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Education:

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| North Carolina State University | Zoology with Statistics and Modeling minor | Ph.D. | 1994 |
| University of Rhode Island | Oceanography, biological option | M.S. | 1990 |
| Trinity College (CT) | Biology | B.S. | 1985 |

Dissertation Title: Causes and consequences of growth variability in young fishes.

Employment:

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| 1995- | Biological Resources Division/USGS, Ecology section leader Anadromous Fish Research Center, Turners, Falls, MA, and adjunct associate professor Department of Natural Resources Conservation, University of Massachusetts |
| 1994-1995 | Oak Ridge Postdoctoral Fellow (with Dr. David Conover) State University of New York, Stony Brook, NY |
| 1992-1994 | Electric Power Research Institute Fellow North Carolina State University, Raleigh, NC |
| 1990-1992 | Wisconsin Sea Grant Fellow North Carolina State University, Raleigh, NC |
| 1987-1990 | URI-USEPA Cooperative Research Fellow University of Rhode Island, Kingston, RI |
| 1986-1987 | Research Assistant, Center for Coastal Studies Provincetown, MA. |
| 1985-1986 | Research Assistant, University of Massachusetts, Amherst, MA. |

Professional Activities:

Associate Editor, Transactions of the American Fisheries Society (1998 - 2001)

Co-Book review editor, American Fisheries Society (2005 - 2009)

Professional societies:

American Association for the Advancement of Science

Ecological Society of America

American Fisheries Society
AFS Early Life History Section (North East representative)
AFS Southern New England Chapter-At large representative
NASCO Assessment Committee representative
Member of the Genetics subcommittee of the Connecticut River Atlantic salmon technical committee
Science advisor to The Nature Conservancy's Connecticut River program

Teaching experience:

Fisheries ecology Teaching Assistant, North Carolina State University, 1992
Individual-based modeling, SUNY Stony Brook, 1995
Ecology of individuals, University of Massachusetts, 1997
Evolution of migration, University of Massachusetts, 1999
Evolution and ecology of migration, University of Massachusetts, 2000
Ecology of diadromous fishes (team taught), University of Massachusetts, 2002, 2004, 2008
Analysis of mark-recapture data, University of Massachusetts, 2004
Analysis of mark-recapture data, University of Massachusetts, 2005
Data management and manipulation (supervised PhD student), University of Massachusetts, 2005
Analysis of mark-recapture data, University of Massachusetts, 2008
Hierarchical modeling workgroup, University of Massachusetts, 2009
Organismic and Evolutionary Biology Core Ecology class (team taught), UMass, 2009, 2011
Advanced Statistics 3 – Bayesian linear models, UMass, 2010

Publications:

Steinschneider S., Polebitski A, Brown C, Letcher BH. **In Press**. Towards a statistical framework to quantify the uncertainties of hydrologic response under climate change, *Water Resources Journal*

Sigourney, D. B., Munch, S. B., & Letcher, B. H., 2012. Combining a Bayesian nonparametric method with a hierarchical framework to estimate individual and temporal variation in growth. *Ecol. Model.*, 247, 125–134.

Kanno, Y, J.C. Vokoun, K. Holsinger, and B. H. Letcher, **in Press**, Estimating size-specific brook trout abundance in continuously-sampled headwater streams using Bayesian mixed models with zero-inflation and over-dispersion, *Ecol Freshw Fish*

Whiteley, A.R., Coombs, J.A., Hudy, M, Robinson, Z., Nislow, K.H., Letcher, B.H., 2012. Sampling Strategies for Estimating Brook Trout Effective Population Size. *Cons. Gen.* 13, 625-637 DOI 10.1007/s10592-011-0313-y

- Kanno, Y, J.C. Vokoun, and B. H. Letcher, 2011. Fine-scale population structure and riverscape genetics of brook trout (*Salvelinus fontinalis*) distributed along headwater channel networks, *Mol. Ecol.* doi: 10.1111/j.1365-294X.2011.05210.x
- Coombs, J., B. H. Letcher, and K. H. Nislow, 2011. GONe: Software for estimating effective population size in species with generational overlap, *Mol. Ecol Resources*
- Kanno, Y, J.C. Vokoun, and B. H. Letcher, 2011. Sibship reconstruction for inferring mating systems and effective population size in headwater brook trout (*Salvelinus fontinalis*) populations, *Cons. Genetics.* 12: 619-628. DOI 10.1007/s10592-010-0166-9
- Nislow, K.H., M. Hudy, and Letcher, B.H., 2011, Variation in local abundance and species richness of stream fishes in relation to dispersal barriers: implications for management and conservation. *Freshw. Ecol.* 56, 2135-2144.
- Letcher, B. H., J. Coombs, K.H. Nislow, 2011. Maintenance of phenotypic variation: repeatability, heritability and size-dependent survival in a wild brook trout population, *Evol. Appl.* 4, 602-615. doi:10.1111/j.1752-4571.2011.00184.x
- Bailey, M. M., M. T. Kinnison, Horton G E., B.H. Letcher, 2011. Seasonal density-dependence in Atlantic salmon (*Salmo salar* L.) over varying spatial scales, *Trans. Am. Fish. Soc.* 139: 1642-1656.
- Horton G E., B.H. Letcher, and W.L. Kendall. 2011. A multi-state capture-recapture modeling strategy to separate true survival from permanent emigration for a PIT-tagged population of stream fish. *Trans. Am. Fish. Soc.* 140: 320-333. DOI: 10.1080/00028487.2011.567861
- Coombs, J. A., Letcher, B. H., Nislow, K. H. 2010. PedAgree: Software to quantify error and assess accuracy and congruence for genetically reconstructed pedigree relationships. *Conservation Genetics Resources.* 2(1): 147-150.
- Castro-Santos, T., B.H. Letcher, Modeling migratory energetics of Connecticut River American shad (*Alosa sapidissima*): implications for the conservation of an iteroparous anadromous fish, 2010. *Can. J. Fish. Aquat Sci.* 67: 806-830.
- Hudy, M., Coombs, J., Nislow, K., & Letcher, B.H. 2010. Dispersal and within-stream spatial population structure of brook trout revealed by pedigree reconstruction analysis. *Transactions of the American Fisheries Society*, 139. doi: 10.1577/T10-027.1.
- Xu, C., B. H. Letcher, and K. H. Nislow, 2010. Size-dependent survival of brook trout *Salvelinus fontinalis* in summer: effects of water temperature and stream flow, *Journal of Fish Biology*, 76: 2342-2369. doi:10.1111/j.1095-8649.2010.02619.x
- Xu, C., B. H. Letcher, and K. H. Nislow, 2010. Context-specific effects of water temperature on brook

- trout growth rates in the field, *Freshwater Biology*. 55: 2253-2264. doi:10.1111/j.1365-2427.2010.02430.x
- O'Donnell, M. J., G. E. Horton and B. H. Letcher, 2010. Use of portable antennas to estimate abundance of PIT tagged fish in small streams: factors affecting detection efficiency, *NAJFM*. 30:323-336. DOI: 10.1577/M09-008.1
- Davidson, R.S., B. H. Letcher, and K. H. Nislow, 2010. Drivers of growth variation in juvenile Atlantic salmon (*Salmo salar*): an elasticity analysis approach. *J. Anim. Ecol.* doi: 10.1111/j.1365-2656.2010.01708.x
- Coombs, J., B. H. Letcher, and K. H. Nislow, 2010. PEDAGOG: Software for simulating eco-evolutionary population dynamics, *Molec. Ecol. Res.* 10:558-563.
- Zimmerman, JKH, B.H. Letcher, K.H. Nislow, K.A Lutz, and F. J. Magilligan, 2010. Determining the effects of dams on subdaily variation in river flows at a whole-basin scale, *River Research and Applications*. 26:1246-1260. DOI: 10.1002/rra.1324
- Davidson, J. G., A.H. Rikardsen; E. Halttunen; E.B. Thorstad; F. Økland; B.H. Letcher; J. Skarðhamar; T.F. Næsje, 2009. Migratory behaviour and survival rates of wild northern Atlantic salmon (*Salmo salar* L.) postsmolts: effects of environmental factors. *J. Fish Biol.* 75:1700-1718.
- Charney, N. D., B. H. Letcher, A. Haro, P. S. Warren. 2009. Terrestrial Passive Integrated Transponder Antennae for Tracking Small Animal Movements. *Journal of Wildlife Management*. 163: 1245-1250.
- Aubin-Horth N., B. H. Letcher, and H. A. Hofmann, 2009. The genomic expression signatures of the plastic life cycle of Atlantic salmon, *Gen. Comp. Endocrin.* 163: 278-284.
- Horton G E., B.H. Letcher, M. M. Bailey, M. T. Kinnison, 2009. Atlantic salmon smolt production: the relative importance of survival and body growth, *Can. J. Fish. Aquat. Sci.* 66:471-483.
- Horton, G.E., and B.H. Letcher. 2008. Movement patterns and study area boundaries: influences on survival estimation in capture-mark-recapture studies, *Oikos* 117(8): 1131-1142.
- O'Donnell, M. J. and B.H. Letcher. 2008. Size and age distributions of juvenile Connecticut River American shad above Hadley falls: influence on outmigration representation and timing, *River Research and Applications*, 24:929-940.
- Letcher, B.H., G.E. Horton. 2008. Seasonal variation in size-dependent survival of juvenile Atlantic salmon (*Salmo salar*): performance of multistate capture-mark-recapture models. *Can. J. Fish. Aquat. Sci.*, 65: 1649-1666.
- J. A. Coombs, B. H. Letcher, and K. H. Nislow. 2008. CREATE: Software to create input files from diploid genotypic data for 50 genetic software programs. *Molec. Ecol. Res.* 8(3): 578-580. doi:

10.1111/j.1471-8286.2007.02036.x

- Sigourney, D.B., B.H. Letcher, M. Obedzinski, and R.A. Cunjak. 2008. Size-independent growth in fish: patterns, models and metrics. *J. Fish Biol.* 72: 2435-2455.
- Carlson, S.M., A.P. Hendry, and B.H. Letcher. 2007. Growth rate differences between resident native brook trout and non-native brown trout, *J. Fish Biol.* 71(5): 1430-1447.
- Scace, J. and B.H. Letcher. 2007. Efficient smolt trap for sandy and debris laden streams. *N. Am. J. Fish. Manag.* 27(4): 1276-1286.
- Pearlstein, J.H., B.H. Letcher, and M. Obedzinski. 2007. Early discrimination of Atlantic salmon smolt age: time course of the relative effectiveness of body size and shape. *Trans. Am. Fish. Soc.* 136(6): 1622-1632.
- Letcher, B.H., K.H. Nislow, J.A. Coombs, M. J. O'Donnell, T. D. Dubreuil. 2007. Population response to habitat fragmentation in a stream-dwelling brook trout population. *PLoS ONE* 2(11): e1139. doi:10.1371/journal.pone.0001139.
- Horton, G.E., T. Dubreuil, and B.H. Letcher. 2007. A model for estimating passive integrated transponder (PIT) tag antenna efficiencies for interval-specific emigration rates, *Trans. Am. Fish. Soc.* 136:1165-1176.
- García De Leániz, C.G., I.A. Fleming, S. Einum, E. Verspoor, W.C. Jordan, S. Consuegra, N. Aubin-Horth, D.Lajus, B. H. Letcher, A.F. Youngson, J. Webb, L.A. Vøllestad, B. Villanueva, A. Ferguson And T.P. Quinn. 2007. A critical review of adaptive genetic variation in Atlantic salmon: implications for conservation. *Biological Reviews* 88:1-39.
- Grader, M. and B.H. Letcher. 2006. Diel and seasonal gut fullness and prey composition of Atlantic salmon parr in the west brook, *J. Freshw. Ecol.* 21(3): 503-517.
- Zydlewski, G.B., G. Horton, T. Dubreuil, B. Letcher, S. Casey, J. Zydlewski. 2006. Remote monitoring of fish in small streams: a unified approach using PIT tags. *Fisheries* 31(10): 492-502.
- Sigourney, D.B., B.H. Letcher, R.A. Cunjak. 2006. Influence of beaver activity on summer growth and condition of age-2 Atlantic salmon parr. *Trans. Am. Fish. Soc.* 135(4): 1068-1075.
- Sigourney, D.B., G.E. Horton, T.L. Dubreuil, A.M. Varady, B.H. Letcher. 2005. Electroshocking and PIT tagging juvenile Atlantic salmon: are there interactive effects on growth and survival? *N. Am. J. Fisheries Manag.*, 25(3):1016-1021.
- Aubin-Horth, N. C. Landry, B. H. Letcher, and H. A. Hofmann. 2005. Alternative life-histories shape different brain gene expression profiles in males of the same population *Proc. R. Soc. B.*, 272:1655-1662.

- Aubin-Horth, N. B. H. Letcher, and H. A. Hofmann. 2005. Interaction of rearing environment and reproductive tactic on brain gene expression profiles in Atlantic salmon. *J. Hered.* 96:261-278.
- Letcher, B.H., G.E. Horton, T. Dubreuil, M.J. O'Donnell. 2005. A field test of the extent of bias in selection estimates after accounting for emigration, *Evol. Ecol. Res.* 7:643-650.
- King, T.L., M. S. Eackles, and B. H. Letcher. 2005. Microsatellite DNA markers for the study of Atlantic salmon (*Salmo salar*) kinship, population structure, and mixed-fishery analyses. *Mol. Ecol. Notes.* 5 (1): 130-132.
- Letcher, B.H., T. D. Dubreuil, M. J. O'Donnell, M. Obedzinski, K. Griswold and K. Nislow 2004. Long-term consequences of variation in timing and manner of fry introduction on juvenile Atlantic salmon growth, survival and life history expression, *Can J. Fish. Aquat. Sci.*, 61:2288-2301.
- Obedzinski, M, and B. H. Letcher, 2004. Variation in early development and growth among five New England Atlantic salmon (*Salmo salar*) populations reared in a common environment. *Can J. Fish. Aquat. Sci.*, 61:2314-2328.
- Carlson, S.M., A.P. Hendry and B.H. Letcher, 2004. Natural selection acting on size, growth rate, and compensatory growth: an empirical test in a wild trout population, *Evol. Ecol. Res.*, 6:1-19.
- Spidle, A., T.L. King, and B.H. Letcher, 2004. Comparison of genetic diversity in recently founded Connecticut River Atlantic salmon population to that of its primary donor stock, Maine's Penobscot River, *Aquaculture*, 236:253-265.
- Letcher, B.H. 2003. Life history dependent morphometric variation in stream-dwelling Atlantic salmon, *Oecologia*, 137:533-540.
- Carlson, S.M., B.H., Letcher, 2003. Variation in trout survival within and among seasons, species, and age classes, *J. of Fish Biol.*, 63:780-794.
- Letcher, B.H., and G. Gries. 2003. Effects of life history variation on size and growth of stream-dwelling Atlantic salmon, *J. Fish Biol.*, 62:97-114.
- Hendry, A.P., B.H. Letcher and G. Gries. 2003. Estimating natural selection on stream-dwelling Atlantic salmon: implications for the restoration of extirpated populations. *Cons. Biol.*, 17(3):795-805.
- Henderson, J.N. and B.H. Letcher. 2003. Predation on stocked Atlantic salmon fry. *Can. J. Fish. Aquat. Sci.*, 60:32-42.
- Letcher, B.H., G. Gries and F. Juanes. 2002. Survival of stream-dwelling Atlantic salmon: effects of life history variation, season and age. *Trans. Am. Fish. Soc.*, 131:838-854.

- Gries, G. and B.H. Letcher. 2002. Tag retention and survival of age-0⁺ Atlantic salmon following surgical implantation with passive integrated transponder tags. *Trans. Am. Fish. Soc.*, 22:219-222.
- Gries, G., and B.H. Letcher. 2002. A night-seining technique to sample Atlantic salmon (*Salmo salar*) in streams. *N. Amer. J. Fish. Manag.*, 22:595-601.
- Mayo, C.A., B.H. Letcher, and S. Scott. 2001. Zooplankton filtering efficiency of the baleen of a North Atlantic right whale, *Eubalaena glacialis*. *Journal of Cetacean Research and Management*, special issue, vol. 2: 225-230.
- Letcher, B.H., and T.L. King. 2001. Parentage and grandparentage assignment with known and unknown matings: application to the Connecticut River Atlantic salmon restoration. *Can. J. Fish. Aquat. Sci.*, 58: 1812-1821.
- Letcher, B.H., and T.D. Terrick. 2001. Effects of developmental stage at stocking on growth and survival of Atlantic salmon fry. *N. Amer. J. Fish. Manag.*, 21: 102-110.
- Juanes, F. B.H. Letcher, and G. Gries. 2000. Ecology of stream fish: insights gained from an individual-based approach. *J. Freshw. Biol.*, 9: 65-73.
- Letcher, B.H., and T.L. King, 1999. Targeted stock identification using multilocus genotype 'familyprinting'. *Fisheries Res.*, 43:99-111.
- Letcher, B.H., and T.D. Terrick, 1998. Maturation of age-0 Atlantic salmon following a massive, localized flood. *J. Fish Biol.*, 53:1243-1252
- Letcher, B.H. and Terrick, T.D. 1998. Thermal marking of Atlantic salmon otoliths. *N. Amer. J. Fish. Manag.*, 18:406-410.
- Buckle, J., Letcher, B.H., and Conover, D. 1998. Effects of a delayed onset of piscivory on size of Age-0 bluefish. *Trans. Am. Fish Soc.*, 127:576-587.
- Letcher, B.H., J. Walters, and J. Priddy. 1998. An individual-based, spatially-explicit model of the population dynamics of the endangered Red-cockaded woodpecker, *Picoides borealis*. *Biol. Cons.*, 86:1-14.
- Letcher, B.H., and J.A. Rice 1997. Prey patchiness and larval fish growth and survival: inferences from a spatially-explicit, individual-based model. *Ecol. Mod.*, 95, 29-43
- Letcher, B.H., J.A. Rice, L.B. Crowder, and F.P. Binkowski. 1997. Size- and species-dependent variability in consumption and growth rates of larvae and juveniles of three fishes. *Can. J. Fish. Aquat. Sci.*, 54, 405-414

- Letcher, B.H., J.A. Rice, L.B. Crowder, and F.P. Binkowski. 1996. Size-dependent effects of continuous and intermittent feeding on starvation time and mass loss in starving yellow perch (*Perca flavescens*) larvae and juveniles. *Trans. Am. Fish. Soc.*, 125, 14-26
- Letcher, B.H., J.A. Rice, L.B. Crowder, and K. Rose. 1996. Variability in survival of larval fishes; disentangling components of variance with a generalized individual-based model. *Can. J. Fish. Aquat. Sci.*, 53, 787-801.
- Letcher, B.H., and D.A. Bengtson. 1993. Effects of food density and temperature on feeding and growth of young inland silversides *Menidia beryllina*. *J. Fish Biol.*, 43; 671-686.
- Letcher, B.H., and D.A. Bengtson. 1993. Effects of food density on growth and on patterns of prey depletion by larval silverside fish *Menidia beryllina* (Cope); a laboratory investigation with image analysis. *J. Exp. Mar. Biol. Ecol.* 167, 197-213.
- Blaustein, J.D., and B. Letcher. 1987. Noradrenergic regulation of cytosol estrogen receptors in female rat hypothalamus: possible role of α_2 -noradrenergic receptors. *Brain Res.*, 404, 51-57.

Book chapter:

- Forseth, T., B.H. Letcher and M. Johansen, 2010. The behavioural flexibility of salmon growth, in *Atlantic Salmon Ecology*, O. Aas, S. Einum, A. Klemetsen, and J. Skurdal, Eds., Wiley-Blackwell, Oxford, UK.

Manuscripts submitted:

- Xu, C., B. H. Letcher, and K. H. Nislow, Predicting climate change effects on brook trout population persistence: integrating stream temperature and flow with population vital rates, *Global Change Biology*.
- Morrissey, M.B., K. Sakrejda, A. Wilson, J. M. Pemberton, R. Covas, C. Doutrelant, C. N. Spottiswoode, and B. H. Letcher Analyzing selection of traits with repeated measures: defining the phenotype and avoiding erroneous inference of stabilizing selection. *Journal of Evolutionary Biology*.
- Kanno, Y, J.C. Vokoun, and B. H. Letcher, Paired stream-air temperature measurements reveal finescale thermal heterogeneity within headwater brook trout (*Salvelinus fontinalis*) stream networks, *Freshwater Biology*.
- Villar et al., Basin-scale phenology and climate variability in anadromous fishes: global seaward migration timing of the charismatic Atlantic salmon (*Salmo salar*), *Global Change Biology*.

Whiteley, A; Coombs, J; Hudy, M; Robinson, Z; Colton, A; Nislow, K; Letcher, BH. Fragmentation and patch size shape genetic structure of brook trout populations. *Mol Ecol*.

Presentations:

Letcher, B.H. et al., A modular Bayesian approach to estimating species response to environmental change, **invited**, Annual meeting of the International Association of Landscape Ecologists, Newport, RI, April 2012

Letcher, B.H. et al., Modeling population persistence on the streamscape, **invited**, USFWS Region 5 Seminar Series, Hadley, MA, April 2012

Letcher, B.H., Connectivity in stream networks, **invited plenary** at the Quebec Society of Animal Behavior annual meeting, Sherbrooke Quebec, Nov 2011.

Letcher, B.H. et al., The Differential Importance of Stream Units and Their Connectivity for Population Persistence, within and trans-generation connectivity, **invited**, Riverscapes Symposium American fisheries Society Annual Meeting, Seattle WA, Sept 2011.

Letcher, B.H., Effects of stream temperature and flow on stream salmon population persistence: can we forecast climate change effects? **Invited**, MA Rivers Alliance meeting – River monitoring and climate change in MA, Leominster, MA, May 2011.

Letcher, B. H., Brook trout population persistence despite isolation. **Invited**, University of Laval, Quebec, Canada, March 2011.

Letcher, B.H., et al. Variation in freshwater Atlantic salmon survival among rivers: timing, body size and extent, **Invited**, Biennial Connecticut River Research Forum, Hadley, MA Feb 2011.

Letcher, B. H., K.H. Nislow, