

DAVID A. CLOSE

Assistant Professor, Fisheries Centre & Department of Zoology,
University of British Columbia
2202 Main Mall, Vancouver, BC, Canada
Email: d.close@fisheries.ubc.ca
Ph (604) 822-0226; Fax (604) 822-8934

EDUCATION

A. A.	Liberal Arts	1991	Blue Mountain Community College, USA
B. Sc.	Fishery Resources	1994	University of Idaho, USA
M. Sc.	Fisheries Science,	2001	Oregon State University, USA
Ph. D.	Fisheries Science,	2007	Michigan State University, USA

PROFESSIONAL EXPERIENCE

2008 (03) Assistant Professor, Distinguished Science Professor of Aboriginal Fisheries, University of British Columbia.
2003 – 2008 Fisheries Scientist, Confederated Tribes of the Umatilla Indian Reservation.
2003 – 2007 Graduate Research Assistant, Michigan State University.
1998 – 2003 Fisheries Biologist III, Confederated Tribes of the Umatilla Indian Reservation.
1994 – 1998 Graduate Research Assistant, Oregon State University.
1994 (06-09) Fisheries Biologist, United States Geological Survey.

HONORS AND AWARDS

National Institute of Mental Health Training Fellowship (2007).
Protectors of the Earth, Certificate of Appreciation, Sault Ste. Marie Tribe of Chippewa Indians (2005)
Michigan State University, Undergraduate Researchers in Plant Sciences Mentor Award (2005).
Protectors of the Earth, Certificate of Appreciation, Sault Ste. Marie tribe of Chippewa Indians (2004).
Native American Fish and Wildlife Society, Chief Sealth Award (2004).
Michigan State University, Diversity and Pluralism Fellowship (2003-2006).
American Indian Science and Engineering Society, Scientific Presentation (1997).
University of Idaho, Personnel and Outstanding Academic Achievement Honor (1994).

PEER-REVIEWED PUBLICATIONS

- Yun, S-S., A.J. Wildbill, M. J. Siefkes, M.L. Moser, A.H. Dittman, S.C. Corbett, W. Li, and D.A. Close. *in review*. "Identification of putative migratory pheromones from Pacific lamprey." *Canadian Journal of Fisheries and Aquatic Sciences*.
- Close, D.A., S-S. Yun, S.D. McCormick A.J. Wildbill, and W. Li. 2010. "11-Deoxycortisol is a corticosteroid hormone in the lamprey." *Proceedings of the National Academy of Sciences*. 107:13942-13947.
- Close, D.A., K.P. Currens, A.D. Jackson, A.J. Wildbill, J.T. Hanson, J.P. Bronson, and K. Aronsuu. 2009. "Lessons from the Reintroduction of a Non-charismatic, migratory fish: Pacific lamprey in the upper Umatilla River." *in* L.R. Brown, S.D. Chase, M. Mesa, R. Beamish, and P.B. Moyle editors. *Biology, Management, and Conservation of Lampreys in North America*. American Fisheries Society, Symposium 72, Bethesda, Maryland.
- Lin B., Y. Wang, Z. Zhang, K. Currens, A. Spidle, Y. Yamazaki, and D.A. Close. 2008. "AFLP Assessment of Genetic Diversity of Pacific Lamprey." *North American Journal of Fisheries Management* 28:1182-1193
- Lin B., Y. Wang, Z. Zhang, K. Currens, A. Spidle, Y. Yamazaki, and D.A. Close. 2008. "Erratum: AFLP Assessment of Genetic Diversity of Pacific Lamprey." *North American Journal of Fisheries Management* 28:1648.
- Brim Box, J., J. Howard, D. Wolf, C. O'Brien, D. Nez and D.A. Close. (2006). "Freshwater mussels (*Bivalvia*: Unionoidea) of the Umatilla and Middle Fork John Day rivers in eastern Oregon." *Northwest Science* 80(2):95-107.
- Bryan, M.B., B.A. Young, D.A. Close, J. Semeyn, T.C. Robinson, J. Bayer, and W. Li. (2006). "Comparison of synthesis of 15 α -hydroxylated steroids in males of four North American lamprey species." *General and Comparative Endocrinology* 149: 149-156.
- Close, D.A., A.D. Jackson, B.P. Conner, and H.W. Li. (2004). "Traditional Ecological Knowledge of Pacific lamprey (*Entosphenus tridentatus*) in Northeastern Oregon and Southeastern Washington from Indigenous Peoples of the Confederated Tribes of the Umatilla Indian Reservation." *Journal of Northwest Anthropology* 38(2):141-162.
- Torgersen, C.E., and D.A. Close. (2004). "Influence of Habitat Heterogeneity on the Distribution of Larval Pacific Lamprey (*Lampetra tridentata*) at two spatial scales." *Freshwater Biology* 49: 614-630.
- Close, D.A., M.S. Fitzpatrick, C.M. Lorion, H.W. Li, C.B. Schreck. (2003) "Effects of Intraperitoneally Implanted Radio Transmitters on the Swimming Performance and Physiology of Pacific Lamprey." *North American Journal of Fisheries Management* 23:1184-1192.
- Moser, M.L., and D.A. Close. (2003). "Assessing Pacific Lamprey Status in the Columbia River Basin." *Northwest Science* 77(2):116-125.
- Yun, S.S., A.P. Scott, J.M. Bayer, J.G. Seelye, D.A. Close, and W. Li. (2003). "HPLC and ELISA analyses of larval bile acids from Pacific and western brook lampreys." *Steroids* 68: 515-523.
- Close, D.A., M.S. Fitzpatrick, and H.W. Li. (2002) "The Ecological and Cultural Importance of a Species at Risk of Extinction, Pacific Lamprey." *Fisheries* 27(7):19-25.

