research Service NP 106 Aquaculture Panel. August – October-January 2015. Office of Scientific Quality Review
- 2014 External Reviewer for promotion package for Environmental Sciences faculty member, University of California, Davis. July.
- 2013. Great Lakes Fisheries Commission Science Board. Reviewer for research proposals. May-July.
- 2013. Reviewer for Department of Agriculture CREES, Small Business Investment in Research (SBIR) Phase I and Phase II grants – Aquaculture.

- 2012-2013. Member, Fisheries Strategic Plan Steering Committee for USFWS, Sport Fishing and Boating Partnership. 5 meetings and final report.
2012. Outside reviewer for Promotion, Department of Biology, Michigan Technology University.
2012. Reviewer for Department of Agriculture CREES, Small Business Investment in Research (SBIR) Phase II grants- Aquaculture.
2012. Reviewer for Alaska Marine Ecosystem Grant Program.
- 2011-2012. Reviewer for Israel Bi-national Agricultural Research and Development Fund proposals.
2011. Reviewer: Ohio Agriculture Research and Development Center (OARDC) Research Enhancement Competitive Grants Program for fiscal year 2012C
2011. Outside reviewer for tenure decision. Oregon State University, Hatfield Marine Science Center and Department of Fish and Wildlife Conservation. August and September 2011
2011. Outside Reviewer for tenure decision, University of California @ Davis (August-Sept 2011)
- 2010-13. Reviewer Lake Tahoe Tahoe Science Consortium Research Program. 5-6 proposals each year.
2010. Reviewer for Israel Bi-national Agricultural Research and Development BARD Fund Proposals.
2010. Reviewer. Montana Water Resources Seed Grants. December
2010. Reviewer. New York Sea Grant Proposals, June
- 2009 – 2011. Reviewer of Alaska Marine Ecosystem Grant Program, January - March.
2009. Reviewer Oregon Sea Grant Proposals, April-May.
2008. Reviewer of Animal Health and Disease proposals: Oregon Agricultural Experiment Station Sun Grants. May 2008
- 2007-present. Associate Editor, *Transactions* of the American Fisheries Society.
2008. Member, Aquatic Nuisance Species, Task Force. Meetings Quarterly with Invasive Species Council, State of Idaho. 15 January, 16 April, 15 July;
2008. SBIR ad hoc grant reviewer. Department of Agriculture, Aquaculture Program. January
- 2007- 2009. Member of the Board of Governors, The Council for Frontiers of Knowledge, Uganda, Africa.
- 2006-07. Task Force Member Reviewer “An Aquatic Nuisance Species Plan For Idaho: A Supplement to Idaho’s Strategic Action Plan For Invasive Species,” DRAFT April 2007.
2007. NSF International Research Fellowship Program Reviewer
2007. CREES Department of Agriculture Ad hoc reviewer
2007. Reviewer for Western Division AFS. Whirling disease risk assessment.
- 2003-2007. Working Group on Quality Assurance, of the Joint Subcommittee on Aquaculture. Participant in group meetings, 2 X annually.
- 2005-2006. Review Panel Lead CREES Department of Agriculture Small Business Innovative Research Program Aquaculture Phase I and Phase II Proposals. Assembled panel of 9 members, and ad hock review team of over 60 additional scientists across the world to review 58 research proposals. Organized and facilitated discussions and final reviews for all proposals.
- 2005-7. North Pacific Research Board (NPRB), the Exxon Valdez Oil Spill Trustee Council (EVOS), and the Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative

- (AYK SSI) Proposal Reviewer.
2005. Participant in panel SBIR Phase II 2005.
- 2004-2007. Journal Outreach Co-Editor, *Journal of Aquatic Animal Health*.
- 2004 - 2007. Reviewer for US- Israel Binational Agricultural Research and Development Fund Proposals. BARD
2005. CREES Department of Agriculture SBIR Aquaculture Program Panel Member. One of 6 panelists. Primary Reviewer for 6 proposals, secondary for 6 proposals.
- 2004-2007. Chair, Technical Advisory Board for Silver Creek Watershed, The Nature Conservancy, Hailey, Idaho.
- 2003-2008. Potlatch Corporation Community Advisory Board. Acting Chair 2004-5.
- 2003 – 2005. SeaGrant of New York proposal Reviewer.
2004. United States- Israel Bi-national Agricultural Research and Development Fund Review Board. Proposal reviewer.
2004. CREES Department of Agriculture, Animal Protection Program Review Panel. Reviewed 16 proposals, primary reviewer on 6, secondary 5 and reader of 5.
- 2004-2005: FWS Strategic Plan Evaluation Committee, appointed by Sport Fishing and Boating Partnership to Evaluate the USFWS Fisheries Program Progress toward their draft Strategic Plan.
2003. Reviewer, California Sea Grant program proposals.
2003. Research Grade Evaluation Panel, USGS. November.
- 2001-2003, Member, Fisheries Strategic Plan Steering Committee for USFWS, of the Sport Fishing and Boating Partnership.
- 1991-2005– Research Proposal Reviewer, Department of Agriculture, CSREES program, one to two proposals each year as a reader.
- 1995-2003- Sea Grant Program, Reviewer, 1 – 2 proposals per year.
- 2003- present - Research Proposal Reviewer, National Science Foundation, Environmental Biology Program, intermittent.
- 2002-2008- Member of working group on quality assurance in aquaculture production. CVM, FDA, USDA/APHIS/NRSP-7, EPA
- 1999-2001- WRAC Board- Research Technical Review Team
- 1994-97. Associate Editors, *Journal of Aquatic Animal Health*
- 1991-94. Associate Editor, *North American Journal Fisheries Management*
- 1985-95. Idaho Water Resources Research Institute. Technical Review Team.

#### Paper reviews for journals

2016. Canadian Journal of Fisheries and Aquatic Sciences, Fisheries Magazine, Ecology; Diseases of Aquatic Organisms; Aquaculture; Journal of Fish Biology.
2015. Ecological Engineering; Water, Air and Soil Pollution; North American Journal of Fisheries Management, Freshwater Science, Ecology.
2014. Aquaculture, Aquatic Invasions, Aquatic Ecology, Journal of Fish Biology, River Research and Applications; Aquatic Ecology; Environmental Engineering; Hydrobiology
2013. Aquaculture; Aquatic Toxicology, Aquatic Invasions, Ecological Engineering, Hydrobiology
2012. Environmental Toxicology and Chemistry, Northwest Science; Aquatic Invasions; North American Journal of Aquaculture; Environmental Management. Fisheries, Aquaculture, Environmental Science and Pollution Research.
2011. Freshwater Biology, Aquaculture Research; Environmental Toxicology; Chinese

- Journal of Oceanography and Limnology, Bulletin of Environmental Contamination and Toxicology; Environmental Management
2010. Freshwater Biology; North American Journal of Aquaculture
2009. Functional Ecology, North American Journal of Aquaculture
2008. North American Journal of Aquaculture; Aquaculture Research; Veterinary Microbiology; Freshwater Biology.
2007. North American Journal of Aquaculture, Journal of Aquatic Animal Health. Aquaculture Research, Journal of Fish Diseases.
2006. Transactions of the American Fisheries Society, North American Journal of Fisheries Management, North American Journal of Aquaculture, Journal of Fish Diseases, Journal of Aquatic Animal Health.
2005. International Journal of Environment and Pollution (IJEP). Paper reviewer. Contact Ann Hudson.
2004. Reviewer for Environmental Assessment of Oxytetracycline for control of Cold Water Disease in trout and salmon. USGS Upper Mississippi Science Center.

**University of Idaho Committee Assignments:**

- 2016 – present. Search Committee for Department Head for Forest, Rangeland and Fire Sciences.
- 2016 - present. Member of climate committee Fish and Wildlife Sciences.
2015. Member search committee, Administrative specialist. Fish and Wildlife Sciences.
- 2014-15. Search Committee, Fish Physiology. July - March
- 2014 - Laboratory Support Committee.
2013. CNR Promotion Committee. September – December
2012. Member departmental promotion committee Sept - October
2012. Evaluation team for Morris K. Udall Scholarship applications February – March 2012.
- 2012 Lead for additional wet laboratory safety and repairs projects April - June
- 2011 Member search committee for Environmental Science Program Director (May – August 2011).
- 2011 – 2012. Safety committee, College of Natural Resources.
2011. Member search committee for Unit Leader (May-June)
- 2009-2010. Member Search Committee for Assistant Unit Leader, Fisheries (October – January).
- 2006-08. Lead representative for College of Natural Resources, Fisheries Wetlab renovations. Worked with University facilities and Idaho Department of Public Works to provide information, oversight and coordination for project to renovate chiller systems in CNR fisheries wetlab. Project completed summer 2008. Estimated cost \$420,000. Provided Tour for Permanent Building Fund Advisory Council Sept 3-4.
2007. Member search committee, Riparian Ecologist. College of Natural Resources.
- 2006-2007. Chair, Search Committee for Limnologist, College of Natural Resources.
- 2004-2006. Member at large, Athena Board.
- 2003-2004. Fish Ecology Search Committee, College of Natural Resources.
- 2003- present, Coordinator CNR Fisheries Wet Lab operations.
- 1999-2003. CNR Fisheries Wet Lab Committee.
- 2000-2001. Fund for Idaho Faculty/Staff Committee

1988-96, FWR Safety Officer  
 1990-93, Affirmative Action Committee  
 1989-93, Chair, Air Quality Committee  
 1989, Fish Ecologist Search Committee  
 1987-88, Aquaculture Search Committee  
 1982-85, Fine Arts Committee

**Other Professional:**

**Membership and Service in Professional and Scholarly Organizations:**

American Association for the Advancement of Science since 1976  
 American Fisheries Society, life member  
 Lead for special session: Actions to increase the engagement of underrepresented minorities in fisheries and aquatic science. Special session for American Fisheries Society Annual Meeting, Kansas City, MO. August 2016.  
 Lead organizer special session “Actions and dialog to change perceptions and increase engagement of underrepresented minorities in fisheries and aquatic sciences”. American Fisheries Society, Portland OR August 2015.  
 Co-chair, Awards Committee. 2014-2016.  
 Member, Hutton Jr. Fisheries Biologist Oversight Committee, 2013-present, evaluate applicants from Canada and US for placement in summer.  
 Member, Steering Committee for Symposium on the Role of Propagated Fishes in Fisheries Resource Management 2011 - 2014  
 Member, Executive Director Search Committee. 2012-2013  
 Chair, AFS Award of Excellence Committee. 2010-2014  
 Policy/Position Development Fish Health Section AFS 2011-2013.  
 Chair, J. Frances Allen Scholarship Committee. 2007-08.  
 Chair, AFS Transition Committee to Prioritize Choices for Moving AFS Headquarters from Grosvenor Lane, Bethesda. 2007-2009  
 Member Steering Committee for Second Anadromous Catadromous Fish Symposium for 2007. Leader of session on climate change and anthropogenic influences.  
 President, Fisheries History Section. 2006- 2008.  
 President Elect, Fisheries History Section, 2004-2006  
 Outreach Editor for Journal of Aquatic Animal Health 2004-2007  
 Chair, Task Force on Enhancement of AFS Value 2005-2006  
 Chair, Award of Excellence Committee, 2002-2005.  
 Committee on the Visibility and Stature of North American Journal of Aquaculture 2002-2003.  
 Page Charge Analysis Committee for Journals 2001-2002  
 Member Development Committee 1998 - 2003  
 Past President, 2000-01  
 President 1999-2000  
 President Elect 1998-99  
 First Vice President 1997-98  
 Second Vice President 1996-97  
 Chair, Standards of Professional Conduct Committee, 1995-96  
 Member, Western Division Scholarship Committee, 1994-2000

