

## *Curriculum vitae*

### **Personal**

Name: Jeffrey Alexander Hutchings  
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Halifax, Nova Scotia B3H 4J1 Canada  
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email: *Jeff.Hutchings@dal.ca*  
Citizenship: Canadian

### **Education**

1991	Ph.D.	Biology	Memorial University of Newfoundland
1985	M.Sc.	Biology	Memorial University of Newfoundland
1980	B.Sc.	Zoology	University of Toronto

### **Academic Experience**

2006-2009	Professeur Associé	Université Laval
2004-present	Professor	Dalhousie University
2002-present	Canada Research Chair in Marine Conservation & Biodiversity	Dalhousie University
2002	Visiting Professor	University of Edinburgh
2002	Visiting Professor	University of Glasgow
2000-2004	Associate Professor	Dalhousie University
1995-1999	Assistant Professor	Dalhousie University
1993-2004	Adjunct Professor	Memorial Univ. of Newfoundland
1993-1994	NSERC Visiting Fellow	Fisheries & Oceans (Newfoundland)
1991-1992	NSERC Postdoctoral Fellow	University of Edinburgh
1987-1990	NSERC Postgraduate Scholar	Memorial Univ. of Newfoundland
1985-1986	Research Associate	Nfld. Inst. For Cold Ocean Science

### **Editorial Responsibilities**

2009-2011	Editorial Board	<i>Proceedings Royal Society B</i>
2008-present	Editorial Board	<i>Environmental Reviews</i>
2007-present	Editorial Board	<i>Evolutionary Applications</i>
2007	Guest Subject Editor	<i>Ecological Applications</i>
2004-2007	Editorial Board	<i>Functional Ecology</i>
2003-2007	Editor	<i>Canadian Journal of Fisheries and Aquatic Sciences</i>
1997-2002	Associate Editor	<i>Canadian Journal of Fisheries and Aquatic Sciences</i>
1999-2001	Associate Editor	<i>Transactions of the American Fisheries Society</i>

### **Professional Responsibilities**

2008-	Member, Committee on Expert Panels, <i>Royal Society of Canada</i>
2008-2009	Chair, Vanier Canada Graduate Scholarship Program Committee, NSERC
2006-2010	Chair, <i>Committee on the Status of Endangered Wildlife in Canada</i> (COSEWIC)
2006-2007	Council Member, <i>Canadian Society for Ecology and Evolution</i>
2005-2006	Co-Chair, Evolution & Ecology Grant Selection Committee (GSC 18), NSERC

- 2003-2005 Member, Evolution & Ecology Grant Selection Committee (GSC 18), NSERC  
 2001-2012 Non-Government Science Member, *Committee on the Status of Endangered Wildlife in Canada* (COSEWIC)  
 2000-2001 Member, Expert Panel on Future of Food Biotechnology, *Royal Society of Canada*  
 1999-2007 Member, Marine Fish Species Specialist Committee, *Committee on the Status of Endangered Wildlife in Canada* (COSEWIC)  
 1999-2002 Council Member, *Canadian Society of Zoologists*  
 1995-1996 Chair, *Ecology, Ethology & Evolution Section*, Canadian Society of Zoologists

### **Plenary Lectures, Honours and Awards**

- 2009 Plenary Speaker, *139<sup>th</sup> Meeting of the American Fisheries Society*, Nashville, TN, USA  
 2008 Invited Speaker, *Third Annual Canada Ocean Lecture*, Vancouver, BC  
 2008 Keynote Speaker, *7<sup>th</sup> International Flatfish Symposium*, Sesimbra, Portugal  
 2008 Keynote Speaker, *Society for Experimental Biology Symposium*, Sète, France  
 2008 Distinguished Lecturer, Faculty of Science Seminar Series, University of Windsor  
 2008 Keynote Speaker, *61<sup>st</sup> Canadian Conference For Fisheries Research*, Halifax, NS  
 2006 Keynote Speaker, *Bevan Lecture Series on Sustainable Fisheries*, Univ. Washington, Seattle  
 2005 Keynote Speaker, *Société Québécoise pour l'Étude Biologique du Comportement*, Montreal  
 2005 Keynote Speaker, *American Assoc. for the Advancement of Science*, Washington, DC  
 2004 Keynote Speaker, *Ecological and Evolutionary Ethology of Fishes*, Sauðarkrokur, Iceland  
 2004 Plenary Speaker, *Royal Society (London) Scientific Discussion Mtg on Extinction Rates*  
 2004 Plenary Speaker, *In Pursuit of Ecological Sustainability* IFAW Forum, Limerick, Ireland  
 2004 Plenary Speaker, Norwegian Research Council Conference on Atlantic Salmon Research, Trondheim, Norway (declined)  
 2003 Plenary Speaker, Canada-UK Colloquium on *Science and Public Policy*, Bristol, UK  
 2003 Invited Speaker, NSERC's *Bacon and Eggheads Seminar Series*, Parliament Hill, Ottawa  
 2003 Plenary Speaker, World Summit on Salmon, Vancouver, British Columbia  
 2002 George A. Lubinsky Memorial Lecturer, University of Manitoba, Winnipeg  
 2001 Plenary Speaker, Fish Biodiversity & Conservation, *Fisheries Society of the British Isles*  
 1999 Petro-Canada Young Innovator Award  
 1998 Freedom of Information Award, B.C. Freedom of Information & Privacy Association  
 1996 Killam Prize, Faculty of Science, Dalhousie University  
 1996 J.C. Stevenson Memorial Lecturer, *Canadian Journal of Fisheries & Aquatic Sciences*  
 1994 Wilfred Templeman Publication Award, Dept. Fisheries & Oceans (Newfoundland)  
 1993 Visiting Fellowship, Natural Sciences and Engineering Research Council  
 1990 Postdoctoral Fellow, Natural Sciences and Engineering Research Council  
 1989 Graduate Fellowship, Memorial University of Newfoundland  
 1988 Olin Fellowship, Atlantic Salmon Federation  
 1987 Postgraduate Scholarship, Natural Sciences and Engineering Research Council  
 1980 Innis College Medal, University of Toronto  
 1979 Studentship in Ichthyology, Royal Ontario Museum & University of Toronto

