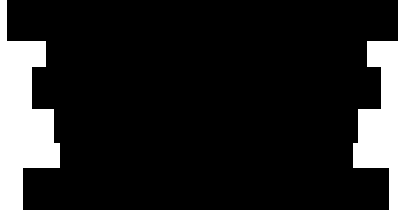


## **MARC TRUDEL, Ph.D.**



### **OBJECTIVES**

To conduct applied and fundamental research in fisheries science in a dynamic research institute. To manage a team of scientists, technicians, and students to perform innovative research.

### **SUMMARY OF QUALIFICATIONS**

- Aquatic and fisheries scientist with significant experience in environmental toxicology.
- Supervised project teams in field and laboratory settings on marine and freshwater fishes.
- Excellent skills in communication and collaboration.
- Strong quantitative skills in statistics and modelling.
- Broad research interests.

### **SKILLS AND ACCOMPLISHMENTS**

#### **Technical**

Fish biologist with more than 15 years of field experience on marine and freshwater ecosystems, and in environmental toxicology. Perform innovative research involving field surveys, laboratory experiments, theoretical models, and literature reviews. Use a highly interdisciplinary approach based on the integration of ecology, physiology, evolution, genetics, toxicology, chemistry and mathematics to conduct research. Received extensive training in statistics, modelling, and on the application of chemical tracers and isotopes in ecology.

#### **Communication**

Possess effective written and oral communication skills. Published frequently cited papers in peer-reviewed journals, as well as non-peer reviewed manuscripts. Presented numerous lectures at international, national, and regional conferences and workshops, including as a guest lecturer. Assisted university professors in teaching courses in biometry, ecology, and experimental design. Gave lectures on introductory and advanced statistics and stable isotope ecology to undergraduate and graduate students.

#### **Administration and Leadership**

Successfully secured and administered external funding, scholarships and fellowships to conduct research. Supervised undergraduate and graduate students, technicians and project teams in field and laboratory settings. Organized special symposiums at international conferences. Regularly solicited as an external reviewer for scientific journals, government and funding agencies, and participated in regional, national, and international committees to provide advice on scientific research conducted in the Pacific Ocean. Worked in collaboration with scientists from government agencies, the industry and university.

**PROFESSIONAL APPOINTMENTS**

2009-Present

Adjunct Assistant Professor, Département des sciences fondamentales, Université du Québec à Chicoutimi, Chicoutimi, QC

2006-Present

Adjunct Assistant Professor, Department of Biology, University of Victoria, Victoria, BC

2004-Present

Program Head, High Seas Salmon Program, DFO, Nanaimo, BC

2002-Present

Research Scientist, DFO, Nanaimo, BC

2000-2002

Post-Doctoral Fellow, DFO, Nanaimo, BC

**EDUCATION**

2000 Ph. D. Biology, McGill University, Montréal, Québec, Canada

1994 M. Sc. Biology, Université de Montréal, Québec, Canada

1991 B. Sc. Biology, Université de Montréal, Québec, Canada

**TRAINING**

2006 First Aid Level 1. Fisheries and Oceans Canada, Nanaimo, British Columbia

2005 Management and Development Level 1 course. Fisheries and Oceans Canada, Nanaimo, British Columbia

2003 Certified Effective Management and Leadership of R&D Personnel. Stargate Consultants Limited, Nanaimo, British Columbia, Canada

2000 Certified Marine Emergency Duties (MED) level A1, Nanaimo, British Columbia, Canada

1991 Certified for scuba diving (ACUC), Montréal, Québec, Canada

**OTHER INFORMATION****Awards**

Received 12 scholarships and fellowships

**Languages**

Fluent in French and English

**Professional Affiliation**

American Fisheries Society (AFS)

American Society of Limnology and Oceanography (ASLO)

North Pacific Anadromous Fish Commission (NPAFC)

**A. RECOGNITION AND AWARDS**

12. 2000-2002. Visiting Fellowship in a Canadian Government Laboratory. Total value: \$75,000.
11. 2000-2002. Fonds pour la Formation de Chercheurs et l'Aide à la Recherche. Total value: \$60,000.
10. 1997-1998. Max Bell Fellowship in Canadian and Northern Studies, Ph.D. Scholarship. Total value: \$15,000.
9. 1997. J.W. McConnell Memorial Fellowship, Ph.D. Scholarship. Total value: \$10,000.
8. 1996. Fonds pour la Formation de Chercheurs et l'Aide à la Recherche, Ph.D. Scholarship. Total value: \$13,000.
7. 1994-1997. Arthur Wiley Scholarship (McGill University Scholarship). Ph.D. Scholarship. Total value: \$16,000.
6. 1994-1995. Natural Sciences and Engineering Research Council of Canada, Ph.D. Scholarship. Total value: \$34,000.
5. 1991-1993. Natural Sciences and Engineering Research Council of Canada, M.Sc. Scholarship. Total value: \$24,000.
4. 1991. Summer Natural Sciences and Engineering Research Council of Canada, B.Sc. Scholarship. Total value: \$3,200.
3. 1990. Summer Natural Sciences and Engineering Research Council of Canada, B.Sc. Scholarship. Total value: \$3,200.
2. 1988-1991. Canada Scholarship, B.Sc. Scholarship. Total value: \$6,000.
1. 1988-1991. United Technology Scholarship, B.Sc. Scholarship. Total value: \$2,300.

**B. RESEARCH SUPPORT**

9. 2008-2012. Modeling foodweb dynamics and growth of juvenile Pacific salmon in the coastal marine ecosystems of BC. NSERC Strategic Grant. Awarded to A. Mazumder, J. Dower, and **M. Trudel**. Total value: \$425,000.
8. 2008-2011. **Trudel, M.**, Tucker, S., Mazumder, A., Mackas, D., Sweeting, R., and Perry, I. Prey quality and food web interactions in the Strait of Georgia. DFO Strait of Georgia Ecosystem Research Initiative. Total value: \$55,000.
7. 2006-2011. Salmon Shelf Survival Study. Bonneville Power Administration. Awarded to **M. Trudel**. Total value: \$2,100,405 USD.
6. 2006-2008. Assessing growth and survival of juvenile Chinook and coho salmon off the West coast of Vancouver Island. Southern Endowment Fund. Awarded to B. Beckamn and **M. Trudel**. Total value: \$85,030 USD.

5. 2006. A pilot study to discriminate non-anadromous morphs (kokanee and residual sockeye) of *Oncorhynchus nerka* using maternal trace element signatures. Species at Risk (SARA). Awarded to L. Godbout, **M. Trudel**, J. Irvine, and C. Wood. Total value: \$12,700.
4. 2005-2006. The effects of parasite dose and host nutritional status on the susceptibility of juvenile Pacific salmon (*Oncorhynchus spp.*) to the salmon louse, *Lepeophtheirus salmonis*. Awarded to S.R.M. Jones, **M. Trudel**, S. Johnson, M. Fast, D. Groves, B. Beckman, and D. Groman. Total value: \$93,625.
3. 2004-2006. Salmon Shelf Survival Study. Bonneville Power Administration. Awarded to **M. Trudel**. Total value: \$500,000 USD.
2. 2003-2004. Origin of Sea Lice Infection on Juvenile Salmon in the Broughton Archipelago. Science Council of British Columbia. Awarded to **M. Trudel**, S.R.M. Jones, J.N.C. White, and K.P. Ang. Total value: \$20,000.
1. 2002-2003 Bering-Aleutian International Salmon Survey. National Marine Fisheries Service. Awarded to **M. Trudel**. Total value: \$10,000.