Member, Equal Opportunities Section Mentor Award Committee, 1994-95  
 Member-at-Large, Long-Range Planning Committee, 1994-95  
 Secretary-Treasurer, Western Division AFS, 1992-95  
 Chair, Education Section, Video Review Committee, 1994-96  
 Chair, Skinner Awards Committee, 1991-92  
 Chair, Membership Committee, Equal Opportunities Section, 1992-93  
 University Liaison, Education Section, 1989-present  
 Symposium/special sessions coordinator, 119th annual meeting, Anchorage, Alaska, September 1989  
 Contributed papers session Moderator, 118th annual meeting, Toronto, Ontario, Canada, 1988  
 Convenor-organizer-editor, “Common Strategies of Anadromous and Catadromous Fish” an international conference, Boston, Massachusetts, 1986  
 Coordinator, Poster Session 115th annual meeting, Sun Valley, Idaho, September 1985  
 Palouse Unit  
     Faculty Advisor or Co-advisor 1984- Present  
     Genetics Workshop Advisory Panel, 1983  
     Nominations Committee, 1981-83  
 Equal Opportunity in Fisheries Committee, 1980-82, 1985-90  
 Membership Concerns Committee  
     Member, 1982-83, 1993-95  
     Chair, 1983-88  
 Editorial Overview Committee, 1982-83  
 Northeastern Division Program Committee, 1980-81  
 Southern New England Chapter  
     Secretary-Treasurer, 1978-79  
     President Elect, 1979-80  
     President, 1980-81  
 American Institute of Biological Sciences, member since 1978  
 Association for Women in Science  
 Ecology Society of America, member since 1978  
 Society for Environmental Toxicology and Chemistry, since 2009  
 Society for Sigma Xi., member since 1972  
 American Institute for Fisheries Research Biologists, Fellow

## **PUBLICATIONS:**

### ***Manuscripts in final preparation or review***

### **Published or in press in Refereed Journals and Peer Reviewed Symposia**

- Moffitt, C. M. K. A. Stockton-Fiti, and R. Caudi. 2016. Toxicity of potassium chloride to veliger and byssal stage dreissenid mussels related to water quality. *Management of Biological Invasions* 7:257–268
- Stockton, K.A., C. M. Moffitt, B. J. Watten, and B. Vinci. 2016. Hydraulics and particle removal efficiency of mixed cell raceway and Burrow’s pond rearing systems. *Aquacultural Engineering* 74:52-61. [doi:10.1016/j.aquaeng.2016.04.005](https://doi.org/10.1016/j.aquaeng.2016.04.005)

- Penney, Z. L., C. M. Moffitt, B. Jones, and B. Marston. 2016. Physiological comparisons of plasma and tissue metrics of selected inland and coastal steelhead kelts. *Environmental Biology of Fishes* 99:487-498. Doi:10.1007/s10641-016-0493-x
- Moffitt, C. M., B. J. Watten, A. Barenberg, and J. Henquinet. 2015. Hydroxide stabilization as a new tool for ballast disinfection: efficacy of treatment on zooplankton. *Management of Biological Invasions* 6:263-275.
- Trushenski, J. T., H. L. Blankenship, J. D. Bowker, T. A. Flagg, J. A. Hesse, K. M. Leber, D. D. MacKinlay, D. J. Maynard, C. M. Moffitt, V. A. Mudrak, K.T. Scribner, S. F. Stuewe, J. A. Sweka, G. E. Whelan, and C. Young-Dubovsky. 2015. Introduction to a special section: Hatcheries and management of aquatic resources (HaMAR)—Considerations for use of hatcheries and hatchery-origin fish. *North American Journal of Aquaculture* 77:327-342.
- Plumb, J. M., and C. M. Moffitt. 2015. Re-estimating temperature-dependent consumption parameters in bioenergetics models for juvenile Chinook salmon. *Transactions of the American Fisheries Society* 144:323–330.
- Buelow, J., and C. M. Moffitt. 2015. Physiological indices of seawater readiness in postspawning steelhead kelts. *Ecology of Freshwater Fish*. 24: 112-122.
- Penney, Z. L., and C. M. Moffitt. 2014. Fatty acid consumption in white muscle and liver tissue of stream maturing steelhead during early migration and kelt emigration. *Journal of Fish Biology* 86: 105-120
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- Moffitt, C.M. 1990. The natural history of lakes: Review of the book by M. Burgis and P. Morris. *Women in Natural Resources* 11(4):37.
- Moffitt, C.M. 1990. Drug testing for fish: Controlling bacterial kidney disease in salmon. *Focus on Renewable Natural Resources* 15:6-7. Idaho Forest, Wildlife and Range Experiment Station, University of Idaho, Moscow.
- Hayton, W.L., I.R. Schultz, and C.M. Moffitt. 1990. Erythromycin pharmacokinetics in adult chinook salmon after intra and extra vascular injection. *The Toxicologist* 10(1):176.
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- Moffitt, C.M., C. Banner, M. DeCew, W. Hutchinson, J. Ganzhorn, J. Warren, and C. Wesby. 1990. Administration of erythromycin to adult and juvenile salmonids - what are we doing and what do we know? *Proceedings of the Fortieth Annual Northwest Fish Culture Conference*. Gleneden Beach, Oregon, December 5-7, 1989. National Marine Fisheries Service, Portland.
- Moffitt, C.M. 1988. River policy and ecology. Review of *Down by the River: Impact of Federal Water Projects and Policies on Biological Diversity*. *Bioscience* 39:494-495.
- Moffitt, C.M. 1987. Female roles in evolution. Review of *Females of the Species* by Bettyann Kevles. *Women in Forestry* 8(4):49.
- Moffitt, C.M. 1987. *Earth*, review of the book by Anne and Paul Ehrlich. *Women in Natural Resources* 9(1):5.
- Moffitt, C.M. 1986. Is the women's movement improving conditions for women in America? A review of two books: *A Lesser Life* by Sylvia Ann Hewlett and *How Men Feel* by Anthony Astrachen. *Women in Forestry* 8(3):35.
- Moffitt, C.M. 1986. Neptune's revenge: common resource produces problems for the future. Book review of *Neptune's Revenge, the Ocean of Tomorrow* by Anne W. Simon. *Women in Forestry* 8(2):47.
- Moffitt, C.M. 1985. Where are we headed in fisheries. *Idaho Forester* 30-31.
- Moffitt, C.M. 1985. The cycle turns upward - again. Book review of *In the Company of Educated Women*, by Barbara Miller Solomon. *Women in Forestry* 7(3):31.
- Leary, R., H.E. Booke, and C.M. Moffitt. 1983. Electrophoretic variation in American shad (*Alosa sapidissima*). *Isozyme Bulletin*. January 1983.
- Moffitt, C.M. 1983. Equal rights for fish and wildlife. *Idaho Forester* 32-33.
1982. Directory of respondents, survey of women members, American Fisheries Society.

#### **UNPUBLISHED REPORTS:**

- Moffitt, C. M. 2011. Developing strategies to improve survival and return recruitment of steelhead kelts from Snake River stocks. Contract No C08-22Purchase Order No C0802240Annual Report- 2010 – 2011. Submitted to Columbia River Inter-tribal Fish Commission. Portland. Oregon.
- Moffitt, C. M. 2010. Developing strategies to improve survival and return recruitment of steelhead kelts from Snake River stocks. Contract No C08-22Purchase Order No C0802240Annual Report- 2009 – 2010. Submitted to Columbia River Inter-tribal Fish Commission. Portland. Oregon.
- Moffitt, C. M. 2007. Continuation of testing of control strategies to reduce New Zealand mudsnail infestation at fish propagation faculties. Annual Report to FWS.

- Requisition Number 11332-4-2006, Amendment Modification 3. Idaho Cooperative Fish and Wildlife Research Unit. September 2007.
- Nielson, R.J., C.M. Moffitt, B.J. Watten. October 2007. Testing the Feasibility of Using a Hydrocyclone to Remove New Zealand Mudsnailes from a Hatchery Water Source. Preliminary Draft Summary of Field Trials Conducted at Hagerman National Fish Hatchery, July 2007
- Nielson, R.J., C.M. Moffitt, B.J. Watten. February 2008. Testing the Feasibility of Using a Hydrocyclone to Remove New Zealand Mudsnailes from a Hatchery Water Source. Preliminary Draft Summary of Field Trials Conducted at Hagerman National Fish Hatchery, October 2007
- Cassinelli, J., C. Moffitt, and K. Meyer. 2007. Laboratory studies of growth and physiology of redband trout from desert and montane streams. FY 2006 Progress Report March. Idaho Fish and Game Report 07-18. March.
- Moffitt, C. M. 2006. Report to Governing Board, American Fisheries Society. Enhancement of AFS Value Committee. 21 August 2006. 8 pages.
- Moffitt, C. M. 1999-2004. Completing FDA approved registration of erythromycin for treatment of bacterial kidney disease in salmon. Annual Reports for Bonneville Power Administration, Oregon.
- Moffitt, C.M. 1989-96. FDA approval registration of erythromycin for treatment of bacterial kidney disease in juvenile and adult chinook salmon. 24 Quarterly Reports, for Bonneville Power Administration, Portland, Oregon.
- Moffitt, C.M. 1991. FDA approval registration of erythromycin for treatment of bacterial kidney disease in juvenile and adult chinook salmon. Annual Report, 1989-90. Bonneville Power Administration, Portland, Oregon.
- Bjornn, T.C., C.M. Moffitt, R.E. Myers, R.W. Tressler Jr., K.P. Reese, C.J. Cleveland, C.M. Falter, and J.H. Milligan. 1987. An evaluation of sediment and nutrient loading in Bear Lake National Wildlife Refuge on fish and wildlife production (draft). Technical Report 87-3. Idaho Cooperative Fish and Wildlife Research Unit, University of Idaho, Moscow, Idaho.
- Bjornn, T.C., J.L. Congleton, R.R. Ringe, and C.M. Moffitt. 1985. Survival of chinook salmon smolts as related to stress at dams and smolt quality, 1984. Idaho Cooperative Fish and Wildlife Research Unit Technical Report 85-1. 25 pp.
- Moffitt, C.M., and T.C. Bjornn. 1984. Fish abundance upstream from Dworshak Dam following exclusion of steelhead trout. Final Technical Completion Report. Project WRIP/371404. Idaho Water and Energy Resources Research Institute. 54 pp.
- Bjornn, T.C., C.M. Moffitt, J.D. Varley, D. Diggs, R. Austin, J. McClain, J. Lientz. 1984. Bacterial kidney disease in chinook salmon as related to hatchery practices and methods. Idaho Cooperative Fishery Research Unit. 68 pp.
1982. The status of women members of the American Fisheries Society--results of a survey of members. Report to the president of the American Fisheries Society. August 1982.
1981. Connecticut River Basin Anadromous fish studies. Performance Report AFS-4-R-20, Jobs 101, 102, 303, 304, 305, and 403.
1979. Recolonization by three species of *Alosa* in water above Rainbow Dam, Farmington River, Connecticut. Final Report AFS-4-C, Job No. II-1.

**INVITED AND CONTRIBUTED PRESENTATIONS AT MEETINGS AND SYMPOSIA:  
Multimedia Presentations:**

2016. Plenary and Business Award Ceremonies for 145<sup>th</sup> Annual Meeting of the American Fisheries Society. Kansas City, MO, August
2015. Plenary and Business Award Ceremonies for 145<sup>th</sup> Annual Meeting of the American Fisheries Society. Portland, OR, August
2014. Plenary and Business Award Ceremonies for Annual Meeting of the American Fisheries Society. Quebec City, August.
2013. Plenary and Business Meeting Awards Ceremonies for Annual Meeting of the American Fisheries Society, Little Rock, AR, September 2013.
2012. Plenary and Business Meeting Awards Ceremonies for Annual Meeting of the American Fisheries Society, St. Paul, MN, August 2012.
2011. Plenary and Business Meeting Awards Ceremonies for Annual Meeting of the American Fisheries Society, Seattle, WA. Sept 2011.
2010. Plenary and Business Meeting Awards Ceremonies for Annual Meeting of the American Fisheries Society, Pittsburgh, PA. Sept 2010.
2009. Plenary and Business Meeting Awards Ceremonies for Annual Meeting of the American Fisheries Society, Nashville, TN. August – Sept 2009.
2008. Plenary and Business meeting Awards Ceremonies for Annual Meeting of the American Fisheries Society, Ottawa, Canada. 17-22 August.
2007. Plenary and Business Meeting Awards Ceremonies for Annual Meeting of the American Fisheries Society, San Francisco, CA. 2-6 September 2007.
2006. Plenary and Business Meeting Awards Ceremonies for Annual Meeting of the American Fisheries Society, Lake Placid, New York.
2005. Plenary and Business Meeting Awards Ceremonies for Annual Meeting of the American Fisheries Society, Anchorage Alaska.
2004. World Fisheries Congress History of World Fisheries. A photographic essay for the Plenary Presentations at the 4<sup>th</sup> World Fisheries Congress, British Columbia.
2004. Plenary and Business Meeting Awards Ceremonies for Annual Meeting of the American Fisheries Society, Madison, Wisconsin.
2003. Plenary and Business Meeting Awards Ceremony for Annual Meeting of the American Fisheries Society, Quebec City, Quebec.
2002. Plenary and Business Meeting Awards Ceremony for the Annual Meeting of the American Fisheries Society, Baltimore, Maryland.
2001. Plenary and Business Meeting Awards Ceremony for the Annual Meeting of the American Fisheries Society, Phoenix, Arizona.
2000. Plenary and Business Meeting Awards Ceremony for the Annual Meeting of the American Fisheries Society, St. Louis, Missouri.
2000. Plenary Presentation: Reflections – A History of the Fisheries and the American Fisheries Society in North America. St. Louis, Missouri.