GRANTS PENDING

Principal Investigator, NSERC, Corticosteroids in Jawless Vertebrates,
2010-2014 \$56,000 per year.

Principal Investigator, Yakama Nation, Migratory pheromones in Pacific lamprey.
2010-2012 \$70,000 per year

GRANTS RECEIVED

Principal Investigator, First Nations Fisheries Council, develop methodology for
studying Eulachon and white sturgeon.
2010 \$20,000

Principal Investigator, Columbia River Inter-Tribal Fisheries Commission, Assessment
of gene flow in Pacific lamprey using microsatellite markers.
2010-2011 \$116,000

Principal Investigator, Kootenai Tribe, Sex pheromone communication in the Kootenai
River white sturgeon.
2010-2012 \$556,734

Principal Investigator, Bonneville Power Administration, Pacific Lamprey Research
and Restoration Project.

2007 \$395,000 for one year.

2006 \$501,000 for one year.

2005 \$501,582 for one year.

2002-2004 \$1,454,381 for three years.

1999-2001 \$1,154,547 for three years.

1995 \$17,490 for one year.

Co-Principal Investigator, Bonneville Power Administration, Characterize Genetic
Differences and Distribution of Freshwater Mussels.

2007 \$233,000 for one year.

2006 \$237,000 for one year.

2005 \$237,000 for one year.

2002-2004 \$685,000 for three years.

ADVISORY AND TECHNICAL ASSISTANCE

2010 Cohen Commission

2010 United States Fish and Wildlife Service-scientific panel

2009 Sto:lo Nation Fisheries technical assistance

2009 Animal Behavior-manuscript reviewer

2009 General Comparative Endocrinology-manuscript reviewer

2009 Northwest Science-manuscript reviewer

2009 Journal of Fish Biology – manuscript reviewer.

2007 Great Lakes Fishery Trust – research proposal reviewer.

2007 Great Lakes Fishery Commission – research proposal reviewer.

1998-2000 Northwest Power Planning and Conservation Council- Columbia
River Basin Pacific Lamprey Technical Workgroup-prioritized research needs.

SERVICE

- 2010 Space committee, Fisheries Centre, The University of British Columbia.
- 2009 Nicola Valley Institute of Technology, visit with aboriginal students regarding fisheries.
- 2009 Board member of the National Indian Center for Marine and Environmental Research and Education, Northwest Indian College, Bellingham, Washington.
- 2009 Graduate committees: 3 MS students, Zoology, 1 PhD student, UBC
Graduate examiner, 2 MS students, Land and Food, UBC
- 2008 Graduate examiner, 1 MS student, Zoology, UBC
- 2006-2007 Graduate Student Representative for the Fish and Wildlife Graduate Committee, Department of Fish and Wildlife, Michigan State University.

PROFESSIONAL CONFERENCE PRESENTATIONS

- “Projected Effects of Climate Change on Aboriginal Fisheries: The Big Picture,” presented at the 2010 First Nations Salish Sea Symposium in Whistler, BC.
- “‘Tamaalwit’ the Sacred Law,” presented at the 2009 Protecting Access to Fisheries Resources, First Nations Fisheries Council Meeting, Chehalis Band, Sto:lo Nation.
- “‘Tamaalwit’ the Sacred Law,” presented at the 2009 Beyond Binaries and Borders: Intercultural Interdisciplinarity Symposium at the University of British Columbia, Vancouver, BC.
- “Projected Effects of Climate Change on Aboriginal Fisheries: The Big Picture,” presented at the 2009 Red Alert: The impact of climate change on Northwest Coast Tribal Fisheries Symposium at the Northwest Indian College in Bellingham, Washington.
- “Projected Effects of Climate Change on Aboriginal Fisheries: The Big Picture,” presented at the 2009 BC Fish, Wildlife & Climate Change Symposium in Victoria, BC.
- “Projected Effects of Climate Change on Aboriginal Fisheries: The Big Picture,” presented at the 2009 National Conference of the Native American Fish and Wildlife Society in Juneau, Alaska.
- “Lamprey Research update,” presented at the 2009 National Conference of the Native American Fish and Wildlife Society in Yakima, Washington.
- “Reintroduction of Pacific lamprey in the upper Umatilla River,” presented at the 2008 Annual Meeting of the Western Division American Fisheries Society in Portland, Oregon.
- “What to look for in a mentor,” presented at the 2008 National Conference of the American Indian Science and Engineering Society in Anaheim, California.
- “First Nations, First Foods: In the classroom,” presented at the 2007 National Conference of American Indian Science and Engineering Society in Phoenix, Arizona.
- “Contaminants in lamprey from the Columbia River Basin: What is the risk to Native American Health?” presented at the 2007 Annual Meeting of the American Fisheries Society in San Francisco, California.