## C. REFEREED PUBLICATIONS

### *Published/Submitted*

28. Tucker, S., **M. Trudel**, D.W. Welch, J.R. Candy, J.F.T. Morris, M.E. Thiess, C. Wallace, and T.D. Beacham. 2010. Annual trends in seasonal stock- and life-history specific ocean migration of juvenile Chinook salmon: an application of genetic identification techniques. *Trans. Am. Fish. Soc.* (in press).
27. Farley, E.V., Jr., A. Starovoytov, S. Naydenko, R. Heintz, **M. Trudel**, C. Guthrie, L. Eisner, and J. Guyon. 2010. Implications of a warming eastern Bering Sea on western Alaska salmon. *ICES J. Mar. Sci.* doi:10.1093/icesjms/fsr021.
26. Nance, S.L., M. Riederer, T. Zubkowski, **M. Trudel**, and L.D. Rhodes. 2010. Interpreting dual ELISA and qPCR data for bacterial and kidney disease of salmonids. *Dis. Aquat. Org.* 91: 113-119.
25. Godbout, L., **M. Trudel**, J.R. Irvine, C.C. Wood, M.J. Grove, A.K. Schmitt, K.D. McKeegan. 2010. Sulfur isotopes in otoliths allow discrimination of anadromous and non-anadromous ecotypes of sockeye salmon (*Oncorhynchus nerka*). *Environ. Biol. Fish.* doi:10.1007/s10641-010-9689-7.
24. **Trudel, M.**, J. Fisher, J. Orsi, J.F.T. Morris, M.E. Thiess, R.M. Sweeting, S. Hinton, E. Fergusson, and D.W. Welch. 2009. Distribution and migration of juvenile Chinook salmon derived from coded-wire tag recoveries along the continental shelf of western North America. *Trans. Am. Fish. Soc.* 138: 1369-1391.
23. Tucker, S., **M. Trudel**, D.W. Welch, J.R. Candy, J.F.T. Morris, M.E. Thiess, C. Wallace, D.J. Teel, W. Crawford, E.V. Farley, Jr and T.D. Beacham. 2009. Seasonal stock-specific migrations of juvenile sockeye salmon along the west coast of North America: Implications for growth. *Trans. Am. Fish. Soc.* 138: 1458-1480.

22. Farley, E.V., Jr., and **Trudel, M.** 2009. Growth rate potential of juvenile sockeye salmon in warm and cool years on the Eastern Bering Sea Shelf. *J. Mar. Biol.* doi:10.1155/2009/640215.
21. Mackas, D.L., Batte n, S., and **Trudel, M.** 2007. Effects on zooplankton of a wa rmer ocean: recent evidence from the Northeast Pacific. *Prog. Oceanogr.* 75: 223-252.
20. Fisher, J. P., **M. Trudel**, A. Amman, J. A. Orsi, J. Pi ccolo, C. Bucher, E. C asillas, J. A. Harding, B. MacFarlane, R. Brodeur, J. Morris, and D. Welch. 2007. Regional comparisons of distribution and abundance of juve nile salmon along the West Coast of North America. *Am. Fish. Soc. Symp. Ser.* 57: 31-80.
19. Morris, J.F.T., **Trudel, M.**, Thiess, M., Sweeting, R.M., Fisher, J., Hinton, S., Fergusosn, E.A., Orsi, J.A., Farley, E.V., Jr., and W elch, D.W. 2007. S tock-specific migrations of juvenile coho salmon derived from coded-wire t ag recoveries on th e continental shelf of western North America. *Am. Fish. Soc. Symp. Ser.* 57: 81-104.
18. Orsi, J. A., Harding, J.A., Pool. S.S., Brodeur, R.D., Haldorson, L. J., Murphy, J.M., Moss, J.H., Farley, E.V., Jr., Sweeting, R.M., Morris, J.F.T., **Trudel, M.**, Beamish, R.J., Emmett, R.L., and Fergusson, E.A. 2007. Epipelagic fish assemblages associated with juvenile Pacific salmon in neritic wa ters of the California Current and Alaska Current. *Am. Fish. Soc. Symp. Ser.* 57: 105-155.
17. **Trudel, M.**, Jones, S.R.M., Thiess, M.E., Morris, J.F.T., Welch, D.W., Sweeting, R.M., Moss, J.H., Wing, B.L., Farley, E. V., Jr., Murph y, J. M., Baldwin, R.E., and Jacobson, K.C. 2007. Infestations of motile salmon lice on Pacific salmon along the west coast of North America. *Am. Fish. Soc. Symp. Ser.* 57: 157-182.
16. Brodeur, R.D., Daly, E.A., Studervant, M.V., Miller, T.W., Moss, J.H., Thiess, M., **Trudel, M.**, Weitkamp, L.A., Armstrong, J., and Norton, E.C. 2007. Regional comparisons of juvenile salmon feeding in coast al marine waters of f the West Coast of North America. *Am. Fish. Soc. Symp. Ser.* 57: 183-203.
15. **Trudel, M.**, Thiess, M.E., Bucher, C., Farley, E.V., Jr., MacFarlane, B., Casillas, E., Morris, J.F.T., Murphy, J.M., and Welch, D.W.. 2007. Regional variation in the marine growth and energy accumulation of juvenil e Chinook salmon and coho salmon along the west coast of North America. *Am. Fish. Soc. Symp. Ser.* 57: 205-232.
14. Brodeur, R.D., S. Ralston, R.L. Emmett, **M. Trudel**, T.D. Auth, and A.J. Phillips 2006. Recent trends and anomalies in pelagic n ekton abun dance, dist ribution, an d app arent recruitment in the Northeast Pacific Ocean. *Geophys. Res. Let.* Doi:10.1029/2006GL026614.
13. **Trudel, M.**, and J. B. Rasmussen. 2006. Bioenergetics and mercu ry dyna mics in fish: a modelling perspective. *Can. J. Fish. Aquat. Sci.* 63: 1890-1902.
12. deBruyn, A.M.H., **Trudel, M.**, Eyding, N., Harding, J., McNally, H., Mountain, R., Orr, C., Urban, D., V erenitch, S., and Ma zumder, A. 2006. Ecosystemic ef fects of salmon farmin g increase mercury contamination in wild fish. *Environ. Sci. Technol.* 40: 3489-3493.
11. **Trudel, M.**, and W elch, D.W. 2005. Mode ling the oxygen consumption rate s of Pacific salmon and steelhead trout: model development. *Trans. Am. Fish. Soc.* 134: 1542-1561.

10. **Trudel, M.**, Tucker, S., Morris, J.F. T., Higgs, D.A., and Welch. 2005. Indicators of energetic status in juvenile coho salmon (*Oncorhynchus kisutch*) and chinook salmon (*Oncorhynchus tshawytscha*). *N. Am. J. Fish. Manag.* 25: 374-390
9. **Trudel, M.**, Geist, D.R., and Welch, D.W. 2004. Modeling the oxygen consumption rates of Pacific salmon and steelhead trout: an assessment of current models and practices. *Trans. Am. Fish. Soc.* 133: 326-348.
8. Pazzia, I., **Trudel, M.**, Ridgway, M., and Rasmussen, J.B. 2002. Influence of food web structure on the growth and bioenergetics of lake trout (*Salvelinus namaycush*). *Can. J. Fish. Aquat. Sci.* 59: 1593-1605.
7. **Trudel, M.**, and Rasmussen, J. B. 2001. Predicting mercury concentration in fish using a mass balance model. *Ecol. Appl.* 11: 517-529.
6. **Trudel, M.**, Tremblay, A., Schetagne, R., and Rasmussen, J.B. 2001. Why are dwarf fish so small? An energetic analysis of polymorphism in lake whitefish (*Coregonus clupeaformis*). *Can. J. Fish. Aquat. Sci.* 58: 394-405.
5. **Trudel, M.**, Tremblay, A., Schetagne, R., and Rasmussen, J.B. 2000. Estimating food consumption rates of fish using a mercury mass balance model. *Can. J. Fish. Aquat. Sci.* 57: 414-428.
4. **Trudel, M.**, and Rasmussen, J.B. 1997. Modeling the elimination of mercury by fish. *Environ. Sci. Technol.* 31: 1716-1722.
3. **Trudel, M.**, and Boisclair, D. 1996. Estimation of fish activity costs using underwater video cameras. *J. Fish Biol.* 48: 40-53.
2. **Trudel, M.**, and Boisclair, D. 1994. Seasonal consumption of dace (*Phoxinus eos* x *P. neogaeus*): a comparison between field and bioenergetic model estimates. *Can. J. Fish. Aquat. Sci.* 51: 2558-2567.
1. **Trudel, M.**, and Boisclair, D. 1993. An *in situ* evaluation of the day-to-day variation in the quantity of food consumed by fish. *Can. J. Fish. Aquat. Sci.* 50: 2157-2165.