### **Invited Oral Papers and Presentations**

2016. Moffitt, C. M. Aquamycin updates. Pacific Northwest Fish Health Protection Committee, Manchester, WA. 13 September.
2016. Moffitt, C. M. and L. Cajas de Gliniewicz. Marine aquaculture production of unfed organisms has important opportunities in future ecosystem management. In session “Effects of Drought on Aquatic Resources, Fisheries Management, and Mitigation Strategies.” Annual Meeting, American Fisheries Society Kansas City, MO. August.
2016. Moffitt, C. M. Aquamycin update and progress toward PMF. 22<sup>nd</sup> Annual

- Aquaculture Drug Approval Coordination Workshop. Jackson, WY. 9-10 June.
2016. Moffitt, C. M. K. Stockton-Fiti, and R. Claudi. Factors affecting the efficacy for potash treatment for dreissenids control Columbia Basin, Columbia River Basin Team Meeting, Spokane WA, 24-25 May 2016
2015. Moffitt, C. M., Water and Energy, Dams, Ships, Fish, CO2 and other things. Guest lecture and discussion leader for Chemistry 400, Honor's Seminar. October 28. Instructor Tom Bitterwolf.
2015. Moffitt, C. M. Summary of considerations regarding KCl treatments for quagga mussels. Dreissenid mussel research priorities workshop. Portland State University. 4-5 November.
2015. Moffitt, C. M. and K. Stockton. Potential Chemical Control Tools for Dreissenids and other Invasive Mollusks. Columbia Basin, Columbia River Basin Team Meeting, Portland, 7-9 October 2015.
2015. Moffitt, C. M. Risks and management of diseases to avoid unwanted outcomes in aquaculture. Ethics in Aquaculture and Fisheries Management, 145<sup>th</sup> Annual Meeting American Fisheries Society. Portland OR. 19 August.
2015. Moffitt, C. M., and B. Kibler. *Corbicula* response in Lake Pend Oreille LPO, Idaho. Columbia River Basin Team Meeting, 12-13 May, Boise. ID.
2015. Moffitt, C. M., and F. Wilhelm. Use of elevated pH under barriers at Lake Pend Oreille, ID. Idaho Invasive Species Council, 6 March. Boise, ID
2014. Moffitt, C. M., B Watten, A. Barenberg, J. Henquinet. Hydroxide stabilization as a new tool for ballast disinfection: efficacy of treatment on zooplankton. Columbia River Basin Team, 100<sup>th</sup> Meridian. 1-2 October, 2014. Heathman Lodge, Vancouver, Washington.
2014. Moffitt, C. M. Reconnecting People to Their Natural Environment. American Fisheries Society Annual Meeting, Quebec City, August.
2013. Moffitt, C. M. Dynamics of social values and fish culture. Hatcheries and management of aquatic resources special session at American Fisheries Society annual meeting, Little Rock, AR. 8-12 September.
2013. Moffitt, C. Invasive mollusks: what are the risks and what can we do?(paper presented by K. Stockton due to sequester). Western Division, AFS, Boise, ID 15 - 18 April 2013.
2013. Moffitt, C., and A. Barenberg. Asian clams infestations and Lake Pend Oreille. Invasive Aquatic Species Treatment Prevention and Education in the Northern Interior Columbia Basin. Dover City Hall, ID. 28 March 2013. (presented by Barenberg due to travel restrictions)
2012. Moffitt. Asian Clams in Lake Pend Oreille. Presentation to Clark Fork Management Committee Meeting, September 19, Noxon, Montana.
2012. Moffitt, C., and L. Cajas Cano. Conflicts for global aquatic resources: the need for tools to assess tradeoffs. 143<sup>rd</sup> Annual meeting of American Fisheries Society. St. Paul, MN, 19 – 23 August.
2012. Moffitt, C. M. Diversity and equality. Workshop and presentation to SEEDS group, 1 February and 15 February. University of Idaho.
2012. Moffitt, C. M., Invasive species. Guest lecture for Wildlife 314 class. 27 January.
2011. Penney\*, Z. L. and C. Moffitt. Modeling starvation in Snake River steelhead trout. University of Arkansas Pine Bluff Fish Physiology Class via video (Moscow, ID), November. Presented by Z. Penney.
2011. Penney\*, Z. L. and C. Moffitt. Energy expenditure in Snake River steelhead trout.

- To National Russian Science Academy delegates at the University of Idaho (Moscow, ID), November. Presented by Z. Penney
2011. Moffitt, C. M., Dams and fish. Guest lecture and discussion leader for Chemistry 400, Honor's Seminar. 26 and 28 September. Instructor Tom Bitterwolf.
2011. Moffitt, C. M. Ethical conduct in science and society. Presentation and workshop to SEEDS group. June 24.
2011. Moffitt, C. M. Aquatic invasive species invertebrates, parasites and pathogens. Lecture and discussion. 9 February. Environmental Science Capstone Class, University of Idaho.
2010. Moffitt, C. M. History of fisheries science in North America. 140<sup>th</sup> annual meeting of the American Fisheries Society, Special Student Colloquium. 16 September.
2010. Moffitt, C. M. Snake River steelhead trout: increasing their capacity for successful return. University of Idaho Physics Department Annual Banquet. April 30. Moscow ID.
2010. Moffitt, C. M. Minority Recruitment in the Cooperative Research Units. Breakout session. National Meeting Hotel Monteleone, New Orleans, Louisiana, March 1 – 5,
2009. Moffitt, C. M. Good laboratory practices, introduction to requirements, examples, and rationale. 2 h session with Advance Limnology Workshop .Department of Fish and Wildlife Resources, Moscow..
2008. Moffitt, C. M. Factors affecting establishment and control of New Zealand mudsnails. Annual meeting, Oregon Lakes Association, 13 September, Wallowa Lake, Oregon.
2008. Moffitt, C. M. Review of research on New Zealand mudsnails with emphasis on control strategies for hatcheries. Western Regional Panel on Invasive Species. Annual meeting, September 9 – 11, Fort Collins, Colorado.
2008. Moffitt, C. M. Keynote Luncheon Speaker, Equal Opportunity Section, AFS Annual Meeting, Ottawa, Canada. 18 August 2008. Subject: Highlights of successful women in the history of the American Fisheries Society.
2008. Moffitt, C. M. Update and Progress on AQUAMYCIN 100® Claim. 14th Annual Aquaculture Drug Approval Coordination Workshop July 28- 31, 2008, Bozeman, Montana.
2008. Moffitt, C. M. Invited speaker for NSF Pan American Advanced Study Institute, Human, Physical, and Natural Capital Investment in Patagonia: A Predictive Approach under the Sustainability Criterion. 11 – 23 August 2008. Conception Chile. [www.ciep.cl](http://www.ciep.cl). Both presentations presented by Luvia Cajas Cano.
2008. Moffitt, C. M. Summary of research on control of New Zealand mudsnails at fish hatcheries. Idaho Invasive Species Taskforce, Hagerman, ID. 15 July 2008.
2008. Moffitt, C. M. Environmental Assessments for Therapeutants for Aquaculture Models, Process and Variables. Idaho Chapter, American Fisheries Society. 6-8 February, 2008. Post Falls, ID.
2008. Moffitt, C. M. Idaho Chapter of the American Fisheries Society, Post Falls, ID. “Palouse Unit: 1978-2008. 30 Years of Excellence.” Invited panel presentation moderator.
2007. Moffitt, C. M. Drug approval of erythromycin to treat bacterial kidney disease. 13<sup>th</sup> 13th Annual Aquaculture Drug Approval Coordination Workshop. July 31- August 1, 2007. Bozeman, MT.
2007. Moffitt, C. M. Vectors, Vehicles and Invasive Species in Stream Watersheds.

- Landscapes to riverscapes: bridging the gaps between research and management of stream taxa and their ecosystems. University of Idaho. Moscow 15-16 May 2007.
2007. Moffitt, C. M, Fish Health Management of cultured fish: parasites, pathogens, and physiology. Presentation to University of Arkansas, Pine Bluff, and University of Maryland, Easter Shore 19 April 2007 for graduate class in use of cultured fish in supplementing marine and inland fisheries. Organized by Paul Port and Alf Haukenes.
2007. Moffitt, C. M. Definition of environmental footprints and applications to animal protein production and aquaculture. Sustainable aquaculture. World Aquaculture San Antonio, TX 26-29 February 2007.
2007. Moffitt, C. M. Use of Antibiotics in Production: myths, reality and comparisons. Sustainable aquaculture. World Aquaculture San Antonio, TX 26-29 February 2007.
2007. Moffitt, C. M. Erythromycin to Control Bacterial Kidney Disease in Salmonids. Producers Session, World Aquaculture, San Antonio, TX. 26-28 February 2007.
2006. Moffitt, C. M., R. L. Bruce, and C. A. James. Understanding the risks of invasive New Zealand mudsnails to free ranging fish communities and to aquaculture. Invasive species session, 5<sup>th</sup> International symposium on Aquatic Animal Health. 2-6 September. San Francisco, CA.
2006. Moffitt, C. M. A model framework for evaluating risks of invasive species and diseases in hatchery and wild fish - examples from salmonids 136<sup>th</sup> Annual Meeting, American Fisheries Society, Lake Placid, New York. September 10-14 2006.
2006. Moffitt, C. M. Progress toward drug approval for oral erythromycin. Annual Drug Approval Workshop. La Crosse, Wisconsin, 1-2 August, 2006.
2006. Moffitt, C. M. Assessment of risks to the environment and humans from aquaculture drugs. Presentation to Idaho Aquaculture Association, Twin Falls, June 2006.
2006. Cajas Cano\*, L. and C. M. Moffitt. Environmental and Social Costs of Beef and Fish Production for Human Consumption: Can we Export Information from Idaho to Guatemala?. Idaho Aquaculture Association, 17th Annual Meeting, Twin Falls, Idaho. June 2006.
2006. Bruce, L., and C. M. Moffitt. Summary of laboratory trials to model survival and passage of New Zealand mudsnails in the gastrointestinal tract of rainbow trout. New Zealand Mudsnails Control workshop. Hagerman, May 2006.
2006. Moffitt, C. M. and L. Bruce. Control of New Zealand mudsnails in hatcheries: conceptual model of components to consider and options for potential collaborations. New Zealand mudsnail control workshop, Hagerman, Idaho. May 2006.
2006. James, C. and C. Moffitt. New Zealand mudsnails in Silver Creek, Idaho. Presentation to the Idaho Nature Conservancy's Citizen's Advisory Group, Hailey, Idaho, March, 2006.
2005. Moffitt, C. M. Idaho Research initiatives. New Zealand and Aquatic Nuisance Species Biologist Workshop, 20 April. Denver, Colorado.
2005. Moffitt, C. M. Environmental assessment of erythromycin to control bacterial kidney disease in salmon hatcheries. Northwest Fish Culture Conference, 6-8 December Boise, Idaho.