### **Professional Reviewing and Advisory Responsibilities**

- 2008 Independent Reviewer, *Central Valley (California) Chinook Salmon ESU Recovery Plan*  
2008 Independent Reviewer, *Central Valley (California) CSteelhead ESU Recovery Plan*  
2008 Independent Reviewer, *Central California Coast Coho Salmon ESU Recovery Plan*  
2007 External Examiner, PhD Thesis, Université Laval, Québec  
2005 Reviewer, U.S. Nat. Mar. Fish. Serv. *Endangered Species Act* Status Rept on Pacific Herring  
2005 Reviewer, Nat. Res. Council (U.S.) Report on Great Lakes-St. Lawrence River Ecosystem  
2005 External Examiner, PhD Thesis, University of Toronto  
2004 Invited Expert, *Nordic Council of Ministers Workshop on Genetic Diversity in Commercial Fishes*  
2004 Representative, *Royal Society of Canada*, U.S. National Academies Meeting on the Elimination of Non-Indigenous Species into the Great Lakes  
2003 External Examiner, PhD Thesis, University of Oslo, Oslo, Norway  
2002 External Reviewer, Atlantic Salmon National Recovery Strategy, Dept. Fisheries & Oceans  
2002 External Examiner, PhD Thesis, Université Laval, Québec  
2002 External Examiner, PhD Thesis, University of Göteborg, Göteborg, Sweden  
2002 External Reviewer, Dept. Fisheries & Oceans Species Recovery Strategies for Atlantic Salmon  
2000 External Examiner, PhD Thesis, University of Oslo, Oslo, Norway  
2000 External Examiner, PhD Thesis, Swedish Univ. of Agricultural Sciences, Umeå, Sweden  
1995- Groundfish, Invertebrate & Salmon Stock Assessments, Dept. Fisheries & Oceans  
1999 Stock Assessment Review Committee, National Marine Fisheries Service, Woods Hole  
1999 External Examiner, PhD Thesis, Department Biology, University of Guelph  
1999 External Reviewer, NSERC Strategic Grant Mid-Term Review, Memorial University  
1998 External Reviewer, Department of Fisheries & Oceans Advisory Panel on Interactions Between Wild and Farmed Atlantic Salmon in the Maritime Provinces  
1998 External Reviewer, Department of Fisheries & Oceans Advisory Panel on Interactions Between Wild and Farmed Striped Bass in the Maritime Provinces  
1996 Review Committee, *Masters of Maritime Studies*, Memorial University of Newfoundland  
1996 Member, Genetics Subgroup, Scientific Working Group on Salmonid Introductions & Transfers (North American Commission/North Atlantic Salmon Conserv. Organisation)  
1995 External Examiner, PhD Thesis, University of Bergen, Norway  
1995 External Reviewer, Northern Cod Science Program, Department of Fisheries & Oceans, Newfoundland Region  
1994- Grants (Strategic and Research) for NSERC, NERC (UK), NSF (USA)  
1988- Numerous peer-reviewed journals, including *American Naturalist*, *Canadian Journal of Fisheries & Aquatic Science*, *Ecology*, *Evolution*, *Evolutionary Ecology*, and *Nature*

### **Dalhousie University Administrative Responsibilities**

- 2008-2009 Member, Promotion and Tenure Committee, Faculty of Science  
2005- Member, Appointments and Awards Committee, Department of Biology  
2005 *Chair*, Search Committee for Canada Research Chair Position, Dept Biology  
2002-2003 *Chair*, Search Committee for Asst. Prof. Position, Department of Biology

1998-2001 *Chair*, Curriculum Committee, Department of Biology  
 1998-2001 Member, Curriculum Committee, Faculty of Science  
 1998 Co-ordinator, NSERC Site Visit  
 1998-2000 *Chair*, Priority Appointments Committee, Dept. Biology  
 1996-2001 Aquatron Management Board  
 1996-1997 Dorothy J. Killam Lecture Series Committee  
 1996-1998 *Chair*, Seminar Committee, Department of Biology  
 1995-2001 Public Relations Committee, Department of Biology

### **Dalhousie University Teaching Responsibilities**

#### ***Undergraduate***

ECOLOGY AND EVOLUTION OF FISHES (Biol 3067). 1995-present. Third-year class. Students: 25-65. Taxonomy and systematics; functional morphology; evolutionary ecology; fisheries science and management, with particular emphasis on Canadian fishes.  
 INTRODUCTORY ECOLOGY (Biol 2060). 1996-2001. Second-year class. Students: 100-150. Models of population growth, competition, predator-prey interactions, conservation biology.  
 RESOURCE ECOLOGY (Biol 3063). 1998-2000. Third-year class. Students: 50-90. Conservation biology, species invasions, models of fisheries science and management.  
 SPECIAL TOPICS COURSES. Class sizes: 1.  
 2008 Causes and Consequences of Human-Induced Evolution  
 1998 Minimum Viable Population Analyses  
 1997 Influence of Fishing on Coral Reef Fishes  
 1995 Integration of Fisher's Local Knowledge with Fisheries Management

#### ***Graduate***

ASSESSMENT OF SPECIES AT RISK IN CANADA. 2007. Graduate student module.  
 FOUNDATIONS OF ECOLOGY. 2000, 2004, 2008. Graduate student module.  
 LIFE HISTORY STRATEGIES. 1996, 1998. Graduate student module.  
 NATURAL SELECTION. 2003. Graduate student module.  
 PRACTICAL & CONCEPTUAL ISSUES IN BIOLOGICAL RESEARCH. 1997. Graduate student module.  
 SPECIAL TOPICS COURSES (Biol 4806, 5832).  
 2003 Life History Strategies in Fish  
 1998 Evolutionary Models of Foraging Behaviour  
 1996 Models: From Ideal Gases to Ecology  
 1996 Dealing With Uncertainty in Fisheries Management  
 1995 Life History Strategies of Cephalopods

### **International University Teaching Responsibilities**

***DEVELOPMENT AND MANAGEMENT OF MARINE PROTECTED AREAS.*** 2004. Nordic Council of Ministers, Finnish Ministry of Environment, and IUCN. Kasnäs, Finland. (Unable to attend.)  
***HISTORY OF MARINE ANIMAL POPULATIONS: OCEAN SUSTAINABILITY THROUGH THE AGES.*** 2001. University of Southern Denmark, Esbjerg, Denmark. (Unable to attend.)  
***POPULATION CONSEQUENCES OF ENVIRONMENTAL FLUCTUATIONS.*** 1999. Department of Marine

Biology, University of Bergen, Bergen, Norway.

**LIFE HISTORY THEORY.** 1992. Department of Ecology and Department of Marine Biology, University of Bergen, Bergen, Norway.

**LIFE HISTORY THEORY AND EMPIRICAL DATA.** 1992. Dept Animal Ecology, University of Umeå, and Dept of Aquaculture, Swedish Univ. of Agricultural Science, Umeå, Sweden.

### **Postdoctoral, Graduate and Honours Student Supervision**

#### ***Postdoctoral Fellows***

Fraser, Dylan (2005-2009; NSERC Postdoctoral Fellow) Conservation genetics of Atlantic salmon.

Purchase, Craig (2003-2005; NSERC Postdoctoral Fellow) Life history invariants and phenotypic plasticity.

Rowe, Sherrylynn (2004-2005; NSERC Postdoctoral Fellow) Atlantic cod reproductive success.

Jones, Matthew (2002) Genetic analyses of individual reproductive success in fishes.

Koops, Marten (2001-2002; NSERC Postdoctoral Fellow) Stochastic dynamic modelling of fish life histories and population dynamics.

#### ***PhD Students***

Benoît, Hugues (in progress; co-supervised with Doug Swain) Community ecology of fishes in the northwest Atlantic.

Debes, Paul (in progress) Fitness consequences of outbreeding depression and life-history variation in Atlantic salmon.

Rollinson, Njal (in progress; NSERC Canada Graduate Scholar) Life-history trade-offs between offspring size and offspring number in animals.

Weir, Laura K. (2008; NSERC Canada Graduate Scholar) Consequences of the intensity of male-male competition on the mating system of Atlantic salmon (*Salmo salar*).

Adams, Blair K. (2007; NSERC Industrial Postgraduate Scholar) Reproductive success and evolutionary persistence of alternative migratory forms in Atlantic salmon.

Baum, Julia (2007; NSERC Postgraduate Scholar; co-supervised with Ransom Myers) Correlates of population recovery in marine fishes.

Hardie, David C. (2007; NSERC & Killam Postgraduate Scholar) Evolutionary ecology of Arctic marine fishes.

den Heyer, Nell (2006) Patterns and mechanisms of American lobster (*Homarus americanus*) movement in the Northumberland Strait, Canada.

Rowe, Sherrylynn (2004) Patterns and processes of mating in Atlantic cod, *Gadus morhua*.

Jones, Matthew W. (2001) Application of genetic markers to conservation biology: salmonid fish in Eastern Canada.

MacDonald, Janice F. (not completed; NSERC Postgraduate Scholar) Alternative reproductive strategies in male white sticklebacks, *Gasterosteus* sp.

**MSc Students**

- Houde, Aimee Lee (in progress) Outbreeding depression in Atlantic salmon.
- Mogensen, Stephanie (in progress) Life-history trade-offs in fishes.
- Normandeau, Éric (2008; co-supervised with Louis Bernatchez, Université Laval) Microarrays in farmed and wild Atlantic salmon.
- Darwish, Tamara (2006) Disentangling genetic and environmental influences on brook trout life histories.
- Bowlby, Heather D. (2006) Individual variability in the movement and dispersal of American lobster, *Homarus americanus*.
- Marcil, Julie (2004) Genetic versus environmental components of phenotypic variation in body shape among populations of Atlantic cod (*Gadus morhua*).
- McCairns, Scott (2004) Adaptive variability in response to differences in seasonality along an altitudinal gradient.
- Weir, Laura K. (2003) The influence of artificial selection on the spawning behaviour and reproductive success of male Atlantic salmon, *Salmo salar*.
- Lawlor, Jennifer (2003) Genetic differences in fitness-related traits among populations of wild and farmed Atlantic salmon (*Salmo salar*).
- Jewett, Tara (2001) Temporal and spatial variation in reproductive investment within and among populations of Atlantic cod, *Gadus morhua*.
- Adams, Blair K. (1999) Variation in genetic structure and life histories among populations of brook char, *Salvelinus fontinalis*, from insular Newfoundland, Canada.
- George, Sarah N. (1998; Commonwealth Scholar) Selectivity of coral reef fishes in a Caribbean trap fishery.

**BSc Honours Students**

- Arbour, Jessica (in progress) Life histories of non-commercial marine fishes.
- Morris, Matthew (in progress) Interactions between farmed and wild Atlantic salmon.
- Prefontaine, Renée (in progress) Collapse and recovery of marine fishes.
- Heggelin, Anthony (2008) Influence of exploitation on brook trout life histories.
- Houde, Aimee Lee (2007) Introgression and predator-avoidance behaviour in salmon.
- de Mestral Bezanson, Louise (2005) Individual reproductive success in Atlantic cod.
- Piché, Jacinthe (2004) Genetic basis to population differences in Atlantic salmon life history.
- Hubleby, Brad (2003) Population differences in Atlantic salmon morphometry.
- Fung, Jonathan (2001) Environmental sex determination in a cichlid fish.
- Gerber, Leah (2000) Sex-biased movement, dispersal, and seasonal growth rate in brook trout.
- Smith, Cheryl-Anne (2000) Lipid composition of reproductive subtidal and intertidal male white sticklebacks, *Gasterosteus* sp.
- Fitzgerald, Gretchen (1999) Life histories of three- and four-spine stickleback populations.
- Pickle, Alison (1997) Overwinter changes in lipid composition of brook trout, *Salvelinus fontinalis*, in relation to size, sex, and reproductive state.
- Joyce, Warren (1997) Migration of the porbeagle shark, *Lamna nasus*, in eastern Canada.
- Jewett, Tara (1996) Effect of time of day on research survey estimates of Atlantic cod biomass.

**Research Grants and Contracts**

<b><i>Duration</i></b>	<b><i>Agency</i></b>	<b><i>Title</i></b>	<b><i>Responsibility</i></b>	<b><i>Total</i></b>
2008-2013	NSERC (Discovery Grant)	Evolutionary ecology and conservation biology of fishes	Sole	\$285,650
2008-2011	NSERC (Discovery Grant Accelerator Suppl.)	Evolutionary ecology and conservation biology of fishes	Sole	\$120,000
2008-2013	NSERC (Northern Research Suppl.)	Ecology of peripheral fish populations at their northern extremes	Sole	\$60,000
2008-2013	NSERC (Major Resources Support)	Major resources support for Aquatron Laboratory	Applicant & 10 co-applicants	\$546,000
2008-2009	NSERC (Research Tools & Instruments)	Fish dispersal and movement detection technology	Sole	\$40,898
2006-2009	NSERC (Strategic Grant)	Multi-generational interactions between farm & wild Atlantic salmon: a risk assessment perspective	Applicant: Co-applicant Louis Bernatchez	\$519,330
2005-2008	NSERC (MFA)	Infrastructure Support for the Aquatron Laboratory	Applicant & 10 Co-Applicants	\$375,000
2005-2006	Polar Continental Shelf Project	Evolutionary ecology of Arctic char on Ellesmere Island	Sole	\$70,000
2004-2006	National Geographic Society (U.S.)	Evolutionary Ecology of Arctic Atlantic Cod	Sole	\$28,350
2004-2008	NSERC (Northern Research Supplement)	Evolutionary ecology of Arctic fishes	Sole	\$30,000
2004-2005	WWF Endangered Species Recovery Fund	Mechanisms of non-recovery in Atlantic cod	Sole	\$18,000

<i>Duration</i>	<i>Agency</i>	<i>Title</i>	<i>Responsibility</i>	<i>Total</i>
2004-2005	SSHRC	Canada's marine species at risk: science and law	with David VanderZwaag	\$26,500
2004-2005	Polar Continental Shelf Project	Evolutionary ecology of Arctic marine fishes	Sole	\$75,000
2003-2007	NSERC (Discovery Grant)	Causes and consequences of life history variation in fish	Sole	\$200,000
2003-2004	Polar Cont. Shelf Proj.	Evolutionary ecology of Arctic marine fishes	Sole	\$45,000
2003-2004	North. Sci. Train. Prog.	Atlantic cod populations on Baffin Island	Sole	\$3,800
2001-2004	Orion Seafoods	Dispersal and migration of American lobster	Sole	\$30,000
2001-2004	Fisheries & Oceans	American lobster spatial dynamics	Sole	\$30,000
2000-2004	NSERC (Strategic)	Genetic and environmental determinants of population variation in Atlantic cod	PI Hutchings; co-applicants: J Brown, D Swain, W Driedzic	\$750,732
2000-2003	NSERC (Aquanet NCE)	Genetic and ecological interactions between farm and wild Atlantic salmon	Sole	\$360,500
2000-2004	NSERC (MFA)	Infrastructure Support for the Aquatron Laboratory	Applicant & 15 Co-Applicants	\$350,000
1999-2003	NSERC (Research Grant)	Influence of Environmental Heterogeneity on Life History Evolution	Sole	\$134,400
1999-2000	Petro-Canada	The Influence of Fishing on the Spawning Behaviour of Atlantic Cod	Sole	\$25,000

<i>Duration</i>	<i>Agency</i>	<i>Title</i>	<i>Responsibility Total</i>	
1999-2000	NSERC (Equipment)	Vehicle in Support of Field Research	R. Scheibling \$30,000 & J. Hutchings	
1997-1999	Indian Bay Ecosys. Corp	Genetic Analysis of Brook Trout Populations	Sole	\$20,000
1997-1998	Fisheries & Oceans	Inshore and Offshore Discarding of Atlantic Cod	Sole	\$6,400
1996-1997	Fish. & Oceans	Partitioning Cod Mortality	Sole	\$16,000
1996-1997	Parks Canada	Genetic & Ecological Analysis of Brook Trout	Sole	\$32,500
1995-1999	NSERC (Research Grant)	Influence of Environmental Heterogeneity on Life History Evolution	Sole	\$105,780
1995-1997	Fisheries & Oceans	Influence of Trawling on Atlantic Cod Spawning	Sole	\$26,000
1995-1996	Fisheries & Oceans	Discard Estimates in the Northern Cod Fishery	Sole	\$15,450
1994	Fisheries & Oceans	Minimum Viable Population Size in Salmon	Sole	\$5,000
1992-1993	Fisheries & Oceans	Interannual Variability in Cod Spawning	Sole	\$27,400
1985-1986	Fisheries & Oceans	Precocious Maturation in Male Atlantic Salmon	with Ransom Myers	\$41,887