#### **D. NON-REFEREED PUBLICATION**

##### *Conference proceedings*

9. Beamish, R.J., **Trudel, M.**, and Sweeting, R. 2007. Canadian coastal and high seas juvenile Pacific salmon studies. North Pacific Anadromous Fish Commission Technical Report 7: 1-4.
8. **Trudel, M.**, Thiess, M.E., Morris, J.F.T., Candy, J.R., Beacham, T.D., Higgs, D.A., and Welch, D.W. 2007. Overwinter mortality and energy depletion in juvenile Pacific salmon off the west coast of British Columbia and Alaska. North Pacific Anadromous Fish Commission Technical Report 7: 61-63.

7. **Trudel, M.**, Welch, D.W., Morris, J.F.T., Farley, E.V. Jr., and Murphy, J. 2005. Influence of the marine feeding area on lipid accumulation in juvenile coho salmon. North Pacific Anadromous Fish Commission Technical Report 6: 94-95.
6. Harrison, P.J., Whitney, F., Mackas, D., Beamish, R., **Trudel, M.**, and Perry, I. 2004. Changes in coastal ecosystems in the NE Pacific Ocean. Proceedings of International Symposium on long-term variations in the coastal environment and ecosystems, 27-28 September 2004, Matsuyama, Japan, pp 17-35.
5. Welch, D.W., **Trudel, M.**, Beacham, T.D., Morris, J.F.T., and Candy, J.R. 2004. DNA-based stock identification of coastal sockeye salmon: evidence for stock-specific migration behaviour of central coast (Rivers Inlet) sockeye salmon. North Pacific Anadromous Fish Commission Technical Report 5: 65-66.
4. **Trudel, M.**, Welch, D.W., Morris, J.F.T., Candy, J.R., and Beacham, T.D. 2004. Using genetic markers to understand the coastal migration of juvenile coho (*Oncorhynchus kisutch*) and chinook salmon (*O. tshawytscha*). North Pacific Anadromous Fish Commission Technical Report 5: 52-54.
3. Welch, D.W., **Trudel, M.**, Zamon, J., Morris, J., and Thiess, M. 2002. Potential interrelationships between patterns of migration and marine survival in Pacific salmon. *N. Pac. Anadr. Fish Comm. Tech. Rep.* 4: 62-64.
2. **Trudel, M.**, Tucker, S., Zamon, J.E., Morris, J.F.T., Higgs, D.A., and Welch, D.W. 2002. Bioenergetic response of coho salmon to climate change. *N. Pac. Anadr. Fish Comm. Tech. Rep.* 4: 59-61.
1. **Trudel, M.**, Zamon, J.E., Tucker, S., and Welch, D.W. 2002. Are salmon starving in the ocean? *Can. Tech. Rep. Fish. Aquat. Sci.* 2403: 112-118.

#### *Data reports*

33. Morris, J. F. T., **Trudel, M.**, Thiess, M. E., Zubkowski, T. B., Tucker, S., Harstad, D.L., Jung, Y., and Maclean, H. R. 2010. *CFV Viking Storm* Gulf of Alaska salmon survey, June 18-July 5, 2008. *Can. Data Rep. Fish. Aquat. Sci.* 1227: 218 p.
32. Trudel, M., Morris, J.F.T., Thiess, M.E., Zubkowski, T., and Jung, Y. 2009. Canadian High Seas Salmon surveys in 2009-2010. NPAFC Technical Document No. 1166.
31. Morris, J. F. T., **Trudel, M.**, Thiess, M. E., Zubkowski, T. B., Maclean, H. R., Curtis, J. M. R., and Felli, L. 2009. *CCGS W.E. Ricker* Gulf of Alaska salmon survey, June 20-July 5, 2007. *Can. Data Rep. Fish. Aquat. Sci.* 1221: 178 p.
30. Trudel, M., Morris, J.F.T., Thiess, M.E., Zubkowski, T., and Jung, Y. 2008. Canadian High Seas Salmon surveys in 2008-2009. NPAFC Technical Document No. 1092.
29. Morris, J. F. T., **Trudel, M.**, Thiess, M. E., Boyle, C. A., Zubkowski, T. B., and Maclean, H. R. 2008. *CCGS W.E. Ricker* Gulf of Alaska salmon survey, February 28 - March 23, 2007. *Can. Data Rep. Fish. Aquat. Sci.* 1206: 70 p.

28. Morris, J. F. T., **Trudel, M.**, Thiess, M. E., Boyle, C. A., Zubkowski, T. B., and MacLean, H. R. 2008. CCGS W.E. Ricker Gulf of Alaska salmon survey, November 7 – December 6, 2006. Can. Data Rep. Fish. Aquat. Sci. 1199: 144 p.
27. Morris, J. F. T., **Trudel, M.**, Thiess, M. E., Zubkowski, T. B., Boyle, C. A., and MacLean, H. R. 2008. CCGS W.E. Ricker Gulf of Alaska salmon survey, June 21-30, 2006. Can. Data Rep. Fish. Aquat. Sci. 1198: 145 p.
26. Morris, J. F. T., **Trudel, M.**, Welch, D. W., Thiess, M. E., Zubkowski, T. B., and MacLean, H. R. 2007. CCGS W.E. Ricker Gulf of Alaska salmon survey, February 13-28, 2004. Can. Data Rep. Fish. Aquat. Sci. 1193: 47 p.
25. Morris, J. F. T., **Trudel, M.**, Thiess, M. E., Zubkowski, T. B., Boyle, C. A., and MacLean, H. R. 2007. CCGS W.E. Ricker Gulf of Alaska salmon survey, February 28 - March 27, 2006. Can. Data Rep. Fish. Aquat. Sci. 1191: 73 p.
24. Morris, J. F. T., **Trudel, M.**, Thiess, M. E., Zubkowski, T. B., and MacLean, H. R. 2007. CFV *Frosti* Gulf of Alaska salmon survey, June 28 - July 7, 2005. Can. Data Rep. Fish. Aquat. Sci. 1187: 125 p.
23. Morris, J. F. T., **Trudel, M.**, Thiess, M. E., Zubkowski, T. B., Boyle, C. A., and MacLean, H. R. 2007. CFV *Frosti* Gulf of Alaska salmon survey, October 27 - November 20, 2005. Can. Data Rep. Fish. Aquat. Sci. 1186: 136 p.
22. Morris, J. F. T., **Trudel, M.**, Thiess, M. E., Zubkowski, T. B., and MacLean, H. R. 2007. CCGS W.E. Ricker Gulf of Alaska salmon survey, March 4-25, 2005. Can. Data Rep. Fish. Aquat. Sci. 1185: 83 p.
21. Morris, J. F. T., **Trudel, M.**, Thiess, M. E., Zubkowski, T. B., and MacLean, H. R. 2007. CCGS W.E. Ricker Gulf of Alaska salmon survey, October 20 – November 21, 2004. Can. Data Rep. Fish. Aquat. Sci. 1184: 121 p.
20. Myers, K.W., Davis, N.D., Celowycz, A.G., Farley, E. V., Jr., Morris, J.F. T., **Trudel, M.**, Fukuwaka, M.-A. 2005. High seas salmonid coded-wire tag recovery data, 2005. North Pacific Anadromous Fisheries Commission Document No. 905.
19. Morris, J.F.T., **M. Trudel**, D.W. Welch, M.E. Thiess, and T.B. Zubkowski. 2004. Canadian Highseas Salmon surveys: CWT recoveries from juvenile Chinook and coho salmon on the continental shelf of British Columbia and southeast Alaska from 1998 to 2003. North Pacific Anadromous Fish Commission Document No. 823.
18. Farley, E.V., Jr., Murphy, J., Middleton, A., Eisner, L., Moss, J., Pohl, J., Ivanov, O., Kuznetsova, N., **Trudel, M.**, Drew, M., Lagoudakis, C., and Yaska, G. 2004. Eastern Bering Sea (BASIS) Coastal Research (August-October 2003) on Juvenile Salmon. North Pacific Anadromous Fish Commission Document No. 816.
17. Morris, J.F.T., **M. Trudel**, D.W. Welch, M.E. Thiess, T.B. Zubkowski, and H.R.C. MacLean. 2004. Canadian Highseas Salmon surveys in the fall of 2003 and the winter of 2004: seasonal changes in the distributions of juvenile salmon on the continental shelf off British Columbia and southeast Alaska. North Pacific Anadromous Fish Commission Document No. 780.



16. Morris, J.F.T., D.W. Welch, P.M. Winchell, M.E. Thiess, **M. Trudel**, T.B. Zubkowski, and H.R.C. MacLean. 2004. The joint USA - Canada echo integration - trawl survey from June 24 to September 8, 2003: a report on the catch and biological data collected for Pacific salmon of southeast Alaska. *Can. Data Rep. Fish. Aquat. Sci.* 1151: 43 p.
15. Morris, J.F.T., Welch, D. W., Thiess, M.E., **Trudel, M.**, Ladouceur, A.R., Jacobs, M.C., and Zubkowski, T.B. 2004. The joint USA-Canada echo integration-trawl survey in 2001: a report on the catch and biological data collected for Pacific salmon from July 28 to August 18. *Can. Data Rep. Fish. Aquat. Sci.* 1150: 110 p.
14. Welch, D. W., Morris, J.F.T., Thiess, M.E., **Trudel, M.**, Ladouceur, A.R., Zubkowski, T.B., Jacobs, M.C., and MacLean, H. R. 2004. *F.V. Ocean Selector* Gulf of Alaska Salmon Survey, June 16-28, 2002. *Can. Data Rep. Fish. Aquat. Sci.* 1146: 71 p.
13. Welch, D. W., Morris, J.F.T., Thiess, M.E., **Trudel, M.**, Ladouceur, A.R., Jacobs, M.C., Zubkowski, T.B., and MacLean, H. R. 2004. *CCGS W.E. Ricker* Gulf of Alaska Salmon Survey, October 8-27, 2003. *Can. Data Rep. Fish. Aquat. Sci.* 1145: 116 p.
12. Welch, D. W., Morris, J.F.T., Thiess, M.E., **Trudel, M.**, Ladouceur, A.R., Zubkowski, T.B., Jacobs, M.C., Winchell, P.M., and MacLean, H. R. 2004. *CCGS W.E. Ricker* Gulf of Alaska Salmon Survey, June 9-11, 2003. *Can. Data Rep. Fish. Aquat. Sci.* 1144: 54 p.
11. Welch, D. W., Morris, J.F.T., Thiess, M.E., **Trudel, M.**, Ladouceur, A.R., Jacobs, M.C., Zubkowski, T.B., Winchell, P.M., and MacLean, H. R. 2004. *CCGS W.E. Ricker* Gulf of Alaska Salmon Survey, February 27 to March 17, 2002. *Can. Data Rep. Fish. Aquat. Sci.* 1143: 56 p.
10. Welch, D. W., Morris, J.F.T., Thiess, M.E., Zamon, J.E., **Trudel, M.**, Ladouceur, A.R., Jacobs, M.C., Zubkowski, T.B., Demers, E., and Robert, M. 2004. *CCGS W.E. Ricker* Gulf of Alaska Salmon Survey, March 9-24, 2001. *Can. Data Rep. Fish. Aquat. Sci.* 1142: 67 p.
9. Welch, D. W., Morris, J.F.T., Thiess, M.E., **Trudel, M.**, Ladouceur, A.R., Zubkowski, T.B., Jacobs, M.C., Winchell, P.M., and MacLean, H. R. 2004. *CCGS W.E. Ricker* Gulf of Alaska Salmon Survey, February 14- 26, 2003. *Can. Data Rep. Fish. Aquat. Sci.* 1139: 63 p.
8. Welch, D. W., Morris, J.F.T., Thiess, M.E., **Trudel, M.**, Ladouceur, A.R., Zubkowski, T.B., Jacobs, M.C., Winchell, P.M., and MacLean, H. R. 2004. *CCGS W.E. Ricker* Gulf of Alaska Salmon Survey, October 17 to November 9, 2002. *Can. Data Rep. Fish. Aquat. Sci.* 1138: 120 p.
7. Welch, D. W., Morris, J.F.T., Thiess, M.E., **Trudel, M.**, Ladouceur, A.R., Jacobs, M.C., Zubkowski, T.B., and MacLean, H.R. 2004. *CCGS W.E. Ricker* Gulf of Alaska Salmon Survey, August 15- 26, 2002. *Can. Data Rep. Fish. Aquat. Sci.* 1137: 119 p.
6. Welch, D. W., Morris, J.F.T., Thiess, M.E., **Trudel, M.**, Ladouceur, A.R., Zubkowski, T.B., MacLean, H.R., Jacobs, M.C., and Winchell, P.M. 2004. *CCGS W.E. Ricker* Gulf of Alaska salmon survey, October 9 to November 5, 2001. *Can. Data Rep. Fish. Aquat. Sci.* 1136: 143 p.
5. Welch, D. W., Morris, J.F.T., Thiess, M.E., **Trudel, M.**, Ladouceur, A.R., Jacobs, M.C., Zubkowski, T.B., Demers, E., and Zamon, J.E. 2004. *CCGS W.E. Ricker* Gulf of Alaska Salmon Survey, June 14- 24, 2001. *Can. Data Rep. Fish. Aquat. Sci.* 1135: 84 p.

4. Welch, D.W., Morris, J.F.T., Thiess, M.E., **Trudel, M.**, and Anderson, D.J. 2003. CCGS *W.E. Ricker* Gulf of Alaska salmon survey, June 27 to July 6, 2000. Can. Data Rep. Fish. Aquat. Sci. 1125: 110 p.
3. Farley, E.V., Jr., Wing, B., Middleton, A., Pohl, J., Hulbert, L., Moss, J., **Trudel, M.**, Parks, E., Hamilton, T., Lagoudakis, C., and McCallum, D. 2003. Eastern Bering Sea (BASIS) coastal research (August – October 2002) on juvenile salmon. North Pacific Anadromous Fish Commission Document No. 678.
2. **Trudel, M.**, and Welch, D.W. 2002. A compilation of literature data on standard metabolic rates and swimming costs of Pacific salmon and steelhead trout (*Oncorhynchus* spp.). *Can. Data Rep. Fish. Aquat. Sci.* 1090, 47p.
1. **Trudel, M.**, Farley, E.V., Jr., Wing, B.L., and Welch, D.W. 2002. Prevalence and intensity of sea lice (*Lepeophtheirus salmonis*) infection on juvenile pink salmon (*Oncorhynchus gorbuscha*) in the Bering Sea – September 2002. *Can. Data Rep. Fish. Aquat. Sci.* 1107: 19 p.

#### *DFO Documents*

13. **Trudel, M.**, M. Thiess, J. Morris, S. Tucker, T. Zubkowski, and Y. Jung. 2010. Reduced catches and growth rates of juvenile salmon off the west coast of Vancouver Island in 2009 compared to 2008. pp. 87-88 In Irvine, J. and B. Crawford (Eds). 2010. *State of physical, biological, and selected fishery resources of Pacific Canadian marine ecosystems in 2009*. Canadian Science Advisory Research Document 2010/053.
12. **Trudel, M.**, S. Tucker, and J. Candy. 2010. Ocean distribution of two depressed stocks of sockeye salmon stocks. pp. 94-95 In Irvine, J. and B. Crawford (Eds). 2010. *State of physical, biological, and selected fishery resources of Pacific Canadian marine ecosystems in 2009*. Canadian Science Advisory Research Document 2010/053.
11. **Trudel, M.**, Baillie, S., Parken, C., and O'Brien, D. 2009. Highest catches of juvenile salmon off Vancouver Island, but average growth conditions. pp. 97-98 In Irvine, J. and B. Crawford (Eds). 2009. *State of physical, biological, and selected fishery resources of Pacific Canadian marine ecosystems*. Canadian Science Advisory Research Document 2009/022.
10. **Trudel, M.**, 2009. Ocean recovery of two endangered sockeye stocks. pp. 99-100 In Irvine, J. and B. Crawford (Eds). 2009. *State of physical, biological, and selected fishery resources of Pacific Canadian marine ecosystems*. Canadian Science Advisory Research Document 2009/022.
9. **Trudel, M.**, Baillie, S., Parken, C., and O'Brien, D. 2008. Average growth for coho salmon in southern British Columbia. pp. 82-83 In Irvine, J. and B. Crawford (Eds). 2008. *State of physical, biological, and selected fishery resources of Pacific Canadian marine ecosystems*. Canadian Science Advisory Research Document 2008/013.
8. **Trudel, M.** 2007. Average growth rate for coho salmon off the west coast of Vancouver Island. p. 56-57. In: DFO. *State of the Pacific Ocean 2006*. DFO Sci. Ocean Status Report. 2007/001.

6. **Trudel, M.**, G. Gillespie, J. Cosgrove and B. Wing. 2006. Warm water species in British Columbia and Alaska. p. 53. *In*: DFO. State of the Pacific Ocean 2005. DFO Sci. Ocean Status Report. 2006/001.
6. **Trudel, M.** 2006. Lowest growth on record for coho salmon in southwest Vancouver Island. p. 44. *In*: DFO. State of the Pacific Ocean 2005. DFO Sci. Ocean Status Report. 2006/001.
6. DFO, 2005. 2004 Pacific Region State of the Ocean. DFO Science Ocean Status Report 2004 (2005). [contributing author]
5. DFO, 2004. 2003 Pacific Region State of the Ocean. DFO Science Ocean Status Report 2003 (2004). [contributing author]
4. Worcester, T., and **Trudel, M.** 2004. Seasonal refugia. Criteria for Designating an Area as Biologically and Ecologically Significant. DFO Document, Ottawa.
3. Dutil, J.-D., Benoît, H., Comeau, L., Treble, M., Chouinard, G., and **Trudel, M.** 2004. Foraging and feeding areas and time periods. Criteria for Designating an Area as Biologically and Ecologically Significant. DFO Document, Ottawa.
2. Comeau, L., Benoît, H., Dutil, J.-D., Olesiuk, P., **Trudel, M.**, Ferguson, S., Chouinard, G., and Ford, J. 2004. Migration routes. Criteria for Designating an Area as Biologically and Ecologically Significant. DFO Document, Ottawa.
1. DFO, 2003. 2002 Pacific Region State of the Ocean. DFO Science Ocean Status Report 2002 (2003). [contributing author]

#### **E. INVITED PRESENTATIONS**

30. **Trudel, M.** The Canada-USA Salmon Shelf Survival Study. Bonneville Power Administration, Portland, Oregon, September 2010.
29. **Trudel, M.**, Tucker, S., Irvine, J., Hyatt, K., Gillespie, G., Schweigert, J., and Welch, D. Outside of Georgia Strait, oceanographic conditions, food, and/or predators (including squid) are important contributors to the Fraser sockeye situation. Pacific Salmon Commission, Nanaimo, British Columbia, June 2010.
28. **Trudel, M.** Climate change and Pacific salmon production in the marine environment. Canadian Society of Ecology and Evolution, Quebec City, May 2010.
27. **Trudel, M.**, Mackas, D., and Mazumder, A. Ocean conditions and salmon production in the northern California Current System. Coastal and Estuarine Research Federation, Portland, Oregon, November 2009.
26. **Trudel, M.** Changements climatiques et production de saumons du Pacifique. Université du Québec à Chicoutimi, Chicoutimi, September 2009.
25. **Trudel, M.** Juvenile Pacific salmon surveys and salmon forecast in the North east Pacific. Pacific Coast Ocean Observing System (PaCOOS). NOAA Fisheries, Seattle, September 2009.

24. **Trudel, M.** There and back again: Tracking the ocean migration of Pacific salmon. Pacific Biological Station Centennial Celebration, Nanaimo, British Columbia, November 2008.
23. **Trudel, M.** Research needs for Pacific salmon: filling the missing middle. North Pacific Anadromous Fisheries Commission, Sokcho, South Korea, April 2008.
22. **Trudel, M.** Distribution, migration, and growth of juvenile pink and chum salmon off British Columbia and southeast Alaska. Pink and Chum Salmon Workshop, Bellingham, Washington, February 2008.
21. **Trudel, M.**, Mackas, D., Sweeting, R., and Mazumder, A. Marine survival of Pacific salmon. Wild Salmon Policy, University of British Columbia, Vancouver, British Columbia, April 2007.
20. **Trudel, M.** Migration of juvenile Pacific salmon. NOAA Fisheries, Seattle, Washington, February 2007.
19. **Trudel, M.**, and Mackas, D. Ocean conditions and the production of west coast of Vancouver Island coho salmon. Pacific Salmon Commission, Vancouver, British Columbia, January 2007.
18. **Trudel, M.** Ecology of juvenile salmon in the Northeast Pacific Ocean. Columbia River Estuary Conference, Astoria, Oregon, April 2006.
17. **Trudel, M.** Canada-USA Salmon Shelf Survival Study. Project Implementation Review Conference of the Columbia Basin Fish and Wildlife Authority's Anadromous Fish Advisory Committee, Portland, Oregon, March 2006.
16. **Trudel, M.** Canada-USA Salmon Shelf Survival Study: Results from 1998-2005 and future directions. Northwest Power Planning Council, Portland, Oregon, December 2005.
15. **Trudel, M.** From physics to fish: understanding the effects of climate change on salmon. Gulf of Maine Research Institute, Portland, Maine, November 2005.
14. **Trudel, M.** To boldly go where all the salmon have gone before: a journey into the ocean ecology of Pacific salmon. Hatfield Marine Science Centre, Newport, Oregon, June 2005.
13. **Trudel, M.** Why does mercury concentration increase with fish age and size? Insight from a mass balance model. Collaborative Mercury Network (COMERN) Workshop, Winnipeg, Manitoba, November 2004.
12. **Trudel, M.** Winter ecology of Pacific salmon post smolts. University College Dublin, Dublin, Ireland, July 2004.
11. **Trudel, M.** An energetics approach to study the ocean ecology of juvenile Pacific salmon. Simon Fraser University, Vancouver, British Columbia, January 2004.
10. **Trudel, M.** Of lice and men. Institute of Ocean Science, Victoria, British Columbia, November 2003.

9. **Trudel, M.**, and Welch, D.W. There and back again: tracking the ocean migration of Pacific salmon. Institute of Ocean Science (Open House), Victoria, British Columbia, June 2003.
8. **Trudel, M.**, Jones, S.M., Morris, J.F.T., Welch, D.W., Farley, E. V., and Wing, B.L. Spatio-temporal variation in sea lice infection on Pacific salmon. Pacific Pink and Chum Salmon Workshop, Victoria, British Columbia, February 2003.
7. **Trudel, M.**, and Zamon, J.E. Columbia basin salmon off Canada - should we care? National Marine Fisheries Service (NMFS), Newport, Oregon, April 2002.
6. **Trudel, M.** Using ambient levels of mercury to evaluate the bioenergetic models of lake whitefish (*Coregonus clupeaformis*) and lake herring (*C. artedii*). Whitefish-Diporeia Workshop, Great Lakes Fishery Commission, Ann Arbor, Michigan, February 2002.
5. **Trudel, M.** Using chemical tracers for estimating the energy budget of fish. Annual Symposium of the Ontario Ministry of Natural Resources, Dorset, Ontario, April 2001.
4. **Trudel, M.** Utilisation de traceurs chimiques pour étudier la bioénergétique des poissons. Université Laval, Ville de Québec, Québec, December 2000.
3. **Trudel, M.** Why are dwarf fish so small? Fisheries and Oceans Canada, Nanaimo, British Columbia, December 1999.
2. **Trudel, M.** Linking mercury dynamics with fish bioenergetics. Environment Canada, Burlington, Ontario, December 1998.
1. **Trudel, M.** The use of chemical tracers for estimating fish energy budget in the field. U.S. Environmental Protection Agency, Narragansett, Rhode Island, April 1998.

## F. NATIONAL AND INTERNATIONAL PRESENTATIONS

51. **Trudel, M.** Considering ocean conditions for forecasting salmon returns to British Columbia. Fisheries and Oceans Canada Regional Science Symposium, Victoria, British Columbia, April 2010.
50. **Trudel, M.** Ocean conditions off British Columbia and Southeast Alaska (1998-2009). Ocean Ecology of Pacific Salmon Workshop, NOAA Fisheries, Santa Cruz, California, March 2010.
49. **Trudel, M.** Ocean recovery of endangered sockeye salmon stocks. American Fisheries Society Annual Symposium (Washington and British Columbia Chapter), Nanaimo, British Columbia, March 2010.
48. Mazumder, A., Mazumder, S., **Trudel, M.-(presenter)**, Farley, E., Eisner, L., Moss, J., and Murphy, J. Shifting warm to cold-water conditions and foodwebs of juvenile pink and chum salmon in the Eastern Bering Sea Ecosystem. American Fisheries Society Annual Symposium (Washington and British Columbia Chapter), Nanaimo, British Columbia, March 2010.
47. **Trudel, M.** Juvenile salmon on the continental shelf of BC and Alaska. State of the Pacific Ocean, Nanaimo, British Columbia, February 2010.

46. **Trudel, M.** Prey quality and foodweb interactions in the Strait of Georgia. State of the Strait, Sidney, British Columbia, January 2010.
45. **Trudel, M.** Using ocean conditions to forecast salmon returns: issues to consider. Wild Salmon Policy, Nanaimo, British Columbia, September 2009.
44. **Trudel, M.** Coastal migration of Pacific salmon: highway to heaven? Ecologically and Biologically Significant Areas, Nanaimo, British Columbia, June 2009.
43. **Trudel, M.**, Mackas, D., and Mazumder, A. Prey quality affect the production of Pacific salmon in the northern California Current System. Ocean Ecology of Pacific Salmon Workshop, NOAA Fisheries, Juneau, Alaska, April 2009
42. **Trudel, M.**, Mackas, D., and Mazumder, A. Prey quality affect the production of Pacific salmon in the northern California Current System. Canadian Conference For Fisheries Research (CCFFR), Ottawa, Ontario, January 2009.
42. Mazumder, A., Mazumder, S., **Trudel, M.-(presenter)**, Farley, E., Eisner, L., Moss, J., and Murphy, J. Shifting warm to cold-water conditions and foodwebs of juvenile Pacific salmon in the Eastern Bering Sea Ecosystem. Canadian Conference For Fisheries Research (CCFFR), Ottawa, Ontario, January 2009.
41. **Trudel, M.**, Mackas, D., and Mazumder, A. Prey quality affect the production of Pacific salmon in the northern California Current System. Eastern Boundary Upwelling Ecosystems Symposium, Las Palmas, Spain, June 2008.
40. **Trudel, M.**, Mackas, D., and Mazumder, A. Climate-mediated changes in prey quality and their impacts on the production of Pacific salmon. International Symposium on the Effects of Climate Change on World's Oceans. Gijon, Spain, May 2008.
39. **Trudel, M.** Using ocean conditions to forecast salmon returns: issues to consider. Ocean Ecology of Pacific Salmon Workshop, Nanaimo, British Columbia, April 2008.
38. **Trudel, M.**, Mackas, D., and Mazumder, A. Assessing the effects of ocean conditions on the growth and survival of Pacific salmon in British Columbia and Alaska. PICES, Victoria, British Columbia, November 2007.
37. **Trudel, M.**, Mackas, D., and Mazumder, A. Consideration of ocean conditions for the management of coho salmon in British Columbia. American Fisheries Society Annual Symposium, San Francisco, September 2007.
36. **Trudel, M.** Overview of the High Seas Salmon Program. NOAA Fisheries, Juneau, Alaska, July 2007
35. **Trudel, M.**, Mackas, D., and Mazumder, A. "Big-Mac Science": the importance of food quality for the production of salmon. Regional DFO Science Symposium, Institute of Ocean Sciences, Sidney, British Columbia, May 2007.

34. **Trudel, M.**, Mackas, D., and Mazumder, A. Assessing the effects of ocean conditions on the growth and survival of Pacific salmon in British Columbia and Alaska. Ocean Ecology of Pacific Salmon Workshop, NOAA Fisheries, Newport, March 2007.
33. **Trudel, M.**, Morris, J., Thiess, M., Sweeting, R., Fisher, J., Orsi, J., and Beacham, T. Salmon migration: A key factor to understand the effects of ocean conditions on salmon production. American Society of Limnology and Oceanography, Victoria, British Columbia, June 2006.
32. **Trudel, M.**, Thiess, M.E., Morris, J. F.T., Candy, J.R., Beacham, T.D., Higgs, D.A., and Welch, D.W. Overwinter mortality and energy depletion in juvenile Pacific salmon off the west coast of British Columbia and Alaska. North Pacific Anadromous Fish Commission, Sapporo, Japan, April 2006.
31. **Trudel, M.**, Cosgrove, J., Crawford, W., Ford, J., Galbraith, M., Gillespie, G., Mackas, D., Morris, J. Orsi, J. Wing, B. Living in a warmer world: Unusual observations from the Gulf of Alaska. Climate and Fisheries Conference. Victoria, British Columbia, November 2005 (poster)
30. **Trudel, M.**, Bucher, C., Farley, E.V. Jr., MacFarlane, B., Cassilas, E., Morris, J., Murphy, J., Sweeting, R., Thiess, M., and Welch, D. Influence of the marine feeding area on energy accumulation in juvenile coho and Chinook salmon. American Fisheries Society, Anchorage, Alaska, September 2005.
29. **Trudel, M.**, Jones, S., Thiess, M., Morris, J., Welch, D., Sweeting, R., Moss, J., Wing, B., Farley, E., Murphy, J., Baldwin, R., and Jacobson, K. Sea Lice infection on Pacific salmon along the west coast of North America. American Fisheries Society, Anchorage, Alaska, September 2005.
28. **Trudel, M.**, Welch, D.W., Morris, J.F.T., Farley, E.V. Jr., and Murphy, J. Influence of the marine feeding area on lipid accumulation in juvenile coho salmon. BASIS Workshop, Sapporo, Japan, November 2004.
27. Welch, D.W., **Trudel, M.-(presenter)**. Stock-specific impacts of marine climate change on B.C. salmon. Species at Risk 2004: Pathways to Recovery Conference, Victoria, British Columbia, March 2004.
26. **Trudel, M.**, Jones, S.M., Morris, J.F.T., Welch, D.W., Moss, J.H., Wing, B.L., Farley, E.V., Murphy, J.M., Baldwin, R.E., and Jacobson, K. C. Sea Lice on Pacific salmon: results from the 2002-2003 High Seas Salmon surveys. Sea Lice Workshop, Alert Bay, British Columbia, January 2004.
25. **Trudel, M.**, Welch, D.W., Morris, J.F.T., Candy, J.R., and Beacham, T.D. Using genetic markers to understand the coastal migration of juvenile coho and chinook salmon. Stock Identification Workshop, Honolulu, Hawaii, November 2003.
24. Welch, D.W., **Trudel, M.-(presenter)**, Morris, J.F.T., Candy, J.R., and Beacham, T.D. DNA-based evidence for stock-specific migration behaviour of Central Coast (Rivers Inlet) Sockeye Salmon. Stock Identification Workshop, Honolulu, Hawaii, November 2003.
23. **Trudel, M.**, Tucker, S., Morris, J.F.T., Higgs, D.A., and Welch, D.W. Overwinter energetics of juvenile Pacific salmon off the west coast of British Columbia and Alaska. American Fisheries Society, Ville de Québec, Québec, August 2003.