2004. Moffitt, C. M. Economic and environmental aspects of animal protein production. 134th Annual American Fisheries Society, Madison, Wisconsin. August
2004. Moffitt, C. M. Getting to the finish line with erythromycin approvals. INAD Workshop, August Bozeman, Montana.
2004. Moffitt, C. M. Modeling the effects of antibiotic treatments in cultured fish. 134<sup>th</sup> Annual American Fisheries Society, August. Madison, Wisconsin.
2003. Moffitt, C. M. Progress in Approval of Erythromycin for Salmonid Bacterial Kidney Disease. INAD Workshop, 30-31 July, Bozeman Montana.
2003. Moffitt, C. M. New Approaches to Evaluate and Understand Risks of Pathogens to Cultured and Free-Ranging Fish Populations. Uses and Effects of Propagated Fishes in Fisheries Management. June 03, Boise, ID. 2003.
2003. Moffitt, C. M. Gerald D. Schmidt Memorial Lecture “The puzzle of whirling disease: can we use landscape level approaches to understand and model risk?” Rocky Mountain Conference of Parasitologists, 34rd Annual Meeting May 1-3<sup>rd</sup> Colorado Springs, CO.
2003. Moffitt, C. M. Models for whirling disease. 9<sup>th</sup> Annual Whirling Disease Symposium, February 03, Seattle WA.
2003. Moffitt, C. M. Aquaculture America Special Session on Drug Approval Studies, February. Louisville, Kentucky.
2002. Moffitt, C. M. Student Leadership retreat leader:”Ethics in Daily and Professional Life”. 20-21 September
2001. Moffitt, C. M. Influence of disease interactions of natural and cultured fishes, WRAC Research Board Meeting, Scottsdale, Arizona. October 15-16, 2001.
2001. Implications of Aquaculture Production and Development on Sustainable Fisheries 131<sup>st</sup> Annual Meeting, American Fisheries Society, Phoenix, Arizona, August 20-24, 2001.
2001. Moffitt, C. M. Spent Carcasses and Fish Pathogens: A workshop to assess the state of knowledge, define research and monitoring needs, and potential funding sources, Annual Meeting of the American Fisheries Society Fish Health Section, Victoria, British Columbia, Canada, June 28-30, 2001.
2000. Moffitt, C. M. Reflections on our AFS roots. Annual Meeting, Montana Chapter American Fisheries Society. 7-11 February. Great Falls, MT
1999. Moffitt, C. M. Historical View of Attitudes Toward Fishery Resources in North America. Western Association of Science Writers. University of Idaho. Moscow.
1999. Moffitt, C. M. Institutional Constraints and Impediments of Management Institutions. Panel participant. The Value of Native Coldwater Fish. February 9 – 11, Coeur d Alene. ID. Forest Service.
1994. Moffitt, C. M. NRSP-7 FDA Workshop. Bethesda, Maryland. Title: Establishing field trials for investigational new animal drugs.
1993. Moffitt, C. M. Review of the INAD process – a case study. INAD Development workshop, New Orleans, Louisiana. January 27-28.
1990. Moffitt, C. M. Fifth IR-4/FDA Workshop for Minor Use Drugs: Focus on Aquaculture. Bethesda, Maryland, October 15-16, 1990. Title: Erythromycin in salmonids.

**Contributed Oral and Poster Papers Presented by Moffitt, Students and Colleagues:**

- \*indicates presenter other than CM

2016. Moffitt, C. M. Control of quagga mussels with potash: trials of efficacy in different source waters. Annual Meeting, American Fisheries Society Kansas City, MO. August.
2016. Moffitt, C. M. and L. Cajas de Gliniewicz. Marine aquaculture production of unfed organisms has important opportunities in future ecosystem management. In session "Effects of Drought on Aquatic Resources, Fisheries Management, and Mitigation Strategies." Annual Meeting, American Fisheries Society Kansas City, MO. August.
2016. Moffitt, C. M. Factors affecting the use of erythromycin therapy to control bacterial kidney disease in juvenile salmonids. 57<sup>th</sup> Western Fish Disease Workshop and American Fisheries Society Fish Health Section Meeting. 7-10 June. Jackson, WY.
2016. Moffitt, C. M. and K. A. Stockton\*. 2016. Mortality responses of quagga mussels to KCl solutions prepared in different source waters. 19th International Conference on Aquatic Invasive Species April 10-14, 2016, Winnipeg, MB Canada
2016. Moffitt, Christine M., K. A. Stockton-Fiti\* and R. Claudi. Mortality responses of quagga mussels to KCl solutions prepared in different source waters. Western Division AFS March 2016, Reno NV.
2016. Stockton-Fiti, K. A.\*, and C. M. Moffitt. 2016. Assessing the risk of an invasion of New Zealand mudsnails and a review of the tools to prevent and manage an infestation. Western Division of AFS. Reno, NV.
2015. Wilhelm\*, F. C. Moffitt, E. Braker, B. Kibler, J. Noonan, and T. Woolf. 2015. Efforts to use elevated pH and benthic barriers to eradicate Asian clams (*Corbicula*) from Idaho's Great Lake, Lake Pend Oreille. North American Lake management Society symposium. November 17 – 20, Sarasota Springs, N.Y.
2015. Moffitt, C. M. Factors affecting the outcome of potential chemical control tools for dreissenids and other invasive mollusks. Annual Meeting of the Western Regional Panel on ANS, September 2-4, Lake Tahoe, CA.
2015. Guzman\*, B., E. Rankin, E. Braker, C. M. Moffitt, and F. M. Wilhelm. (poster) Benthic survey of Ellisport Bay, Lake Pend Oreille, Idaho, for invasive Asian clams. Ecological Society of America, August. Baltimore, MD.
2015. Moffitt, C. M., B Watten\*, A. Barenberg, J. Henquinet. (poster) Hydroxide stabilization as a new tool for ballast disinfection: efficacy of treatment on zooplankton. International Association for Great Lakes Research, 58<sup>th</sup> Annual Conference. 25-29 May. Burlington VT.
2015. Vierling, K., C. J. Conway, C. Moffitt, and E. Braker. Internship programs in the Fish and Wildlife Sciences Department at the University of Idaho: opportunities for expanding wildlife education. Idaho Chapter of The Wildlife Society Annual Meeting, 10 March 2015. Pocatello, ID
2015. Braker, E., C. M. Moffitt\*, K. Vierling, C. Conway, and M. Quist. Investment in mentoring: training to promote diversity in conservation professions. Idaho Chapter American Fisheries Society, March. Boise ID.
2015. Moffitt, C. M. Socio-economic and environmental factors influence the relevance of natural resources. Idaho Chapter American Fisheries Society, March. Boise ID.
2015. Moffitt, C. M., F. Wilhelm, E. Braker, B. Kibler, J. Noonan, and T. Woolf. Asian clams can pose a significant threat to aquatic resources: updates on the Lake Pend

- Oreille infestation and management. Idaho Chapter American Fisheries Society, March. Boise ID.
2014. Moffitt, C. M., B Watten\*, A. Barenberg, J. Henquinet\*. (poster) Hydroxide stabilization as a new tool for ballast disinfection: efficacy of treatment on zooplankton. Upper Midwest Invasive Species conference, 20-22 October, Duluth MN.
2014. Moffitt, C. M. Elevated pH: An Effective, Economical and Safe Tool to Control Release of Invasive Species. American Fisheries Society Annual Meeting Quebec City August.
2014. Rankin\*, E., B. Guzman\*, A. Barenberg, E. Braker, and C. M. Moffitt. Population density and management of invasive Asian clams in Lake Pend Oreille. Upward bound workshop. McCall Outdoor Science Center, July.
2014. Moffitt, C.M. Z. L. Penney, J. Buelow, B. Jones and B. Marston. Energetics and physiology of Columbia/Snake Steelhead. Pacific Coast Steelhead Management Meeting at Skamania Lodge. March 18-20,
2013. Barenberg\*, A., C. M. Moffitt, and B. J. Watten (oral). Toxicity studies to control invasive mollusks. Washington State Lake Protection Association (WALPA) and Oregon Lake Management Association. Vancouver, WA. 16-18 October.
2013. Barenberg\*, A., C. M. Moffitt and B. J. Watten (oral). Elevated pH as a disinfection tool against three invasive mollusks of concern. Annual Meeting, American Fisheries Society. Little Rock AR. 8-12. September.
2013. Penney\*, Z. L., and C. M. Moffitt. (oral). Finding death: the relationship between energy and iteroparity in steelhead trout. AFS/Sea Grant best student presentations. Annual Meeting, American Fisheries Society. Little Rock AR. 9 September.
2013. Penney\*, Z. and C. M. Moffitt. (oral). Histological assessment of selected tissues in maturing and post spawning Snake River steelhead. Western Division American Fisheries Society, Boise, ID 17 April.
2013. Cajas Cano\*, L. and C. M. Moffitt. (oral). Life cycle assessment (LCA) of marine mussels production in Washington, US. Western Division American Fisheries Society, Boise, ID 17 April.
2012. Barenberg\*, A., C. M. Moffitt, and B. J. Watten (oral). Elevated pH as a management tool to control invasive mollusks. Washington State Lake Protection Association (WALPA). Wenatchee, WA, 24-26 October.
2012. Shearer\*, J., C. M. Moffitt, and A. Barenberg. (poster) NaOH toxicity to invasive quagga mussels and Asian clams: estimating lethal time of exposure to NaOH pH 12. Idaho NSF EPSCoR and Idaho NASA EPSCoR annual meeting, Boise, ID. 2-3 October.
2012. Barenberg\*, A., C. M. Moffitt, and B. J. Watten. (poster) Use of hydrated lime and sodium hydroxide to reducing the risks of release of invasive species from ballast systems. 143rd Annual Meeting, American Fisheries Society, St. Paul, MN. 19 – 13 August.
2012. Penney\*, Z., and C. M. Moffitt. (oral) No guts no glory: using histology to assess the capacity for post-reproductive recovery in Snake River steelhead kelts. 143rd Annual Meeting, American Fisheries Society, St. Paul, MN. 19 – 13 August.
2012. Penney\*, Z., C. M. Moffitt, B. Marston, C. Woods, B. Jones, and J. Buelow. Nutritional and energetic status of inland Snake River and coastal Situk River kelts using blood plasma chemistry (poster). 13th Steelhead Management Meeting

- Pacific States Management Council, Fort Worden, WA, March.13-14
2012. Hughes\*, L., A. Barenberg\*, T Britton\*, C. Withers-Haley\*, C. M. Moffitt, B. J. Watten, and J. Davis\*. Use of hydrated lime to reducing the risks of release of invasive species from boats and ballast systems (Poster). Idaho Chapter American Fisheries Society Annual Meeting. Coeur d Alene. 6-9 March.
2012. Jones\*, B., C. M. Moffitt, T. Copeland, B. Bowersox, D. Hatch, Z. Penney, and J. Buelow (oral). Migration and physiology of Clearwater River steelhead kelts. Idaho Chapter American Fisheries Society Annual Meeting. Coeur d Alene. 6-9 March.
2012. Madsen\*, R., C. M. Moffitt, J. Christiansen, and J. Olson. Monitoring and mitigation of saturated gasses at Dworshak National Fish Hatchery (poster). Idaho Chapter American Fisheries Society Annual Meeting. Coeur d Alene. 6-9 March.
2012. Penney, Z. L., C. M. Moffitt, B. Marston. J. Buelow, B. Jones.(oral) A comparison of the nutritional and energetic status of kelts from the Snake River and coastal Situk River, AK using blood plasma metrics. Idaho Chapter American Fisheries Society Annual Meeting. Coeur d Alene. 6-9 March.
2012. Plumb\*, J. M., C. M. Moffitt, J. A. Yanke, W. P. Connor and K. F. Tiffan. (oral) Thermal shift in maximum consumption helps explain bioenergetics and growth by subyearling fall Chinook salmon. Idaho Chapter American Fisheries Society Annual Meeting. Coeur d Alene. 6-9 March.
2012. Cajas Cano\*, L. and C. M. Moffitt.(oral) Life cycle assessment integrating two or more species to improve sustainability in marine aquaculture. Idaho Chapter American Fisheries Society Annual Meeting. Coeur d Alene. 6-9 March
2012. Hewett\*, H., C. M. Moffitt and Z. L. Penney. (poster) Prevalence of otolith aberrancy in hatchery-reared juvenile steelhead trout from the Snake River basin. Idaho Chapter American Fisheries Society Annual Meeting. Coeur d Alene. 6-9 March
2011. Jones\*, B. C. M. Moffitt, (oral) Physiological and migratory characteristics of Clearwater River steelhead kelts. 142<sup>nd</sup> Annual Meeting, American Fisheries Society, Seattle, WA. 4 – 8 September.
2011. Buelow\*, J., C. M. Moffitt, Z. Penney, K. Hamilton, A. Pape, and B. Jones. (oral) Physiological characteristics of migrating steelhead trout kelts from the Snake River system. 142<sup>nd</sup> Annual Meeting, American Fisheries Society, Seattle, WA. 4 – 8 September.
2011. Penney\*, Z. C. M. Moffitt. J. Buelow, B. Jones. (oral) Understanding energy expenditure of upstream migration, sexual maturation, and kelt emigration of Snake River steelhead trout with bioenergetic models and empirical data from tissues. 142<sup>nd</sup> Annual Meeting, American Fisheries Society, Seattle, WA. 4 – 8 September.
2011. Penney\*, Z., C. M. Moffitt, V. Dorsey, B. Jones, J. Buelow. Taking a look inside: histological changes within the liver during freshwater spawning cycles of Snake River steelhead trout. (poster). 142<sup>nd</sup> Annual Meeting. American Fisheries Society, Seattle WA 4-8 September.
2011. Plumb\*, J. M., K. Tiffan, C. Moffitt, and B. Connor. (oral) Bioenergetics and migration of Snake River fall chinook salmon. 142<sup>nd</sup> Annual Meeting, American Fisheries Society, Seattle, WA. 4 – 8 September.
2011. Stockton\*, K. and C. Moffitt. (oral) Evaluation of Virkon Aquatic as a potential tool to disinfect mollusk infested field and hatchery gear. Idaho Chapter AFS

- Annual Meeting, Boise, ID. March.
2011. Penney, Z.\*, C.M. Moffitt, J. Buelow, J. Plumb and W. Schrader. (oral) Evaluating energy expenditure in adult Snake River steelhead trout (*Oncorhynchus mykiss*). 48th Idaho Chapter of the American Fisheries Society Annual Meeting (Boise, ID). March.
2011. Jones\*, B., C. Moffitt, T. Copeland, B. Bowersox, J. Buelow, and W. Schrader. Migration timing, run characteristics and selected plasma metrics of steelhead trout kelts from three Clearwater River tributaries, Idaho. Idaho Chapter AFS Annual Meeting, Boise, ID. March.
2011. Buelow\*, J. C. Moffitt, Z. Penney, K. Hamilton, A. Pape, B. Jones. (oral) Physiological characteristics of steelhead kelts in the Snake River, Idaho Idaho Chapter AFS Annual Meeting, Boise, ID. March.
2011. Stockton, K\*. T. Allan, C. M. Moffitt, B. Watten, B. Vinci. (poster) Modeling water and small particle residence times in two rearing units used for intensive culture of steelhead trout in Idaho. Idaho Chapter AFS Annual Meeting, Boise, ID. March.
2011. Schrader\*, W., Z. Penney, C. Moffitt. (poster) Energy and proximate content of selected tissues from Snake River steelhead trout kelts sampled at Lower Granite Dam. Idaho Chapter AFS Annual Meeting, Boise, ID. March.
2011. Plumb\*, J. M. K F. Tiffan, C M. Moffitt, W. P. Connor. (oral) Factors affecting early life history and growth of naturally-produced fall chinook salmon in the Lower Snake River, Idaho. Idaho Chapter AFS Annual Meeting, Boise, ID. March.
2010. Cajas-Cano\*, L., and C. M. Moffitt. (poster) Life cycle assessment to simulate the benefits of integration of mussels in aquaculture. Life Cycle Assessment X, Portland, Oregon. Nov. 2-4, 2010.
2010. Reyes, P. C. M. Moffitt\* and J. Brostrom. (poster) Using GIS to assess the risks and benefits of culvert removal to native bull trout (*Salvelinus confluentus*) in the upper Boise River basin. American Fisheries Society Annual Meeting, Pittsburgh, PA. September.
2010. Penney, Z. L.\*, C. M. Moffitt (oral). Tissue composition, condition and energy storage of sexually mature steelhead trout from the Snake River. American Fisheries Society Annual Meeting, Pittsburgh, PA. September.
2010. Buelow, J.\*, C. M. Moffitt, Z. Penney, K. Hamilton and A. Pape. (poster) Physiological and migrational characteristics of steelhead kelts in the Snake River, Idaho. American Fisheries Society Annual Meeting, Pittsburgh, PA. September.
2010. Stockton, K.\*, C. M. Moffitt. (oral). Development of biosecurity measures for aquaculture facilities. American Fisheries Society Annual Meeting, Pittsburgh, PA. September.
2010. Plumb\*, J. C. M. Moffitt, K. Tiffan, and W. P. Connoer. (oral). Estimating and predicting the probability of bypassing subyearling Chinook salmon at Lower Granite Dam. Snake River fall Chinook salmon workshop. Hood River, Oregon. May 26-27.
2010. Stockton\*. K., C. M. Moffitt. (oral). Development of Biosecurity Measures for Hatcheries to Protect Against Invasive Mollusks Western Division, Salt Lake City, Utah, April
2010. Reyes\*, P., C. M. Moffitt, and J. Brostrom. (oral). Barrier removals: Tools to

- Assess the Risks of Invasive Species. Salt Lake City, Utah, April
2010. Plumb\*, J. M., C. M. Moffitt, and W.P. Connor. (oral) Quantifying the effects of Snake River dam operations on the collection and detection of subyearling fall Chinook salmon. Idaho Chapter, American Fisheries Society. Pocatello, ID. March.
2010. Plumb\*, J. M., C. M. Moffitt, and W.P. Connor.(poster). A non-parametric assessment of Snake River fall Chinook salmon (*Onchorynchus tshawytscha*) out-migration timing. Idaho Chapter, American Fisheries Society. Pocatello, ID. March.
2010. Penney\*, Z., C. M. Moffitt, J. Buelow, K. Hamilton, and A. Pape.(oral). Tissue composition and condition of sexually mature hatchery origin steelhead. Idaho Chapter, American Fisheries Society. Pocatello, ID. March.
2010. Reyes\*, P., C. M. Moffitt, and J. Brostrom. (oral).GIS tools to assess the risks and benefits of barrier removal to native fish populations in Idaho trout Idaho Chapter, American Fisheries Society. Pocatello, ID. March.
2010. Buelow\*, J., C. Moffitt, Z. Penney, K. Hamilton, A. Pape.(oral). Characteristics of steelhead kelts in the Snake River. Idaho Chapter, American Fisheries Society. Pocatello, ID. March.
2010. Stockton\*, K. and C. Moffitt.(oral). Development of biosecurity measures for hatcheries to protect against invasive mollusks. Idaho Chapter, American Fisheries Society. Pocatello, ID. March.
2010. Barenberg\*, A., K. Stockton, and C. M. Moffitt..(poster).Efficacy of Virkon Aquatic ® to disinfect wading gear infested with New Zealand mudsnails. American Fisheries Society. Pocatello, ID. March.
2009. Fritz\*, R., L. Cajas-Cano\*, and C. M. Moffitt (oral).An Assessment of the Potential Use of for Mollusks to Improve Water Quality in Aquaculture Systems Filtration. 4-6 March. Idaho Chapter AFS. Boise.
2009. Teater, K., C. M. Moffitt\*, and B. Watten. (oral) Evaluation of Mixed Cell Raceways at Dworshak National Fish Hatchery. Idaho Chapter AFS, 4-6 March. Boise.
2009. Reyes, P.\*, C. Moffitt, and J. Brostrom. (oral).Using GIS to estimate the risks and benefits of barrier removal to native fish populations in Idaho. Idaho Chapter AFS.4-6 March. Boise.
2009. Stockton, K.\* 2009. (oral).Colorado's zebra/quagga mussel monitoring program. Idaho Chapter AFS.4-6 March. Boise.
2008. Cajas Cano, L. and C. M. Moffitt\*(poster) Life cycle analysis approach to understanding sustainable aquaculture production. American Fisheries Society Annual Meeting, Ottawa, ON. CANADA. 17-21 August.
2008. Cajas Cano, L\*. and C. M. Moffitt.(invited oral presentations and workshop leader) Environmental considerations in considering sustainable development for Chile. and Aquaculture development and social and economic measures of sustainability. NSF Pan American Advanced Study Institute, Human, Physical, and Natural Capital Investment in Patagonia: A Predictive Approach under the Sustainability Criterion. 11 – 23 August 2008. Concepcion Chile.
2008. Cajas Cano, L\*. and C. Moffitt. (invited oral) “Putting aquaculture production into reality: recognizing environmental and other factors affecting sustainability. “Jornada de Piscicultura Marina AECI-Guatemala”. June 2008.
2008. Nielson, J.\*, C. Moffitt, and B. Watten. (oral) Feasibility of two step system for

- removing New Zealand mudsnails from infested hatchery inflow waters. Idaho Chapter, American Fisheries Society. 6-8 February, 2008. Post Falls, ID.
2008. Cassinelli, J.\* and C. Moffitt. (oral) Effects of water temperature on growth and physiology of different populations of redband trout (*Oncorhynchus mykiss gairdneri*). Idaho Chapter, American Fisheries Society. 6-8 February, 2008. Post Falls, ID.
2008. Cajas Cano, L.\*, and C. M. Moffitt (oral). Estimating water, land, and other resources used to produce beef and trout for human consumption in Idaho. Idaho Chapter, American Fisheries Society. 6-8 February, 2008. Post Falls, ID.
2007. Cajas Cano, L. and C. M. Moffitt\*. (poster). Estimating water, land, and other resources used to produce beef and trout for human consumption in Idaho. Idaho Water Resources Research Symposia, Idaho Environmental Summit, December 12 and 13, 2007 – Boise, Idaho.
2007. Nielson, R.J\*., Moffitt, C.M., and Watten, B.J. (oral) Feasibility of two step system for removing New Zealand mudsnails from infested hatchery inflow waters. Northwest Fish Culture Conference 2007, Portland, OR.
2007. Nielson, R.J., Moffitt, C.M., and B. J. Watten\*, 2007. (poster) Toxicity of CO<sub>2</sub> to New Zealand Mudsnails (*Potamopyrgus antipodarum*): Implications for Control. 15th International Conference on Aquatic Invasive Species, September. Nijmegen, The Netherlands. 24 September 07.
2007. Nielson, R.J\*., Moffitt, C.M., and B. J. Watten, 2007. (Oral) Feasibility of two step system for removing New Zealand mudsnails from infested hatchery inflow waters. 137th Annual Meeting American Fisheries Society, San Francisco, CA. 3-7 September, 2007.
2007. Hamilton, K. 2007. (poster) Using Hydrocyclone Filtration to remove the invasive New Zealand mudsnail from fish hatchery inflow REU2 Inter Program Poster Presentation. August 2007.
2007. Nielson, R. J.\* C.M. Moffitt, and B. J. Watten (oral) A two-step approach for controlling New Zealand mudsnails (*Potamopyrgus antipodarum*) in fish hatcheries. 5th New Zealand Mudsnail in the Western USA Conference, Putah Creek Lodge, 27-28 June 27, 2007.
2007. Moffitt, C. M.\* Dealing with changing environments: xenobiotics and emerging diseases. (poster) Challenges for Diadromous Fishes in a Dynamic Global Environment. Halifax, NS. June 18-21 2007.
2007. Nielson, J.\* Moffitt, C.M., and B. J. Watten, 2007. (oral) Toxicity of New Zealand Mudsnails (*Potamopyrgus antipodarum*) to CO<sub>2</sub>: Implications for Control. Idaho Chapter of American Fisheries Society, Boise, ID. 21-24 February, 2007.
2007. Cassinelli, J.\*, and C. M. Moffitt 2007. (oral) Effects of water temperature on growth and physiology of different populations of redband trout (*Oncorhynchus mykiss gairdneri*). Idaho Chapter of American Fisheries Society, Boise, ID. 21-24 February, 2007.
2006. Nielson, J. , C. M. Moffitt, and B. J. Watten. 2006. (oral) Progress on Methods of Controlling New Zealand Mudsnails (*Potamopyrgus antipodarum*) in Fish Hatcheries. December 4 – 6, 2006, Portland OR.
2006. Moffitt, C. M. C. James, L. Bruce, J. Nielson, and B. Watten. (poster). Invasive New Zealand Mudsnails (*Potamopyrgus antipodarum*) in Idaho: assessment of risks and opportunity for control. Poster for USGS headquarters highlights of research on invasive species. November 2006.

- 2006 Moffitt, C. M. (oral). Presentation of studies of small populations and invasive species. New Zealand mudsnails in Idaho. Presentation to CRISSP advisory board 13 October 2006.
2006. C. M. Moffitt (oral). A model framework for evaluating risks of invasive species and diseases in hatchery and wild fish - examples from salmonids 136th Annual Meeting, American Fisheries Society, Lake Placid, New York. September 10-14 2006.
2006. Howard, S., J. Nielson, and C. Moffitt. 2006. (oral). Control of New Zealand mudsnails using CO<sub>2</sub> toxicity. CRISSP summer interns group presentations. August 2006.
2006. Bruce, L. R. and C. M. Moffitt. (oral) Survival and passage of New Zealand mudsnails in the gastrointestinal tract of rainbow trout. Idaho Chapter American Fisheries Society Twin Falls, February 2006.
2006. James, C. and C. M. Moffitt. (oral) Seasonal population dynamics of New Zealand mudsnails in Silver Creek and Riley Creek Drainage, Idaho. Idaho Chapter American Fisheries Society, Twin Falls February.
2006. Moffitt, C. M., Do Aquaculture Drug Treatments Pose a Serious Risk to Humans and the Environment – a case study. (oral) Idaho Chapter of the American Fisheries Society. Idaho Falls, 15-17 February, 2006.
2005. Bruce, R. L., and C. M. Moffitt. (oral) Passage of New Zealand mudsnails in the GI tract of rainbow trout. Northwest Fish Culture Conference, 6-8 December 2006. Boise, Idaho.
2005. Cajas Cano, L. and C. M. Moffitt. 2005. (oral) Environmental and Social Footprints of Beef and Fish Production for Animal Protein. Northwest Fish Culture Conference. 6-8 December 2005, Boise, Idaho.
2005. Bruce, L., and C. M. Moffitt\*. (oral) Survival of New Zealand mudsnails in the gastrointestinal tract of rainbow trout. New Zealand Mudsnails Conference, 16-17 August. Montana State University. Bozeman. MT.
2005. James, C.\*, and C. M. Moffitt. (oral) Assessing winter populations of New Zealand mudsnails (*Potamopyrgus antipodarum*) in Silver Creek drainage, Blain County, Idaho, and Riley Creek drainage, Gooding County, Idaho. New Zealand Mudsnails Conference, 16-17 August. Montana State University. Bozeman. MT.
2005. Moffitt, C. M., K. A. Anlauf, and A. H. Haukenes. (oral) Risk characterization of erythromycin effluents from salmon hatcheries. Western Fish Disease Workshop, June. Boise.
2005. Moffitt, C. M. and S. M. A. Mobin. (oral) Profile of the microflora in the hatchery water, the trout and New Zealand mudsnails at Hagerman State Fish Hatchery. Western Fish Disease Workshop, June. Boise.
2005. Bruce, L., and C. M. Moffitt. (oral) Survival of New Zealand mudsnails in the gastrointestinal tract of rainbow trout. Western Fish Disease Workshop. June. Boise.
2005. Cajas, L., and C. Moffitt. (oral) Comparison of the environmental, social, and economic factors in trout and beef production in Idaho. Presentation for Forestry 510. May.
2005. James, C. and C. M. Moffitt. (oral) New Zealand Mudsnails in Silver Creek Drainage. Idaho Chapter American Fisheries Society, Boise February.
2005. Yanke, J., C. Moffitt, J. Congleton, and W. Connor. (oral) Survival growth and physiology of Snake River fall Chinook salmon following chronic temperature

- stress and application of passive integrated transponder (PIT) tags. Idaho Chapter American Fisheries Society, Boise, ID.
2005. Colvin, M., K. Anlauf, C. Moffitt, and K. Johnson. (oral) The ecology of *Myxobolus cerebralis* in the Pahsimeroi River drainage, Idaho. Idaho Chapter American Fisheries Society, Boise, ID.
2005. Anlauf, K., C. Moffitt, M. Colvin. (oral) The influence of landscape, stream, and microhabitat parameters on tubificid habitat and population abundances. Idaho Chapter American Fisheries Society. Boise.
2005. Anlauf, K. A., C. M. Moffitt, M. E. Colvin, and B. Rieman. (poster). Ecology of whirling disease through aquatic habitat modeling using geospatial attributes. Whirling disease symposium. February. Denver, Colorado.
2004. Moffitt, C. M. What about resistant microorganisms? (Poster) in Reconciling fisheries with conservation and the ecological footprint of aquaculture. World Fisheries Congress. Vancouver, British Columbia, Canada. 3-6 May 2004.
2003. Moffitt, C. M., J. Yanke. (oral) Effects of PIT Tags on Growth, Survival and Blood Chemistry of Fall Chinook Salmon in Different Temperatures. 133<sup>rd</sup> annual American Fisheries Society, Quebec City, Quebec. August 2003
2003. Moffitt, C. M., S. M. A. Mobin. (oral) Profile of bacteria in the gastrointestinal tract of Chinook salmon (*Oncorhynchus tshawytscha*) before, during, and following administration of erythromycin rations. Northwest Fish Culture Conference. December 3-5, Portland Oregon
2002. Moffitt, C. M., M. Colvin, and K. Anlauf. (oral) Distribution of *Myxobolus cerebralis* in free-ranging fish populations in Idaho: associations with landscape variables. Proceedings International Symposium on Aquatic Animal Health, September 1-5 2002. New Orleans, Louisiana.
2001. Moffitt, C. M. (oral) Epidemiological modeling of *Myxobolus cerebralis* infections in trout: Associations with habitat variables. 6<sup>th</sup> Annual Whirling Disease Workshop. Salt Lake City, Utah, February 6-8, 2001.
2001. Moffitt, C. M., and C. Williams. (oral) A Critique of methods of sampling and reporting pathogens in populations of fish. 6<sup>th</sup> Annual Whirling Disease Workshop. Salt Lake City, Utah, February 6-8, 2001.
2000. Moffitt, C., M., (oral) Dealing with risk assessments for resistant microorganisms to achieve drug approval for erythromycin to treat bacterial kidney disease. Western Fish Disease Workshop, June 27-29, Gig Harbor, Washington.
2000. Moffitt, C. M., and S. Intelmann (oral). Spatial distribution of pathogens in free ranging populations of salmonids and their relationships with anthropogenic influences in the intermountain west 130<sup>th</sup> Annual Meeting American Fisheries Society, August 20-24, 2000, St. Louis, Missouri.
1999. Risk Assessments for Aquaculture Drugs: What we know and do not know? AFS/Fish Health Section 1999 Annual Meeting and Western Fish Disease Workshop, June 9-11, 1999, Twin Falls, Idaho.
1999. Redefining models of epidemiology of *Myxobolus cerebralis* in Idaho. 5<sup>th</sup> Annual Whirling Disease Symposium, Research and Management Perspectives, February 1999, Missoula, Montana.
1998. Disease interactions of natural and cultured fishes, WRAC Board Research Board Meeting. October 1998. San Diego, California.
1998. Understanding epidemiology of whirling disease in Idaho. February 1998. Idaho Chapter AFS, Idaho Falls.

1998. Visions for the American Fisheries Society in 2000. February 1998. Missouri Chapter American Fisheries Society.
1996. Northwest Fish Culture Conference, Victoria, British Columbia. December 1996. Registration of aquaculture chemicals – Will we ever get to the finish line?
1995. Western Fish Disease Workshop. Twin Falls, Idaho. Title: Residues of erythromycin in filets of muscle and skin tissue from salmonids following oral and parenteral administration.
1994. International Symposium on Aquatic Animal Health. Seattle, Washington. September. C.M. Moffitt, A.H. Haukenes, T.L. Burnham, and J.K. Erickson. Title: Bacteria isolated from eggs and developing progeny of adult chinook salmon injected with erythromycin.
1994. American Fisheries Society, Annual Meeting. Halifax, Nova Scotia. August. Title: Field trials of erythromycin feed additive and erythromycin injectable with INAD permits.
1994. Western Fish Health Workshop. Bozeman, Montana. June. A.H. Haukenes and C.M. Moffitt. Title: Assessing the environmental effects of applications of erythromycin in fish culture.
1994. Western Fish Health Workshop. Bozeman, Montana. June. C.M. Moffitt and A.H. Haukenes. Title: Comparisons of techniques for evaluating *Renibacterium salmoninarum* in chinook salmon at spawning.
1993. Pacific Northwest Fish Health Protection Committee. Twin Falls, Idaho. September. Title: Use of erythromycin in critical stocks.
1993. Western Fish Disease Workshop. Wenatchee, Washington. June. Title: Pharmacokinetics of administrations of erythromycin to adult salmon.
1992. Western Fish Disease Conference. Parkville, British Columbia. July. H. Kaiser and C.M. Moffitt. Title: Feeding strategies to improve palatability and absorption of erythromycin thiocyanate rations administered to chinook salmon.
1992. Western Fish Disease Conference. Parkville, British Columbia. July. A.H. Haukenes and C.M. Moffitt. Title: Field trials of two formulations and two routes of injection of erythromycin administered to maturing chinook salmon.
1992. Western Fish Disease Conference. Parkville, British Columbia. July. K.K. Peters and C.M. Moffitt. Title: Dose titration tests of erythromycin thiocyanate to control acute infections of bacterial kidney disease in juvenile chinook salmon.
1992. Western Fish Disease Conference. Parkville, British Columbia. July. Poster Paper: A.H. Haukenes, K.B. Hills, J.C. Faler, C.M. Moffitt, and S.L. Leek. Title: Toxic responses of erythromycin administered to juvenile and adult salmon.
1992. American Fisheries Society Fish Health Section. Auburn, Alabama. July. C.M. Moffitt, A. Haukenes, and W.R. Hayton. Title: Determination of an optimal window for injection of erythromycin to maturing chinook salmon.
1992. Idaho Chapter, American Fisheries, Society. McCall, Idaho. March. A.H. Haukenes and C.M. Moffitt. Title: Retention of erythromycin in adult chinook salmon related to maturity, drug formulation and sex of fish. Application of erythromycin to control bacterial kidney disease in salmon.
1992. U.S. Trout Farmers Meeting. Colorado. January. Title: Steps to development of INAD field trials.
1991. Idaho Chapter American Fisheries Society. Boise, Idaho, March 7-9, 1991. Title: Application of erythromycin to control bacterial kidney disease in salmon.
1991. Idaho Chapter American Fisheries Society. Boise, Idaho, March 7-9, 1991. Title:

- Role of Idaho Chapter in Advocacy vs. Professionalism.
1990. Forty-First Annual Northwest Fish Culture Conference. Boise, Idaho, December 4-6, 1990. Title: Progress on the registration of erythromycin for use in fish culture.
1989. Fortieth Annual Northwest Fish Culture Conference. Glededen Beach, Oregon, December 5-7, 1989. Moderator panel discussion, "Administration of erythromycin to adult and juvenile salmonids - what are we doing and what do we know?"
1988. American Fisheries Society 119th Annual Meeting. Toronto, Ontario, Canada, September 10-15, 1988. Title: Differential mortality in disease-challenged chinook salmon.
1988. 1st International Fish Health Conference. Vancouver, B.C., Canada, July 19-21, 1988. Title: Protection of chinook salmon against bacterial kidney disease by feeding erythromycin thiocyanate.
1988. Idaho Chapter American Fisheries Society. Boise, Idaho, March 3-5, 1988. Title: Challenging chinook salmon with bacterial kidney disease.
1987. Idaho Chapter American Fisheries Society. Boise, Idaho. March 12-14, 1987. Two papers--titles: Palatability of erythromycin thiocyanate to chinook salmon; Retention of erythromycin thiocyanate in tissues of chinook salmon.
1986. American Fisheries Society 116th Annual Meeting. Providence, Rhode Island. September 14-18, 1986. Title: Interactions of sediments, nutrients, fish, and wildlife in Bear Lake National Wildlife Refuge, Idaho.
1985. Idaho Chapter, American Fisheries Society. Boise, Idaho. March 7-9, 1985. Title: Chinook workshop--Effects of feeding drugs to juveniles.
1984. American Fisheries Society 114th Annual Meeting. Cornell University, Ithaca, New York. August 12-16, 1984. Title: Behavioral and physiological assessment of smoltification in hatchery-reared steelhead trout and chinook salmon.
1983. Idaho Chapter, American Fisheries Society. Boise, Idaho. March 4-5, 1983. Title: Behavioral assessment of smoltification in Snake River steelhead trout and chinook salmon in 1982.
1982. Biology Department Seminar, University of Idaho. November 3, 1982. Title: Voluntary migration in hatchery-reared chinook salmon and steelhead trout smolts.
1982. Idaho Chapter, American Fisheries Society. Boise, Idaho. February 25-27, 1982. Panel Title: The dilemmas of mixed stocks (wild and hatchery) steelhead management.
1981. American Fisheries Society 111th Annual Meeting. Albuquerque, New Mexico. September 16-18, 1981. Title: Upstream movements of subadult striped bass at fish passage facilities in the Connecticut River watershed.
1980. Third Annual Research Conference on the Connecticut River Flood Plain. Enfield, Connecticut. March 7, 1980. Title: A review of fish studies in the Connecticut River.
1978. American Fisheries Society 108th Annual Meeting. University of Rhode Island, Kingston, R.I. August 20-25, 1978. Title: Dynamics of natural recolonization by American shad, *Alosa sapidissima*, at a fish ladder facility.
1977. Southern New England Chapter, American Fisheries Society. Shrewsbury, Massachusetts. June 1977. Title: Sexual selectivity at Rainbow Dam fishway, Farmington River, Connecticut.
1977. Northeast Division of American Fisheries Society and the Wildlife Society Meetings. Boston, Massachusetts. March 1977. Title: Progress in recolonization of American shad above Rainbow Dam.

**GRANTS FUNDED:**

2016. Co-Investigator with F. Wilhelm. Survey of Asian clam distribution at Hope in Lake Pend Oreille, Idaho. Idaho Department of Agriculture. 4 May 2016 – 31 May 2017. \$8,000
- 2013-2018. Co-Investigator. With C. Conway and MC Quist. Effects of changes in disturbance regimes on animal communities. USGS.\$81,666. August 30, 2013 - June 30, 2018.
- 2013-2016. Principal Investigator. Guidance Documents to Improve Operations at Fish Hatcheries USFWS. \$16,500. July 1, 2013 – September 30, 2016
- 2013-2016. Principal Investigator. Aquatic Invasive Species Investigations to assist UDWR. \$26,000. May 1, 2013 – September 30, 2016
- 2013 – 2016. Principal Investigator. Risks and effectiveness of benthic barriers as tools to eradicate infestation of Asian clams in the Ellisport Bay treatment area of Lake Pend Oreille, Idaho. U S Geological Survey SSP project. 46,018. December 2013 to 30 June 2016.
- 2012 -2013. Principal Investigator. Native American student capacity. US. Geological Survey. \$16,500.
- 2011-2013. Co-Investigator. High Risk Ballast Water – Refinement and Application of a Promising New Treatment Method for the NPS Ranger III and Other Ships Plying the Great Lakes.\$50,000. National Park Service. Collaboration with Leetown Science Center and Western Fisheries Research Center.U of Idaho portion to date, total project \$250,000.
- 2011-2012. Principal investigator. Research, monitoring and evaluation of emerging issues and measures to recover the Snake River fall Chinook ESU. Bonneville Power Administration.\$40,000
- 2008 – 2013. Principal Investigator. Developing strategies to improve survival and return recruitment of steelhead kelts from Snake River stocks. Columbia River Inter-Tribal Fish Commission. \$ 440,000 for year one; 200,000 for year two; 200,000 for year three, \$66,000 for year 4; 42,000 for year 5..
- 2008-2012. Principal Investigator. Development of decision analysis tools for controlling New Zealand mudsnails in fish hatcheries. USFWS. \$76,700
- 2008- 2009 – Principal Investigator. Assessing the Risks and Benefits of Barrier Removal to Native Fish Populations in Idaho. USFWS. \$35,000.
- 2008-2011. Principal Investigator. Research, monitoring and evaluation of emerging issues and measures to recover the Snake River fall Chinook ESU. \$162,300.
- 2005-2008- Principal Investigator. Physiology of Redband trout. Idaho Department of Fish and Game. \$80,000.
- 2005-2008. Continuation of development of control strategies for New Zealand mudsnails. U.S. Fish and Wildlife Service. \$67,6000.
- 2005-2007. Principal Investigator. Exploring feasibility of proposed control strategies for New Zealand Mud Snails at Fish Hatcheries. Science Support Project \$21,800 for the first year; \$12,500 for second installment.
- 2004-2005. Principal Investigator. Startup studies for control of New Zealand mudsnails in FWS hatchery waters. USFWS. \$11,00.
- 2004-2005. Principal Investigator. Studies of New Zealand Mudsnail in Silver Creek Idaho. Idaho Department of Fish and Game. \$43,000, 1.2 years.
- 2004-05. Principal Investigator. Collaborations to measure risk of whirling disease.

- Trout Unlimited. \$10,000; and Montana State Partnership. \$5,000.
- 2004-2005. Principal Investigator. Spatially based monitoring and modeling of resistant microorganisms at freshwater aquaculture facilities UI/WSU Aquaculture Initiative, The Northwest Center for Aquaculture Research and Education. \$12,000
- 2003-2005. Principal Investigator. Effects of water and PIT-tagging on the survival, growth, physiology and health status of subyearling fall Chinook salmon. FWS \$105,000.
- 2003-2005. Principal Investigator. Completing models to predict risks of infection of *Myxobolus cerebralis* within river drainages. U. S. Geological Survey. \$13,000.
- 2003-2006. Principal Investigator . Infrastructure to complete FDA registration of erythromycin for salmonids. Bonneville Power Administration. \$156,000 year 1; \$140,000 year 2; \$100,000 year 3
- 2003-2004. Principal Investigator . Whirling Disease Studies. Idaho Department of Fish and Game. \$7,000.
- 2001-2003: Principal Investigator . Development of Empirical Models of *Myxobolus cerebralis* to Predict Risks for Populations of Fish Across River Drainages. Montana State University. Whirling Disease Partnership Projects. \$27,587 year one: 34,000 year two.
- 2000-02, Principal Investigator. Susceptibility of bull trout to infection by *Renibacterium salmoninarum*. U.S. Fish and Wildlife Service and USGS. \$44,000.
- 1999-2002, Principal Investigator. Infrastructure to complete FDA registration of erythromycin Bonneville Power Administration, \$142,000.
- 1998-2002. Principal Investigator. Disease interactions between wild and cultured salmonids. Western Regional Aquaculture Center. University of Washington. \$76,000.
- 1997-99, Principal investigator: Understanding factors affecting the epidemiology of Whirling Disease. Idaho Department of Fish and Game. \$38,000.
- 1995-97, Principal investigator: Registration of erythromycin for salmonids. \$165,000. USFWS.
- 1995-97, Principal investigator: FDA approved registration of erythromycin for treatment of bacterial kidney disease (BKD) in juvenile and adult salmon. \$170,000. Bonneville Power Administration.
- 1992-95, Principal investigator: FDA approved registration of erythromycin for treatment of bacterial kidney disease (BKD) in juvenile and adult chinook salmon. \$400,000 per year for 4 years. Bonneville Power Administration.
- 1989-91, Principal investigator: FDA approved registration of erythromycin for treatment of bacterial kidney disease (BKD) in juvenile and adult Chinook salmon. \$300,000 per year for 2 years. Bonneville Power Administration.
- 1997, Co-principal investigator: Equipment to enhance university research capabilities in fish research. USDA 1433 Formula Funds. \$8,000.
- 1996, Principal Investigator: FDA approved registration of erythromycin for treatment of bacterial kidney disease (BKD) in juvenile and adult salmon. \$152,000. Bonneville Power Administration.
- 1992-95, Principal Investigator: FDA approved registration of erythromycin for treatment of bacterial kidney disease (BKD) in juvenile and adult chinook salmon. \$400,000 per year for 4 years. Bonneville Power Administration.
- 1989-91, Principal Investigator: FDA approved registration of erythromycin for treatment of bacterial kidney disease (BKD) in juvenile and adult chinook salmon.

- Bonneville Power Administration. \$300,000 per year for 2 years.
- 1988, Co-Principal Investigator: Equipment to enhance university research capabilities in fish research. USDA 1433 Formula Funds. \$8,000.
- 1987, Principal Investigator: Determination of dosage and duration of oral administration of erythromycin thiocyanate to treat bacterial kidney disease in chinook salmon. IR-4 Program, Department of Agriculture. \$14,000.
- 1987, Co-Principal Investigator: Natural immunity to IHN and BKD in salmon and trout. University of Idaho Aquaculture Program. State Board of Education. \$19,000.
- 1986, Co-Investigator: International symposium on common strategies of anadromous and catadromous fishes. National Science Foundation (Grant to East Carolina University). \$20,000.
- 1984-87, Co-Investigator: Evaluation of proposed use of Bear Lake NWR as a sediment and nutrient trap for inflows into Bear Lake. U.S. Fish and Wildlife Service. \$240,000.
- 1983, Co-Principal Investigator: Fish production in drainages where anadromous fish have been excluded by construction of dams. Phase I. Idaho Water and Energy Resources Research Institute. \$15,000.
- 1982-87, Co-Investigator: Evaluation of hatchery practices and methods to control bacterial kidney disease in hatchery stocks of Snake River chinook salmon. U.S. Fish and Wildlife Service. \$70,000.
- 1981-83, Evaluation of wild stock status and development of plans for use of hatchery salmon in the Snake River. U.S. Fish and Wildlife Service. \$60,000.
- 1975-77, Principal Investigator: Restoration of anadromous fish at Rainbow Fishway U.S. Fish and Wildlife Service anadromous fish research. Agencies involved: Stanley Works, Inc., of New Britain, Connecticut, and Connecticut River Anadromous Fish Programs, Hadley, Massachusetts. \$35,000.
- 1971, Sloan Foundation Grant for summer research on the Mill River, Massachusetts. \$5,000.

#### **HONORS AND AWARDS:**

- Outstanding Faculty Award for 2015-2016 in Continuing Education and Outreach, College of Natural Resources, April 2016.
- Elected as Fellow of the American Fisheries Society. Recognition in Portland, Oregon. 2015. AFS members who are recognized by their peers as distinguished for their outstanding and/or sustained contributions to the discipline and Society.
- Idaho Chapter American Fisheries Society Excellence in Aquaculture. Boise, ID. March 2015. Continued leadership in aquaculture and fish health.
- American Fisheries Society Equal Opportunity Section and Student Subsection. Honored for Influential Career Contributions 2013. "Ladies Night," AFS annual meeting, Little Rock, AR. September
- American Fisheries Society Distinguished Service Award, 2013. For team leadership to select a new Society Executive Director. May 2013.
- University of Idaho Alumni Award for Excellence as a Mentor –2012 for Zachary L. Penney, December
- USGS Performance Award. 2012. For maintaining active research, teaching and outreach.
- Lifetime Achievement Award, Idaho Chapter of the American Fisheries Society. March 2012.

Columbia River Intertribal Fish Commission. 2012. Recognition of outstanding partnership and collaboration with tribal entities. Presented to the University of Idaho in recognition of the Moffitt laboratory collaborations.

USGS Performance Award. 2011. For maintaining active research, teaching and outreach programs. November 2012

USGS Star Award for Outstanding Mentoring and Unit Support. September 2011

Outstanding Faculty Member in Environmental Science. University of Idaho. May 2011.

Outstanding Advisor 2010-2011. College of Natural Resources, April 2011

University of Idaho, Virginia Wolf Distinguished Service Award – Faculty. For continuous dedication to activism for gender justice.

USGS, Performance Award. 2010. For maintaining active research and outreach programs. November 2010.

American Fisheries Society Emmeline Moore Prize for Lifetime Contributions to Diversity. 13 September. 2010. Pittsburgh, PA.

AFS Palouse Unit Distinguished Service Award. April 2010.

U of Idaho Alumni Award for Excellence as Mentor – 2009 for Lubia Cajas Cano Outstanding Graduate Student.

USGS Headquarters Diversity Award. 2009.