- “Reintroduction of Pacific lamprey in the upper Umatilla River in Northeast Oregon,” presented at the 2007 Annual Meeting of the American Fisheries Society in San Francisco, California.
- “First Nations, First Foods: Implications for Sovereignty,” presented at the 2007 Earth Day Conference at the Center for the Study of Indigenous Border Issues, Michigan State University, East Lansing, Michigan.
- “The cultural and ecological importance of lamprey to tribal peoples,” presented at the 2006 Annual Great Lakes Regional Conference of the Native American Fish & Wildlife Society in Manistee, Michigan.
- “Native Freshwater Mussels: A reserved treaty resource,” presented at the 2006 Annual Great Lakes Regional Conference of the Native American Fish & Wildlife Society in Manistee, Michigan.
- “Reintroduction of Pacific lamprey in the Umatilla River, Oregon: A case study,” presented at the 2004 Lamprey Technical Workshop in Vancouver, Washington.
- “Reintroduction of Pacific lamprey in the Umatilla River, Oregon: A case study,” presented at the 2003 Annual Conference of the Oregon Chapter American Fisheries Society in Eugene, Oregon.
- “Ecological and Cultural Importance of Pacific Lampreys,” presented at the 2001 Annual Conference of the Oregon Chapter American Fisheries Society in Portland, Oregon.
- “Effects of Acute Stress on the Physiology of Pacific Lampreys,” presented at the 2001 Annual Conference of the Oregon Chapter American Fisheries Society in Portland, Oregon.
- “Effects of Intraperitoneally Implanted Radio Transmitters on the Swimming Performance and Physiology of Pacific Lampreys,” presented at the 2001 Annual Conference of the Oregon Chapter American Fisheries Society in Portland, Oregon.
- “Pacific Lamprey Technical Workgroup Regional Planning,” presented in 2000 to the Northwest Power Planning Council, Portland, Oregon.
- “Stress Physiology and Swimming Performance of Radio-tagged Pacific Lamprey (*Lampetra tridentata*),” presented at the 1997 National Conference of American Indian Science and Engineering Society in Houston, Texas.
- “Status and Biology of Pacific Lampreys in the Columbia River Basin,” presented at the 1996 Pacific Region Conference Native American Fish and Wildlife Society in Pendleton, Oregon.
- “Status of Pacific Lamprey in the Columbia River Basin,” presented in 1995 to the Northwest Power Planning Council, Portland, Oregon.

GRADUATE STUDENTS

1 MS aboriginal student, 1 PhD aboriginal student.

TEACHING RESPONSIBILITIES

Biology 456, Comparative vertebrate endocrinology, Jan. 2010.

Fish 503, Aboriginal Fisheries, Sept. 2011

Guest Lecturer for IHHS 301, University of British Columbia, 2009. Traditional Foods.

Guest Lecturer for Native American Studies IAH 211C, Ecological Perspectives of Native Americans, Michigan State University 2007. "First Nations First Foods."

Guest Lecturer for Native American Studies 303, Ecological Perspectives of Native Americans, Michigan State University 2007. "First Nations First Foods."

Guest Lecturer for Fish & Wildlife 473, Environmental Fish Physiology, Michigan State University 2007. "Endocrinology of Stress."

Guest Lecturer for Fish & Wildlife 205, Principles of Fish and Wildlife Mgt., Michigan State University 2007. "Native American Perspectives in Fish and Wildlife and Treaty Reserved Fishing Rights."

Mentored and taught laboratory techniques to Native American student from the Umatilla Indian Reservation at Michigan State University's Department of Fish and Wildlife from May 2006 to present.

Guest Lecturer for the Department of Fish & Wildlife Seminar, Michigan State University 2006. "Native American Perspectives on Fish and Wildlife Conservation/Management."

Guest Lecturer for Fish & Wildlife 205, Principles of Fish and Wildlife Mgt., Michigan State University 2006. "Native American Perspectives in Fish and Wildlife and Treaty Reserved Fishing Rights."

Guest lecturer for Plant Biology 499, Michigan State University 2004. "Is there a connection between traditional ecological knowledge, western science, religion and myth?"

Guest lecturer for Plant Biology 499, Michigan State University 2004. "Ethno biology and the importance of Traditional Ecological Knowledge."

Mentored and taught fisheries techniques to Native American fisheries technicians and students from 1998 through 2003, Tribal Fisheries Program, Department of Natural Resources, Confederated Tribes of the Umatilla Indian Reservation.

Mentored and taught laboratory techniques to Native American students from the Umatilla Indian Reservation and Warm Springs Reservation at Oregon State University's Department of Fish and Wildlife during summer of 1997.

PROFESSIONAL SOCIETIES

Native American Fish and Wildlife Society
American Fisheries Society
American Indian Science and Engineering Society, Sequoyah Fellow