22. **Trudel, M.**, Welch, D.W., and Jones, S.R.M. Overwinter ecology of juvenile coho and chinook salmon at sea: lipid dynamics in juvenile coho and Chinook salmon. Science Symposium of Fisheries and Oceans Canada, Victoria, British Columbia, May 2003.
21. **Trudel, M.**, Tucker, S., Morris, J.F.T., Higgs, D.A., and Welch, D.W. Overwinter lipid dynamics in juvenile coho and chinook salmon. Western Division of the American Fisheries Society Annual Symposium, San Diego, California, April 2003.
20. **Trudel, M.**, Welch, D.W., Morris, J.F.T., Thiess, M., Candy, J. R., and Beacham, T.D. Columbia River salmon in British Columbia and Alaska. Lower Columbia River and Estuary Workshop, Portland, Oregon, March 2003.
19. **Trudel, M.**, Jones, S.M., Morris, J.F.T., Welch, D.W., Farley, E.V., and Wing, B.L. Sea lice infection on Pacific salmon: results from the 2002 High Seas Salmon surveys. Sea Lice Workshop, Vancouver, British Columbia, February 2003.
18. **Trudel, M.**, Tucker, S., Higgs, D.A. and Welch, D.W. Overwinter energetics of juvenile coho and chinook salmon. Coastal Salmon Ecosystem Workshop, National Oceanic and Atmospheric Administration (NOAA), Newport, Oregon, February 2003.
17. **Trudel, M.**, Tucker, S., Zamon, J.E., and Welch, D.W. Bioenergetics response of coho salmon to climate change. American Fisheries Society, Baltimore, Maryland, August 2002.
16. **Trudel, M.**, and Welch, D.W. Modeling the bioenergetic costs of metabolic rates in Pacific salmon and steelhead trout: an assessment of current models. American Fisheries Society, Baltimore, Maryland, August 2002.
15. **Trudel, M.**, Tucker, S., Zamon, J.E., and Welch, D.W. Bioenergetics response of coho salmon to climate change. American Society of Limnology and Oceanography, Victoria, British Columbia, June 2002.
14. **Trudel, M.**, Tucker, S., Zamon, J.E., and Welch, D.W. Bioenergetics response of coho salmon to climate change. Western Division of the American Fisheries Society Annual Symposium, Spokane, Washington, April 2002.
13. **Trudel, M.**, Tucker, S., Zamon, J.E., Morris, J.F.T., Higgs, D.A. and Welch, D.W. Bioenergetic response of coho salmon to climate change. North Pacific Anadromous Fisheries Commission, Vancouver, British Columbia, March 2002. (poster)
12. **Trudel, M.**, and Welch, D.W. Bioenergetic models under scrutiny: a plea for basic research. Coastal Salmon Ecosystem Workshop, National Oceanic and Atmospheric Administration (NOAA), Santa Cruz, California, January 2002.
11. **Trudel, M.**, Zamon, J., Tucker, S., and Welch, D.W. Are salmon starving in the ocean? Canadian Conference For Fisheries Research (CCFFR), Vancouver, British Columbia, January 2002.
10. **Trudel, M.**, Zamon, J., Tucker, S., and Welch, D.W. Are salmon starving in the ocean. Science Symposium of Fisheries and Oceans Canada, Victoria, British Columbia, November 2001.



9. **Trudel, M.**, Tucker, S., and Welch, D.W. Are salmon starving in the ocean? North Pacific Marine Science Organization, Victoria, British Columbia, October 2001.
8. **Trudel, M.**, Tucker, S., and Welch, D.W. Food consumption rates of juvenile salmon off the west coast of British Columbia. Coastal Salmon Ecosystem Workshop, Pacific Biological Station, Nanaimo, British Columbia, February 2001.
7. **Trudel, M.**, Tremblay, A., Schetagne, R., and Rasmussen, J.B. An energetic analysis of polymorphism in lake whitefish. CCFFR, Toronto, Ontario, January 2001.
6. **Trudel, M.** Estimating food consumption rates of fish using chemical tracers. Coastal Salmon Ecosystem Workshop, NOAA, Seattle, Washington, February 2000.
5. **Trudel, M.**, Tucker, S., and Rasmussen, J.B. Scaling of fish feeding rate in the field: an intra- and intergeneric analysis. CCFFR, Kingston, Ontario, January 1998.
4. **Trudel, M.**, and Rasmussen, J. B. Estimating fish energy budget using a mercury mass balance model. CCFFR, Montréal, Québec, January 1996.
3. **Trudel, M.**, and Boisclair, D. The relationship between activity and consumption rates of dace (*Phoxinus eos* x *P. neogaeus*) in the field. CCFFR, Saskatoon, Saskatchewan, January 1994.
2. **Trudel, M.**, and Boisclair, D. Variation of food consumption rates of fish in nature. CCFFR, Trent University, Peterborough, Ontario, January 1993.
1. **Trudel, M.**, and Boisclair, D. An *in situ* evaluation of the day-to-day variation in the quantity of food consumed by fish. CCFFR, University of Dalhousie, Halifax, Nova Scotia, January 1992.

## G. OTHER PRESENTATIONS

11. **Trudel, M.** A journey into the marine ecology of salmon. Pacific Biological Station, Nanaimo, January 2007.
10. **Trudel, M.** Bioenergetics and mercury dynamics in fish. Department of Biology, McGill University, Montréal, Québec, April 1999.
9. **Trudel, M.** The use of chemical tracers for estimating fish feeding rate in the field. Department of Biology, McGill University, Montréal, Québec, October 1997.
8. **Trudel, M.** Bioenergetics of mercury accumulation in fish. Department of Biology, McGill University, Montréal, Québec, April 1997.
7. **Trudel, M.**, Tucker, S., and Rasmussen, J. B. Modeling the consumption rates of freshwater and marine fishes: influence of size and water temperature. GRIL (Groupe de Recherche Interuniversitaire en Limnologie) Symposium, Station de Biologie des Laurentides de l'Université de Montréal, St-Hippolyte, Québec, February 1997.
6. **Trudel, M.**, and Rasmussen, J.B. Modeling the elimination of mercury by fish. GRIL Symposium, Station de la Huardière (UQAM), St-Michel-des-Saints, Québec, February 1996.

5. **Trudel, M.** Can growth dilution of persistent contaminants be detected in the field. Department of Biology, McGill University, Montréal, Québec, January 1996.
4. **Trudel, M.** Bioenergetics of mercury accumulation in fish. Department of Biology, McGill University, Montréal, Québec, March 1995.
3. **Trudel, M.** Bioénergétique d'une population de ventres rouges (*Phoxinus eos* x *P. neogaeus*). Département de sciences biologiques, Université de Montréal, Montréal, Québec, February 1994.
2. **Trudel, M.** Variations journalières de la quantité de nourriture consommée par les poissons. Département de sciences biologiques, Université de Montréal, Montréal, Québec, November 1992.
1. **Trudel, M.** Une évaluation in situ des variations journalières de la quantité de nourriture consommée par les poissons. Département de sciences biologiques, Université de Montréal, Montréal, Québec, December 1991.

#### **H. TEACHING EXPERIENCE**

15. 2010. Can we anticipate the effects of climate change on Pacific salmon. University of Victoria, Victoria, British Columbia, November 2010.
14. 2010. High Seas Salmon Program. Vancouver Island University, Nanaimo, British Columbia, February 2010.
13. 2009. Global climate change and marine fishery resources. Vancouver Island University, Nanaimo, British Columbia, March 2009.
12. 2009. Global climate change and marine fishery resources. University of Victoria, Victoria, British Columbia, March 2009.
11. 2008. Global climate change and marine fishery resources. Capilano-College, Vancouver, British Columbia, January 2008.
10. 2007. Impacts of climate change on Pacific salmon: the good, the bad, and the ugly. Capilano-College, Vancouver, British Columbia, February 2007.
9. 2006. Response of coastal ecosystems to global warming. Guest lecture in Marine Ecology, Department of Fisheries and Aquaculture. Malaspina-University College, Nanaimo, British Columbia, April 2006.
8. 2006. Assessing the response of coastal ecosystems to climate change and global warming: the importance of long-term research and monitoring programs. Guest Lecture in Advanced Aquatic Ecology, Department of Biology, University of Victoria, Victoria, British Columbia, April 2006.

7. 2004. Using chemical tracers in aquatic food web ecology . Guest lecture in Limnology , Department of Fisheries and Aquaculture. Malaspina-University College, Nanaimo, British Columbia, October 2004.
6. 1998. Planned and unplanned statistical comparisons. Guest Lecture in Advanced Biometry. Department of biology, McGill University, Montreal, Quebec.
5. 1998. Teaching Assistant in Ecology . Department of biology , McGill University , Montreal, Quebec.
4. 1997. Application of statistics in ecology . Guest Lecture in Introduction to Biometry . Department of biology, McGill University, Montreal, Quebec.
3. 1997. Teaching Assistant in Biometry . Department of biology, McGill University, Montreal, Quebec.
2. 1992. Teaching Assistant in Experimental Design. Département de sciences biologiques, Université de Montréal, Montreal, Quebec.
1. 1990-1993. Teaching Assistant in Biometry. Département de sciences biologiques, Université de Montréal, Montreal, Quebec.

## I. SUPERVISORY EXPERIENCE

### Post-Doc:

Rana El-Sabaawi. 2010-. Department of biology, University of Victoria. **Research project:** "Food web quality and juvenile salmon production"  
Strahan Tucker. 2008-2011. Fisheries and Oceans Canada. **Research project:** "Juvenile salmon migration and bioenergetics"

M.Sc. Dan Bevan. 2009-. Department of biology, University of Victoria (supervisory committee). **Thesis Title:** "Regional variation in prey quality for juvenile salmon"

Erica Jenkins. 2009-. Department of biology, University of Victoria (co-supervisor). **Thesis Title:** "Trophic variability within and among juvenile salmon species in years of contrasting ocean conditions"

Jérôme Plourde. 2008-2011. Département de sciences appliquées, Université du Québec à Chicoutimi (co-supervisor). **Thesis Title:** "Bioenergetics of rainbow smelt in Lac St-Jean"

Katherine Middleton. 2008-2011. Department of biology, University of Victoria (co-supervisor). **Thesis Title:** "Factors affecting the early marine growth and survival of juvenile Chinook salmon on the west coast of Vancouver Island, BC"

Alison Edwards. 2005-. Department of biology, University of Victoria (supervisory committee). **Thesis Title:** "Mercury accumulation in marine fish"

Ivano Pazzia. 2000. Department of biology, McGill University (co-supervisor). **Thesis Title:** "The influence of food web structure on the growth and bioenergetics of lake trout (*Salvelinus namaycush*)"

- B.Sc. Rachel Saraga. 2009. Department of fisheries and aquaculture, Vancouver Island University. **Project Title:** “An analysis of simple regression models as a means to predict daily food consumption rates in fishes”
- Lisa Hartford. 1999. Department of biology, McGill University (co-supervisor). **Thesis Title:** “Estimating the assimilation efficiency of protein and mercury in wild fish”
- Rosalie Allen. 1997. Department of biology, McGill University (co-supervisor). **Thesis Title:** “Modelling the elimination of PCBs in fish”

## J. PROFESSIONAL ROLES AND SERVICES

### 1. International, National, and Regional Committees

2008-2011. Associate Editor for the Canadian Journal of Fisheries and Aquatic Sciences.

2007-2011. College of Reviewers, Industrial Research and Development Program, Natural Science and Engineering Council of Canada.

2007-2011. Strait of Georgia Ecosystem Research Initiative. Member of the Steering Committee, Fisheries and Oceans Canada, Nanaimo, British Columbia.

2005. Sea Lice Working Group, Group, Member of the Committee on Scientific Research, University of British Columbia, Vancouver, British Columbia.

2004. Pacific Scientific Advice Review Committee, Fisheries and Oceans Canada, Nanaimo, British Columbia.

2003. North Pacific Anadromous Fish Commission, Member of the Committee on Salmon Marking.

2002-2004. North Pacific Anadromous Fish Commission, Member of the Committee on Scientific Research for the Bering-Aleutian Salmon International Survey (BASIS).

2002-2004. Sea Lice Working Group, Member of the Committee on Scientific Research, Fisheries and Oceans Canada, Nanaimo, British Columbia.

2000-2001. Pacific Salmon Commission. Member of the Committee on Scientific Research for the Early Migration of the Late-Run Sockeye Salmon.

### 2. Reviewed manuscripts submitted for publication in

[1] *Aquatic Living Resources*; [2] *Bulletin of the North Pacific Anadromous Fish Commission*; [3] *Canadian Journal of Fisheries and Aquatic Sciences*; [4] *Deep Sea Research*; [5] *Ecological Applications*; [6] *Environmental Science and Technology*; [7] *Estuarine, Shelf and Coastal Research*; [8] *Fisheries Oceanography*; [9] *Fishery Bulletin*; [10] *Global Change Biology*; [11] *Hydrobiologia*; [12] *Limnology and Oceanography*; [13] *Journal of Environmental Radioactivity*; [14] *Journal of Fish Biology*; [15] *North American Journal of Fisheries Management*; [16] *Pacific Scientific Advice Review Committee*; [17] *Progress in Oceanography*; [18] *Transactions of the American Fisheries Society*; [19] *Water, Air and Soil Pollution*.

### 3. Reviewed grant applications for

*[1] Arctic-Yukon-Kuskokwin Sustainable Salmon Initiative; [2] DFO Strait of Georgia Ecosystem Research Initiative; [3] DFO Subvention Research Grants Pilot Program; [4] Natural Sciences and Engineering Research Council of Canada; [5] University of Wisconsin Sea Grant Program.*

### 4. Conferences and Workshops

2010. Co-Chair of the Pink and Chum Salmon Workshop. Nanaimo, British Columbia, March 2010.

2009-2010. Co-Chair of the Salmon Ocean Ecology Workshop. Juneau (Alaska) and Santa Cruz (California).

2008. Chair of the Salmon Ocean Ecology Workshop. Nanaimo, British Columbia, May, 2008.

2007. Chair of the Regional DFO Science Symposium – Pacific Region. Fisheries and Oceans Canada, Sidney, May 2007.

2006. Freshwater and marine processes regulating salmon productivity, Session Co-Chair. American Society of Limnology and Oceanography Summer Meeting, Victoria, British Columbia, June 2006.

2004. Member of the Organizing Committee of the Bering-Aleutian Salmon International Survey Workshop. North Pacific Anadromous Fish Commission, Sapporo, Japan, October 2004.

2003. Ocean ecology of Pacific salmon, Session Co-Chair. Western Division of the American Fisheries Society Annual Symposium, San Diego, California, April 2003.