Idaho Chapter American Fisheries Society, Outstanding Mentor Award, 2008-09.

USGS Star Award. 2009. Maintaining active research and mentoring.

College of Natural Resources, Outstanding Advisor. 2008.

University of Idaho, Candidate for U of Idaho Supervisor of the Year – Human Resources.

University of Idaho Alumni Award for Excellence as Mentor –2007 for Outstanding Graduate Student John Cassinelli

USGS, Star Award, 2006. For maintaining active research and outreach programs.

USGS, Star Award. 2004. For mentoring student that achieved awards and recognition for his studies and contributions.

University of Idaho Alumni Award for Excellence Mentor - for Outstanding Graduate student, Michael Colvin. 2004.

American Fisheries Society, Water Quality Section, Best Student Poster Award for Jeffrey Yanke (co-advised with Dr. Jim Congleton). 2004

Who's Who in Medicine and Healthcare, 2003 – present.

Who's Who in America 2003 –present.

Who's Who of American Women 2002-present.

University of Idaho Alumni Award for Excellence Mentor - for Outstanding Graduate Student, Darin Jones, 2001.

University of Massachusetts, Department of Natural Resource Conservation Distinguished Alumna Award, 1999

University of Idaho Alumni Award for Excellence - Mentor for Outstanding Graduate Student, Monica Hiner, 1999.

Certificate of Appreciation for Visionary Leadership and Commitment to Advance Fisheries Science and Communications. AFS 2000 Strategic Planning Committee.

American Fisheries Society, Western Division, Special Recognition, 1999

American Fisheries Society, Meritorious Service Award, 1995

American Fisheries Society, Award of Merit, Western Division, 1995

### **Post Doctoral, Masters and PhD Students Supported**

Post Doctoral Students

Horst Kaiser, 1989-1991

Anita Koehn, 1994—1996

S. M. A. Mobin, 2003-2005

Shawn P. Young 2009

Major Professor for

Name	Program	Enter Date	Status
Giambra, Trisha	M.S.	Spring 2012	incomplete
Cajas, Lubia	Ph. D.	Fall 2006	Completed August 2016
Braker, Elizabeth	M.S.	Fall 2013	Completed Fall 2015
Barenberg, Amber	M.S.	Spring 2011	completed May 2015
Penney, Zachary	PhD.	Spring 2009	Completed Dec 2013
Jones, Bryan	M.S.	Spring 2010	completed Dec 2012
Plumb, John	Ph. D.	Spring 2009	completed December 2012
Maggie Picard	M.S.	Fall 2010	completed May 2012
Buelow, Jessica	M.S.	Spring 2009	completed Dec 2011
Stockton, Kelly	M.S.	Spring 2009	completed May 2011
Reyes, Paul	M.S.	Summer 2008	completed June 2010
Kautza, Adam	M.S.	Summer 2007	Completed May 2008
Nielson, Jordan	MS	Summer 2006	Completed June 2008
Cassinelli, John D	MS	Fall 2005	completed December 2007
James, Christopher Anthony	M.S.	Summer 2004	completed, Jan 2007
Bruce, Rolita Louise	M.S.	Fall 2004	completed fall 2006
Cajas, Lubia	M.S.	Fall 2004	completed August 2006
Yanke, Jeffrey Alan	M.S.	Summer 2003	Completed, Jan 2006
Amberg, Jon	Ph.D.	Spring 2003	transferred in 2004
Anlauf, Kara Janaye	M.S.	Fall 2002	completed 2005
Colvin, Michael Eric	M.S.	Fall 2002	completed 2005
Santora, Maura Kathleen	M.S.	Fall 2000	completed 2003
Jones, Darin Thomas	M.S.	Fall 1999	completed, 2002
Intelmann, Steven Stanley	M.S.	Spring 1998	completed 2001
Hiner, Monica D.	M.S.	Fall 1997	completed 2000
Faler, Joyce C.	M.S.	Fall 1994	completed (Dr. Powell)
Kiryu, Yasunari	Ph.D.	Summer 1993	completed
Hills, Kent	M.S.	Spring 1992	dropped
Haukenes, Alf	MA	Summer 1991	completed
Peters, Kenneth	M.S.	Summer 1990	completed
Fagan, Colleen	M. S.	Fall 1990	completed
Schreck, Julie	M.A.	Summer 1985	completed
Lam, Devona	M. A.	Summer 1982	completed

Member of Graduate Committee or examination committee (list is not complete)

Coyle, Mary	Ph.D.	spring 2014	in progress
Howard, Michelle	Ph.D.	Spring 2012	in progress

Smith, Clinton	M.S.	Fall 2012	completed 2015
Bellinger, Kristy (WSU)	Ph.D.	Spring 2010	completed, fall 2015
Hill, Matthew	M.S.	Fall 2012	completed 2015
Liu, Boya	M.S.	Spring 2012	completed 2014
Hemingway, R. J.	M.S.	Spring 2012	completed 2014
Fehringer, Tyson	M.S.	Fall 2010	completed 2014
Wiedeback, Benjamin David	M.S.	Fall 2010	completed 2013
Long, Amy	Ph.D.	Fall 2008	completed 2013
Nduwayo-Ntore, Jean-Paul	M.S.	Summer 2011	completed 2012
Johnson, Zachary	M.N.R	Spring 2012	completed 2012
Turner, Tony	M.S.	Spring 2007	completed 2008
Lindstrom, Nicole	M.S.	Fall 2004	completed 2007
Pinson, Amy Marie	M.S.	Fall 2002	completed 2005
Kraemer, Mary Kathleen	M.S.	Fall 1997	completed
Welker, Thomas Lee	Ph.D.	Fall 1994	completed
Seigel, Debbie	M.S.	Fall 1993	complete
Saffel, Patrick	M.S.	Fall 1994	completed
Monk, Patrick A.	M.S.	Fall 1993	completed
Hunt, Joel	M.S.	Spring 1989	completed
Dresser, Tom	M.S.	Fall 1989	completed
Porter, Pamela Elizabeth	Ph.D.	Fall 1988	completed
Chandler, Gwen	MS	Fall 1986	completed
Tressler, Ron	M. S.	Spring 1984	completed

#### Research Experience for Undergraduates: NSF funded interns, and others

2015-present. Doris Duke Conservation Scholars Program. Internship guidance for Keala Bush and Viviana Baeza Summer 2016.

2014-2016. Doris Duke Conservation Scholars Program. Bethany Guzman, Emily Rankin

2014. mentor. CRISSP, REU student. Jordan Rutland, Paine College, Augusta, GA.

2013. mentor. CRISSP, REU student Mary Frances Babrowicz, College of Charleston Honors College.

2012. mentor. CRISSP, REU student, Mindy Torres, Northern Arizona University, Yuma.

2012. mentor EPSCoR REU student Justin Shearer.

2011-13. mentor. EPSCoR student Heath Hewett.

2011. mentor. CRISSP, REU student. Veatasha Henri Dorsey, North Carolina Central University.

2011. mentor HOIST intern, Janae Crispin. [janaecrispin@yahoo.com](mailto:janaecrispin@yahoo.com)

2010. mentor. Water of the West Environmental Science REU. Interns. Jessica Kohls Timothy Allan

2010. Mentor, CRISSP. REU students, Kausei Perales, Brittany Winston

2010. Mentor EPSCoR REU student, Will Schrader

2010. Mentor HOIST. Effie Hernandez

2009. Mentor. Water of the West REU student interns: Jonathan Megli and Amanda Eckhart.

2009. Mentor. CRISSP REU student, Liz Marchio. Studies of invasive New Zealand mudsnails.

2008. Mentor, Water footprints and sustainability. Water of the West REU student intern, Anthony Lopez.

2008. Hoist Student mentor research on invasive species. June – July. Kristine Atto

2007. Kala Hamilton

2006. Sean Howard

2006. Katherine Teater

#### Environmental Science Senior Thesis Students

Daniel Olsen. 2013-2014. Survey of Asian clam infestations in Lake Pend Oreille, ID.

Colin Heath. 2013-2014. Measures to control aquatic invasive mollusks.

Justin Shearer. 2012. Control strategies for invasive Asian clams. Completed December 2012

Rhett Madsen. 2011 – 2012. Monitoring and mitigation of supersaturation of dissolved gasses in the release waters from Dworshak dam.

Laura Hughes. 2011-2012. Use of calcium hydroxide as an agent to kill invasive species in boat ballast.

William Schrader. 2010 – 2011. Analysis of proximate constituents of steelhead kelts at Lower Granite Dam.

Amber Barenberg, 2009-2010. Efficacy of Virkon Aquatic® To Disinfect Wading Gear Infested with New Zealand Mudsnaills

Chelsea Merrill 2009-2010. Otolith Aberrancy in A run and B run Hatchery Steelhead and Associated Problems with Aging

Josh Peterson 2009-2010. Ecosystem service valuation of phosphorus and nitrogen removal by freshwater mussels

Kristy Marks 2009 – 2010. Enhancing the Potential for Marine Mussels in Aquaculture

Fritz, Rebecca. 2009. Potential Use of Mollusks to Improve Water Quality in Aquaculture.

Teater, Katherine. 2009 completed. Evaluation of Mixed Cell Raceways at Dworshak National Fish Hatchery.

#### Thesis and Dissertation Titles: (incomplete)

Cajas de Gliniewicz, Lubia. 2016. From trout to mollusks: life cycle assessment, socio-economic attributes and ecosystem services surrounding sustainable aquaculture. PhD Dissertation. College of Natural Resources. August.

Barenberg, Amber. 2015. The Use of elevated pH to reduce the risk of release of select invasive mollusk species from vessel ballast and bilge water. Master's Thesis, Fisheries. College of Natural Resources. December

Penney, Zachary. 2013. Physiological and energetic constraints of iteroparity in Steelhead Trout (*Oncorhynchus mykiss*). PhD Dissertation, College of Natural Resources, University of Idaho. December.

Jones, Bryan. 2013. Migratory and physiological characteristics of steelhead kelts from the Clearwater River, Idaho, and Lower Granite Dam, Washington. Master's Thesis. College of Natural Resources.

Plumb, John. 2012. Evaluation of models and the factors affecting the migration and growth of naturally produced subyearling fall Chinook salmon (*Oncorhynchus tshawytscha*) in the Lower Snake River. PhD. Dissertation. College of Natural Resources. University of Idaho.

Buelow, Jessica. 2011. Physiological and physical characteristics of steelhead kelts (*Oncorhynchus mykiss*) from the Snake River, captured at Lower Granite Dam. Master's Thesis. December.

Stockton, Kelly. 2011. Methods to assess, control, and manage risks for two invasive

- mollusks in fish hatcheries. Master's Thesis. May.
- Reyes Paredes, Paul Eugenio. 2010. GIS Tools to assess the risks and benefits of barrier removal to native fish populations in Idaho. Master's Thesis
- Nielson, R. Jordan. 2008. Control of New Zealand Mudsnailed in Fish Hatcheries. Master's Thesis. Department of Fish and Wildlife Resources, University of Idaho. May 2008.
- Kautza, Adam. 2008. Growth, Age Distribution, and Population Dynamics of Black Crappies From Idaho. Report Prepared for Idaho Department of Fish and Game. Non thesis project for Master's Degree.
- Cassinelli, J. D. 2007. Effects of Water Temperature on Growth and Physiology of Different Populations of Redband Trout (*Oncorhynchus mykiss gairdneri*). Master's Thesis, Department of Fish and Wildlife Resources. University of Idaho. December 2007.
- James, C. A. 2007. Investigations of the invasive New Zealand mudsnail *Potamopyrgus antipodarum* in Idaho: implications for temperature limitations. Master's Thesis, University of Idaho.
- Cajas, Cano, L. 2006. Environmental and social footprints of beef and trout production for human consumption: using Idaho as an example. Master's Thesis. University of Idaho.
- Bruce, R. L. 2006. Methods of Fish Depuration to Control New Zealand Mudsnailed at Fish Hatcheries. Master's Thesis, Fishery Resources. University of Idaho. September 2006.
- Anlauf, K. 2005. Understanding the ecology of whirling disease through modeling of the tubificid host. Masters thesis, University of Idaho.
- Colvin, M. 2005. Ecology of *Myxobolus cerebralis* in the Pahsimeroi River drainage, Idaho. Masters Thesis, University of Idaho.