## **Research Publications**

### ***Refereed Publications***

**Hutchings, J.A.** *Submitted*. Avoidance of fisheries-induced evolution: management implications for catch selectivity and limit reference points. *Evol. Applic.*

Skjæraasen, J.E. and **J.A. Hutchings**. *Submitted*. Shifting dominance hierarchies and reproductive success in a shoal of wild and reared Atlantic cod, *Gadus morhua* L. *Env. Biol. Fish.*

Den Heyer, C.E., Chadwick, E.M.P., and **J.A. Hutchings**. 2009. Diffusion of American lobster (*Homarus americanus*) in Northumberland strait, Canada. *Can. J. Fish. Aquat. Sci.* 66 (In press)

Darwish, T.L., and **J.A. Hutchings**. 2009. Genetic variability in reaction norms between farmed and wild backcrosses of Atlantic salmon (*Salmo salar*) *Can. J. Fish. Aquat. Sci.* 66: 83-90.

Houde, A.L.S., Fraser, D.J., and **J.A. Hutchings**. 2009. Reduced anti-predator responses in multi-generational hybrids of farmed and wild Atlantic salmon (*Salmo salar* L.). *Cons. Gen.* (In press)

**Hutchings, J.A.**, and M. Festa-Bianchet. 2009. Scientific advice on species at risk: a comparative analysis of status assessments of polar bear, *Ursus maritimus*. *Environ. Rev.* (In press)

**Hutchings, J.A.**, and M. Festa-Bianchet. 2009. Canadian species at risk (2006-2008), with particular emphasis on fishes. *Environ. Rev.* (In press)

Lawlor, J.L., Dacanay, A., **Hutchings, J.A.**, Brown, L.L., and S.A. Sperker. 2009. Differences in pathogen resistance within and among cultured, conservation-dependent, and endangered populations of Atlantic salmon, *Salmo salar* L. *Env. Biol. Fish.* 84: 69-78.

Morris, M.R.J., Fraser, D.J., Heggelin, A.J, Whoriskey, F.W., Carr, J.W., O'Neil, S.F, and **J.A. Hutchings**. 2008. Prevalence and recurrence of escaped farmed Atlantic salmon (*Salmo salar*) in eastern North American rivers. *Can. J. Fish. Aquat. Sci.* 65: 2807-2826.

Bowlby, H.D., Hanson, J.M., and **J.A. Hutchings**. 2008. Stock structure and seasonal distribution patterns of American lobster, *Homarus americanus*, inferred through movement analyses. *Fish. Res.* 90: 279-288.

Fraser, D.J., Cook, A.M., Eddington, J.D., Bentzen, P., and **J.A. Hutchings**. 2008. Mixed evidence for reduced local adaptation in wild salmon resulting from interbreeding with

- escaped farmed salmon: complexities in hybrid fitness. *Evolutionary Applications* 1: 501-512.
- Hardie, D.C., Renaud, C.B., Ponomarenko, V.P., Mukhina, N.V., Yaragina, N.A., Skjaeraasen, J.E., and **J.A. Hutchings**. 2008. The isolation of Atlantic cod, *Gadus morhua* (Gadiformes), populations in northern meromictic lakes – a recurrent Arctic phenomenon. *J. Ichthyol.* 48: 230-240.
- Hutchings, J.A.** 2008. Ransom Aldrich Myers (1952-2007): in memoriam. *Can. J. Fish. Aquat. Sci.* 65: vii-xix.
- Hutchings, J.A.**, and D.J. Fraser. 2008. The nature of fishing- and farming-induced evolution. *Molecular Ecology* 17: 294-313.
- Hutchings, J.A.**, and S. Rowe. 2008. Consequences of sexual selection for fisheries-induced evolution: an exploratory analysis. *Evolutionary Applications* 1: 129-136.
- Hutchings, J.A.**, and S. Rowe. 2008. Response: on the consequences of sexual selection for fisheries-induced evolution. *Evolutionary Applications* 1: 650-651.
- Piché, J., **Hutchings, J.A.**, and W. Blanchard. 2008. Genetic variation in threshold reaction norms for alternative reproductive tactics in male Atlantic salmon, *Salmo salar*. *Proc. R. Soc. B* 275: 1571-1575.
- Purchase, C.P., and **J.A. Hutchings**. 2008. A temporally stable spatial pattern in the spawner density of a freshwater fish: evidence for an ideal despotic distribution. *Can. J. Fish. Aquat. Sci.* 65: 382-388.
- Rowe, S., and **J.A. Hutchings**. 2008. A link between sound producing musculature and mating success in Atlantic cod. *J. Fish Biol.* 72: 500-511.
- Rowe, S., **Hutchings, J.A.**, Skjæraasen, J.E., and L. Bezanson. 2008. Morphological and behavioural correlates of reproductive success in Atlantic cod *Gadus morhua*. *Mar. Ecol. Prog. Ser.* 354: 257-265.
- Williams, J.G., Zabel, R.W., Waples, R.S., **Hutchings, J.A.**, and W.P. Connor. 2008. Potential for anthropogenic disturbances to influence evolutionary change in the life history of a threatened salmonid. *Evolutionary Applications* 1: 271-285.
- Bowlby, H.D., Hanson, J.M., and **J.A. Hutchings**. 2007. Resident and dispersal behavior among individuals within a population of American lobster, *Homarus americanus*. *Mar. Ecol. Prog. Ser.* 331: 207-218.

- Fraser, D.J., Jones, M.W., McParland, T.L., and **J.A. Hutchings**. 2007. Loss of historical immigration and the unsuccessful rehabilitation of extirpated salmon populations. *Conserv. Gen.* 8: 527-546.
- Fraser, D.J., Weir, L.K., Darwish, T.L., Eddington, J.D., and **J.A. Hutchings**. 2007. Divergent compensatory growth responses within species: linked to contrasting migrations in salmon? *Oecologia* 153: 543-553.
- Hutchings, J.A.**, Swain, D.P., Rowe, S., Eddington, J.D., Puvanendran, V., and J.A. Brown. 2007. Genetic variation in life-history reaction norms in a marine fish. *Proc. R. Soc. B* 274: 1693-1699.
- Mooers, A.O., Prugh, L.R., Festa-Bianchet, M., and **J.A. Hutchings**. 2007. Biases in the legal listings under Canadian endangered species legislation. *Conservation Biology* 21: 572-575.
- Rowe, S., **Hutchings, J.A.**, and J.E. Skjæraasen. 2007. Non-random mating in a broadcast spawner: mate size influences reproductive success in Atlantic cod (*Gadus morhua*). *Can. J. Fish. Aquat. Sci.* 64: 219-226.
- Hardie, D.C., Gillett, R.M., and **J.A. Hutchings**. 2006. The effects of isolation and colonization history on the genetic structure of marine-relict populations of Atlantic cod (*Gadus morhua*) in the Canadian Arctic. *Can. J. Fish. Aquat. Sci.* 63: 1830-1839.
- Hutchings, J.A.** 2006. Survival consequences of sex-biased growth and the absence of a growth-mortality trade-off. *Functional Ecology* 20: 347-353.
- Hutchings, J.A.** 2006. Ecological and fisheries sustainability: common goals uncommonly achieved. In: D.M. Lavigne [ed], *Gaining Ground: In Pursuit of Ecological Sustainability*, University of Limerick, Limerick, pp. 101-112.
- Marcil, J., Swain, D.P. and **J.A. Hutchings**. 2006. Genetic and environmental components of phenotypic variation in body shape among populations of Atlantic cod (*Gadus morhua* L.). *Biol. J. Linn. Soc.* 88: 351-365.
- Marcil, J., Swain, D.P. and **J.A. Hutchings**. 2006. Countergradient variation in body shape of a widespread marine fish, the Atlantic cod (*Gadus morhua*). *Proc. R. Soc. Lond. B.* 273: 217-223.
- Purchase, C.F., **Hutchings, J.A.**, and G.E. Morgan. 2006. The biological and statistical significance of life history invariants in walleye (*Sander vitreus*). *Evolutionary Ecology Research* 8: 295-308.

- Rowe, S., and **J.A. Hutchings**. 2006. Sound production by Atlantic cod during spawning. *Transactions of the American Fisheries Society* 135: 529-538.
- Skjæraasen, J.E., Rowe, S., and **J.A. Hutchings**. 2006. Sexual dimorphism in pelvic fin length of Atlantic cod. *Can. J. Zool.* 84: 856-870.
- Hutchings, J.A.** 2005. Life history consequences of overexploitation to population recovery in Northwest Atlantic cod (*Gadus morhua*). *Can. J. Fish. Aquat. Sci.* 62: 824-832.
- Hutchings, J.A.**, and J.K. Baum. 2005. Measuring marine fish biodiversity: temporal changes in abundance, life history, and demography. *Phil. Trans. R. Soc. Lond.* 360: 315-338.
- Reynolds, J.D., Dulvy, N.K., Goodwin, N.B., and **J.A. Hutchings**. 2005. Biology of extinction risk in marine fishes. *Proc. R. Soc. Lond. B* 272: 2337-2344.
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### **Lectures and Presentations**

#### ***Invited Conference and Symposium Presentations***

- Hutchings, J.A.** 2008. Lament for a nation's oceans. Canada Ocean Lecture, Vancouver.
- Hutchings, J.A.** 2008. The adaptive significance and demographic consequences of phenotypic plasticity in marine fishes. 7<sup>th</sup> International Symposium on Flatfishes, Sesimbra, Portugal.
- Hutchings, J.A.** 2008. Management implications of fisheries-induced evolution. Symposium on *Evolving Fish, Changing Fisheries*, 138<sup>th</sup> Meeting of the American Fisheries Society, Ottawa.
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**Hutchings, J.A.** 2000. Life at the edge: adaptive variation in brook trout life histories on a small geographical scale. COSEWIC Symposium on Peripheral Populations, McGill University, Montréal.

**Hutchings, J.A.** 2000. Causes and consequences of seasonal changes in growth rate in brook

- trout, *Salvelinus fontinalis*. International Congress on Fish Biology, Aberdeen, Scotland.
- Hutchings, J.A.** 1998. The inter-relationship among science, management, and politics in the collapse of northern cod. Symposium entitled The Crisis of the Atlantic Fisheries, Pacem Maribus XXVI, in conclusion of the Year of the Ocean, Dalhousie University, Halifax, Nova Scotia.
- Hutchings, J.A.** 1998. Temporal and spatial scales of Atlantic salmon life history variation. Sustainability of Salmon Fisheries: Binational Perspectives, American Fisheries Society Symposium, Hartford, USA.
- Hutchings, J.A.** 1998. The communication of science in Canadian fisheries resource management. Plenary Lecture, Ontario Ecology & Ethology Colloquium, Queen's University, Kingston, Ontario.
- Hutchings, J.A.,** Bishop, T.D., and C.R. McGregor-Shaw. 1998. Evidence of mate competition and mate choice in Atlantic cod, *Gadus morhua*. Symposium honouring E.J. Crossman, American Society of Ichthyologists and Herpetologists Annual Meeting, University of Guelph, Guelph, Ontario.
- Hutchings, J.A.,** and M. Ferguson. 1998. Discarding, catch rates and fishing effort in Newfoundland's inshore and offshore cod fisheries: analytical strengths and weaknesses of interview-based data. Bringing Fishers' Knowledge into Fisheries Science and Management: A Methodological Workshop, St. John's, Newfoundland.
- Hutchings, J.A.** 1997. Uneasy interactions between fisheries science, management, and policy: a Canadian example. Annual Meeting of Swedish Fish and Fisheries Research. Umeå, Sweden.
- Hutchings, J.A.** 1997. Life history variation within and among populations of Atlantic salmon. Integrating Across Scales: Predicting Patterns of Change in Atlantic Salmon. Braemar, Scotland.
- Hutchings, J.A.** 1997. Life history variability in salmonid fish: adaptive responses to juvenile and adult growth. Conference on Brown Trout Population Biology, University of Lund, Sweden.
- Hutchings, J.A.** 1996. Causes and consequences of the collapse of Atlantic cod. J.C. Stevenson Memorial Lecture, Canadian Conference For Fisheries Research, Montréal, Québec.
- Hutchings, J.A.** 1995. The biological consequences of spatial and temporal variation in the exploitation of the northern cod, *Gadus morhua*: a historical perspective from 1500 to the present. Symposium on Marine Resources and Human Societies in the North Atlantic

Since 1500, Memorial University of Newfoundland, St. John's, Newfoundland.

**Hutchings, J.A.**, Neis, B., and P. Ripley. 1995. The "nature" of cod: perceptions of stock structure and cod behaviour by fishermen, "experts", and scientists from the nineteenth century to present. Symposium on Marine Resources and Human Societies in the North Atlantic Since 1500, Memorial University of Newfoundland, St. John's, Newfoundland.

**Hutchings, J.A.** 1994. The influence of early life experience on phenotypic plasticity in age at maturity in brook trout (*Salvelinus fontinalis*). 18th Annual Larval Fish Conference of the American Fisheries Society, Huntsman Marine Centre, St. Andrews, New Brunswick.

**Hutchings, J.A.**, and C.T. Taggart. 1994. Biological metrics and their utility in monitoring the "health" of a highly exploited stock: examples from northern cod and their future application. American Fisheries Society Annual Meeting, Halifax, Nova Scotia.

**Hutchings, J.A.** 1992. The influence of mate competition and age at maturity on the evolution of alternative mating strategies in male Atlantic salmon, *Salmo salar*. Association For The Study of Animal Behaviour Annual Meeting, Glasgow, U.K.

**Hutchings, J.A.** 1991. Behavioural implications of intraspecific life history variation. Symposium on Behavioural Ecology of Fishes, Erice, Sicily.

**Hutchings, J.A.** 1991. Reaction norms for maturation in brook trout and their influence on evolutionary changes effected by size-selective exploitation. Symposium on The Control of Evolving Systems, Jülich, Germany.

**Hutchings, J.A.** 1990. The threat of extinction to native populations experiencing spawning intrusions by cultured Atlantic salmon. International Symposium on Interactions Between Cultured and Wild Atlantic Salmon, Loen, Norway.

### ***Contributed Conference Presentations***

Fraser, D.J., and **J.A. Hutchings**. 2008. Parental divergence predicts the degree of outbreeding depression between farmed and wild Atlantic salmon. 61<sup>st</sup> Canadian Conference For Fisheries Research, Halifax, NS.

Fraser, D.J., and **J.A. Hutchings**. 2008. Genetic interactions between escaped farmed and wild Atlantic salmon in the Northwest Atlantic. American Fisheries Society Symposium, Ottawa, ON.

Houde, A.S., Fraser, D.J., and **J.A. Hutchings**. 2008. Ecological interactions between juveniles of multi-generational crosses of farmed and wild Atlantic salmon. 61<sup>st</sup> Canadian

Conference For Fisheries Research, Halifax, NS.

**Hutchings, J.A.** 2008. On threshold traits, conservation biology,  $R_m$  and  $r$ . 2<sup>nd</sup> Conference of the Canadian Society For Ecology and Evolution, Vancouver.

**Hutchings, J.A.** 2008. Alternative reproductive strategies then and now: 25 years of study of Atlantic salmon. 61<sup>st</sup> Canadian Conference For Fisheries Research, Halifax, NS.

**Hutchings, J.A.** 2008. Ransom Aldrich Myers (1952-2007): an appreciation. 61<sup>st</sup> Canadian Conference For Fisheries Research, Halifax, NS.

Morris, M., Fraser, D.J., Heggelin, A.J., Carr, J.W., O'Neil, S.F., Whoriskey, F.G., and **J.A. Hutchings**. 2008. Prevalence and recurrence of escaped farmed Atlantic salmon (*Salmo salar*) in eastern North American rivers. 61<sup>st</sup> Canadian Conference For Fisheries Research, Halifax, NS.

Normandeau, É., **Hutchings, J.A.**, Fraser, D.J., and L. Bernatchez. 2008. Domestication, hybridization and gene expression in *Salmo salar*. 2<sup>nd</sup> Conference of the Canadian Society For Ecology and Evolution, Vancouver.

Hardie, D.C., and **J.A. Hutchings**. 2007. The growth consequences of cannibalism in Atlantic cod populations in Canadian Arctic lakes. 60<sup>th</sup> Canadian Conference For Fisheries Research, Montréal, PQ.

**Hutchings, J.A.**, and S. Rowe. 2007. Influence of reproductive behaviour on fishery-induced evolution. 60<sup>th</sup> Canadian Conference For Fisheries Research, Montréal, PQ.

Weir, L.K., Breau, C., **Hutchings, J.A.**, and R.A. Cunjak. 2007. Variance in male reproductive success and correlates of multiple paternity in a naturally spawning Atlantic salmon population. 60<sup>th</sup> Canadian Conference For Fisheries Research, Montréal, PQ.

**Hutchings, J.A.**, and S. Rowe. 2006. Potential consequences of reproductive behaviour and mating system complexity on fishery-induced evolution. ICES Annual Conference, Maastricht, Netherlands.

Hardie, D.C., Bower, R.M., and **J.A. Hutchings**. 2006. The effects of isolation and colonization history on the genetic structure of marine-relict populations of Atlantic cod in the Canadian Arctic. 59<sup>th</sup> Canadian Conference For Fisheries Research, Calgary, AB.

**Hutchings, J.A.**, Swain, D.P., Puvanendran, V., Rowe, S., and J.A. Brown. 2006. Genetic differences in life history reaction norms among populations of Atlantic cod (*Gadus morhua*). Fisheries Society of the British Isles Annual Meeting, Aberdeen, UK.

- Hutchings, J.A.**, Swain, D.P., Puvanendran, V., Rowe, S., and J.A. Brown. 2006. Genetic differences in Atlantic cod reaction norms: linking individual and population responses to the environment. 7<sup>th</sup> International Congress on the Biology of Fish, St. John's, NL.
- Morrissey, M.M., **Hutchings, J.A.**, and M.M. Ferguson. 2006. Selection on phenotypic and genetic variation in brook trout (*Salvelinus fontinalis*) in Freshwater River, Newfoundland. 59<sup>th</sup> Canadian Conference For Fisheries Research, Calgary, AB.
- Rowe, S., and **J.A. Hutchings**. 2006. Phenotypic and behavioural correlates of individual variation in Atlantic cod reproductive success. Fisheries Society of the British Isles Annual Meeting, Aberdeen, UK.
- Rowe, S., and **J.A. Hutchings**. 2006. Population consequences of individual variability in reproductive behaviour of Atlantic cod. 7<sup>th</sup> International Congress on the Biology of Fish, St. John's, NL.
- Weir, L.K., Breau, C., **Hutchings, J.A.**, and R.A. Cunjak. 2006. Spatial variability of multiple paternity in a naturally spawning population of Atlantic salmon, *Salmo salar*. Fisheries Society of the British Isles Annual Meeting, Aberdeen, UK.
- Darwish, T., and **J.A. Hutchings**. 2005. Genetic and environmental influences on fitness-related traits in three populations of Atlantic salmon (*Salmo salar*). 90<sup>th</sup> Ecological Society of America Annual Meeting, Montreal, PQ.
- Hutchings, J.A.**, and J.K. Baum. 2005. Measuring marine fish biodiversity. 58<sup>th</sup> Canadian Conference For Fisheries Research, Windsor, ON.
- Rowe, S., and **J.A. Hutchings**. 2005. Phenotypic and behavioural correlates of individual variation in Atlantic cod reproductive success. 58<sup>th</sup> Canadian Conference For Fisheries Research, Windsor.
- Weir, L.K., Grant, J.W.A., and **J.A. Hutchings**. 2005. Operational sex ratio and aggression within alternative strategies in male Atlantic salmon, *Salmo salar*. 90<sup>th</sup> Ecological Society of America Annual Meeting, Montreal, PQ.
- Hutchings, J.A.** 2004. Life history consequences of over-exploitation to population recovery of Northwest Atlantic cod. 57<sup>th</sup> Canadian Conference For Fisheries Research, St. John's, NL.
- Hutchings, J.A.**, Puvanendran, V., Swain, D.P., Brown, J.A. and W.R. Driedzic. 2004. Genetic determinants of population variation in Atlantic cod growth, survival and phenotypic plasticity 57<sup>th</sup> Canadian Conference For Fisheries Research, St. John's, NL.

- Marcil, J., Swain, D.P. and **J.A. Hutchings**. 2004. Genetic differences in body shape among populations of Atlantic cod (*Gadus morhua*). 57<sup>th</sup> Canadian Conference For Fisheries Research, St. John's, NL.
- Marcil, J., Swain, D.P. and **J.A. Hutchings**. 2004. Countergradient variation in body shape of a widespread marine fish, the Atlantic cod (*Gadus morhua*). Society for the Study of Evolution Annual Meeting, Fort Collins, CO.
- McCairns, R.J.S., **Hutchings, J.A.**, and T.W. Knight. 2004. Countergradient variation in growth and associated life-history trade-offs in brook trout from western Newfoundland. 57<sup>th</sup> Canadian Conference For Fisheries Research, St. John's, NL.
- Purchase, C.P., **Hutchings, J.A.**, and G.E. Morgan. 2004. Statistical versus biological deviation in walleye life history invariants. Ecological and Evolutionary Ethology of Fishes 2004 Meeting, Sauðarkrokur, Iceland.
- Rowe, S., and **J.A. Hutchings**. 2004. Sound production by Atlantic cod during spawning. Ecological and Evolutionary Ethology of Fishes 2004 Meeting, Sauðarkrokur, Iceland.
- Rowe, S., and **J.A. Hutchings**. 2004. Implications of mating systems for the collapse and recovery of Atlantic cod. 57<sup>th</sup> Canadian Conference For Fisheries Research, St. John's, NL.
- Weir, L.K., **Hutchings, J.A.**, Fleming, I.A., and S. Einum. 2004. Studs or duds? The influence of artificial selection on the spawning behaviour of male Atlantic salmon. 57<sup>th</sup> Canadian Conference For Fisheries Research, St. John's, NL.
- Adams, B.K., and **J.A. Hutchings**. 2003. Evidence for genetically distinct anadromous and non-anadromous Atlantic salmon (*Salmo salar*) in wild and introduced populations. 56<sup>th</sup> Canadian Conference For Fisheries Research, Ottawa, ON.
- Den Heyer, N., Lanteigne, M., Chadwick, E.M.P., and **J.A. Hutchings**. 2003. The contribution of seasonal movement to recruitment in a Canadian lobster fishery. 133<sup>rd</sup> Annual Meeting, American Fisheries Society, Québec, PQ.
- Hutchings, J.A.** 2003. Survival consequences of sex-biased patterns in seasonal growth. 56<sup>th</sup> Canadian Conference For Fisheries Research, Ottawa, ON.
- Hutchings, J.A.** 2003. Causes and consequences of sex-biased dispersal in salmonid fish. Fisheries Society of the British Isles, University of East Anglia, Norwich, UK.
- McCairns, R.J.S., **Hutchings, J.A.**, and T.W. Knight. 2003. Variation in brook trout (*Salvelinus fontinalis*) life histories along an altitudinal gradient: an hypothesized adaptive response.

- 133<sup>rd</sup> Annual Meeting, American Fisheries Society, Québec, PQ.
- Rowe, S., and **J.A. Hutchings**. 2003. The mating behaviour of Atlantic cod. 56<sup>th</sup> Canadian Conference For Fisheries Research, Ottawa, ON.
- Rowe, S., and **J.A. Hutchings**. 2003. Sound production by Atlantic cod during spawning. 133<sup>rd</sup> Annual Meeting, American Fisheries Society, Québec, PQ.
- Weir, L.K., **Hutchings, J.A.**, Fleming, I.A., and S. Einum. 2003. Spawning behaviour and fertilization success of male Atlantic salmon of farmed and wild origin. 56<sup>th</sup> Canadian Conference For fisheries Research, Ottawa, ON.
- Weir, L.K., **Hutchings, J.A.**, Fleming, I.A., and S. Einum. 2003. Behavioural similarities and differences among Atlantic salmon males of farmed and wild origin. 133<sup>rd</sup> Annual Meeting, American Fisheries Society, Québec, PQ.
- Adams, B.K., and **J.A. Hutchings**. 2002. Anadromous and non-anadromous life history strategies in Atlantic salmon (*Salmo salar*). 55<sup>th</sup> Canadian Conference For Fisheries Research, Vancouver.
- Rowe, S., and **J.A. Hutchings**. 2002. The mating behaviour of Atlantic cod (*Gadus morhua*). International Workshop on the Application of Passive Acoustics in Fisheries, Boston, MA.
- Weir, L.K., **Hutchings, J.A.**, and I.A. Fleming. 2002. The effect of domestication on spawning behaviour and reproductive success of mature male Atlantic salmon parr. Ecology, Ethology and Evolution of Fishes Conference, Québec, PQ.
- Hutchings, J.A.**, and S. Rowe. 2001. Life history and conservation biology of marine fishes: perceptions and caveats. 54<sup>th</sup> Canadian Conference For Fisheries Research, Toronto, Ontario.
- Rowe, S., and **J.A. Hutchings**. 2001 Patterns and processes of mating in Atlantic cod. Fisheries Society of the British Isles Annual Meeting, Leicester, UK.
- Rowe, S., and **J.A. Hutchings**. 2001 Mating system of Atlantic cod. Fish Bioacoustics Meeting, Evanston, Illinois, USA.
- Adams, B.K., and **J.A. Hutchings**. 2000. Population genetics and adaptive life histories of wild brook charr, *Salvelinus fontinalis*. 53<sup>rd</sup> Canadian Conference For Fisheries Research, Fredericton, NB.
- Hutchings, J.A.** 2000. Sex-biassed dispersal and temporal consistency in habitat use by brook

- trout. 53rd Canadian Conference For Fisheries Research, Fredericton, New Brunswick.
- Jones, M.W., McParland, T.L., **Hutchings, J.A.**, Dansmann, R.G., and D. Clay. 2000. Low genetic variability in brook trout lakes. 53rd Canadian Conference For Fisheries Research, Fredericton.
- Adams, B.K., and **J.A. Hutchings**. 1999. Population genetics and adaptive life histories of wild brook charr, *Salvelinus fontinalis*. Can. Soc. Zool., Ottawa, ON.
- Jones, M.W., and **J.A. Hutchings**. 1999. Reproductive success in Atlantic salmon (*Salmo salar*): effects of parr size and intensity of mate competition. Amer. Soc. Ichthyol. Herpetol., State College, Penn.
- Hutchings, J.A.**, Pickle, A., McGregor-Shaw, C.R., and L. Poirier. 1999. An energetic basis for a survival cost of reproduction in brook trout, *Salvelinus fontinalis*. Can. Soc. Zool., Ottawa.
- MacDonald, J.A., and **J.A. Hutchings**. 1999. Alternative reproductive phenotypes in male white sticklebacks (*Gasterosteus* sp.). Can. Soc. Zool., Ottawa, ON.
- Jones, M.W., McParland, T.L., **Hutchings, J.A.**, and D. Clay. 1998. Temporal changes in genetic variation in Atlantic salmon populations in the Inner Bay of Fundy. 51st Canadian Conference For Fisheries Research, Kingston, Ontario.
- Hutchings, J.A.** 1997. Population differences in Atlantic salmon age at maturity: adaptive responses to environmental variation in growth. 36th Annual Meeting of the Canadian Society of Zoologists, London, Ontario.
- Cadigan, S.T., and **J.A. Hutchings**. 1997. The ecological history of the nineteenth and early twentieth centuries' Labrador fishery. 76th Annual Meeting of the Canadian Historical Association, St. John's, Newfoundland.
- MacDonald, J.F., and **J.A. Hutchings**. 1997. Alternative reproductive behaviour in male white sticklebacks (*Gasterosteus* sp.). 36th Annual Meeting of the Canadian Society of Zoologists, London, Ontario.
- Hutchings, J.A.** 1996. Adaptive phenotypic plasticity in brook trout life histories. 35th Annual Meeting of the Canadian Society of Zoologists, St. John's, Newfoundland.
- Jones, M.W., **Hutchings, J.A.**, Dansmann, R.G., and D. Clay. 1996. Implications of low genetic variability in brook trout populations in Fundy National Park, New Brunswick. 35th Annual Meeting of the Canadian Society of Zoologists, St. John's, Newfoundland.

- Sinclair, A., Myers, R.A., and **J.A. Hutchings**. 1995. Seal predation: is there evidence of increased mortality on cod? NAFO/ICES Symposium on the Role of Marine Mammals in the Ecosystem, Dartmouth, Nova Scotia.
- Hutchings, J.A.** 1994. Life history metrics of population sustainability: empirical data on Newfoundland cod. Second International Conference on Science and the Management of Protected Areas, Dalhousie University, Halifax, Nova Scotia.
- Hutchings, J.A.**, and R.A. Myers. 1994. The influence of variable growth rate on the evolution of alternative mating strategies. 33rd Annual Meeting of the Canadian Society of Zoologists, Winnipeg, Manitoba.
- Hutchings, J.A.**, and R.A. Myers. 1994. The interplay between life history, overexploitation, and the collapse of Newfoundland cod. 33rd Annual Meeting of the Canadian Society of Zoologists, Winnipeg, Manitoba.
- Hutchings, J.A.** 1993. The evolution of alternative mating strategies in male Atlantic salmon. 46th Canadian Conference For Fisheries Research, Trent University, Peterborough, Ontario.
- Hutchings, J.A.** 1992. Individual optimisation in salmonid life histories. Symposium on Fish Life History Strategies, Fisheries Society of the British Isles, Liverpool, U.K.
- Hutchings, J.A.**, and D.W. Morris. 1990. The influence of egg size and food abundance on maternal fitness in the brook trout, *Salvelinus fontinalis*. Fourth International Congress of Systematic and Evolutionary Biology, College Park, Maryland.
- Hutchings, J.A.** 1989. The evolutionary significance of population divergence in brook trout, *Salvelinus fontinalis*, life histories. International Symposium on Fish Population Biology, Aberdeen, Scotland.
- Hutchings, J.A.**, and D.W. Morris. 1989. What is the scale of life history variation? 74th Annual Ecological Society of America meeting, Toronto, Ontario.
- Hutchings, J.A.** 1988. The scale of life histories: adaptive variation in populations of brook trout, *Salvelinus fontinalis*. 27th Annual Meeting of the Canadian Society of Zoologists, Halifax, Nova Scotia.
- Hutchings, J.A.** 1987. Mating success of alternative maturation phenotypes in male Atlantic salmon, *Salmo salar*. 26th Annual Meeting of the Canadian Society of Zoologists, Montréal, Québec.
- Hutchings, J.A.** 1984. Lakeward migrations by juvenile Atlantic salmon, *Salmo salar*. 23rd

## Annual Meeting of the Canadian Society of Zoologists, Wolfville, Nova Scotia.

***Invited Lectures at Universities and Government Laboratories***

March	2009	University of North Carolina, Wilmington, NC
March	2009	University of California, Riverside, CA
April	2008	Zoological Society of London, London, UK
February	2008	Great Lakes Institute For Environmental Research, University of Windsor
April	2007	Centre for Environ., Fisheries & Aquaculture Science (CEFAS), Lowestoft, UK
April	2007	IUCN Species Programme, UK Office, Cambridge, UK
February	2007	Department of Marine Biology, University of Bergen, Bergen, Norway
November	2006	Dept Fisheries & Oceans, Bedford Inst. Oceanography, Dartmouth, NS
June	2006	Department of Biology, Hólar University College, Hólar, Iceland
April	2006	Department of Biology, University of Umeå, Umeå Sweden
April	2006	Department of Aquaculture, Swedish Univ. Agric. Sci., Umeå, Sweden
February	2006	School of Fisheries & Aquatic Sciences, Univ. Washington, Seattle, WA
November	2005	Concordia University, Montreal, PQ
October	2005	Dept Fisheries & Oceans, Bedford Inst. Oceanography, Dartmouth, NS
September	2005	Memorial University of Newfoundland, St. John's, NL
February	2005	Simon Fraser University, Burnaby, BC
November	2004	University of New Brunswick, Fredericton, NB
November	2004	University of New Brunswick at Saint John, Saint John, NB
October	2004	Memorial University of Newfoundland, St. John's, NL
August	2004	Marine Research Institute, Reykjavik, Iceland
April	2004	Department of Biological Sciences, Simon Fraser University, Burnaby, BC
March	2004	Department of Biology, University of Calgary, Calgary, AB
March	2004	Department of Biology, University of Massachusetts, Amherst, MA
January	2004	Dept. Biology, Acadia University, Wolfville, NS
September	2003	West Block, Parliament Buildings, Ottawa, ON
April	2003	Zoological Society of London, London, UK
February	2003	Dept Fisheries & Oceans, Bedford Inst. Oceanography, Dartmouth, NS
November	2002	Dept. Biology, Université Laval, Ste. Foy, PQ
November	2002	Dept. Biology, Université du Québec à Trois-Rivières, Trois-Rivières, PQ
November	2002	Dept. Biology, Université de Sherbrooke, Sherbrooke, PQ
September	2002	Dept. Resource & Environ. Stud., Simon Fraser University, Burnaby, BC
April	2002	Department of Biology, University of Sheffield, Sheffield, UK
March	2002	Department of Zoology, University of Göteborg, Göteborg, Sweden
March	2002	Department of Zoology, University of Manitoba, Winnipeg, MB
February	2002	Inst. Cell, Animal & Pop. Biol., University of Edinburgh, UK
January	2002	Division of Ecology & Evolution, University of Glasgow, UK
December	2001	Dept Fisheries & Oceans, Bedford Inst. Oceanography, Dartmouth, NS
June	2000	Department of Biology, Memorial Univ. Newfoundland, St. John's, NF
April	2000	Biologisk Institutt, University of Oslo, Oslo, Norway

March	2000	Department of Aquaculture, Swedish Univ. Agric. Sci., Umeå, Sweden
November	1999	Dept of Biology, Erindale College (Univ. Toronto), Mississauga, ON
April	1999	Fisheries & Wild. Sci., Virginia Poly. Inst. State Univ., Blacksburg, VA
March	1999	Department of Zoology, University of Guelph, Guelph, ON
November	1998	Department of Zoology, University of British Columbia, Vancouver, BC
November	1998	Pacific Biological Station, Nanaimo, BC
October	1998	Department of Biology, St. Francis Xavier University, Antigonish, NS
October	1998	Department of Biology, Memorial Univ. Newfoundland, St. John's, NL
April	1998	Department of Biology, University of New Brunswick, Fredericton, NB
November	1997	Department of Biology, McGill University, Montréal, PQ
November	1997	Department of Biology, Concordia University, Montréal, PQ
November	1997	Department of Aquaculture, Swedish Univ. Agric. Sci., Umeå, Sweden
November	1997	Bedford Institute of Oceanography, Dartmouth, NS
October	1997	Department of Biology, St. Mary's University, Halifax, NS
October	1997	Department of History, Dalhousie University, Halifax, NS
September	1997	Department of Anthropology, Memorial University, St. John's, NL
September	1997	Faculty of Law, Dalhousie University, Halifax, NS
August	1997	Department of Fisheries & Oceans, Moncton, NB
June	1997	EcoResearch Programme, Memorial University of Nfld., St. John's, NL
November	1996	Department of Biology, Queen's University, Kingston, ON
November	1996	Fish Behavioural Group, Queen's University, Kingston, ON
February	1996	Department of Finance & Resource Mgmt., St. Mary's Univ., Halifax, NS
February	1996	Faculty of Law, Dalhousie University, Halifax, NS
November	1995	Department of Biology, Mount Allison University, Sackville, NB
November	1995	Department of Biology, St. Francis Xavier University, Antigonish, NS
May	1995	Norwegian Institute for Nature Research, Trondheim, Norway
March	1994	Department of Biology, Dalhousie University, Halifax, NS
March	1994	Department of Zoology, University of Toronto, Toronto, ON
October	1993	Centre For Northern Studies, Lakehead University, Thunder Bay, ON
October	1993	Department of Biology, Lakehead University, Thunder Bay, ON
September	1993	Department of Biology, York University, Toronto, ON
September	1992	Department of Ecology, University of Bergen, Bergen, Norway
August	1992	Biology Department, St. Andrews University, St. Andrews, Scotland
February	1992	Swedish University of Agricultural Sciences, Umeå, Sweden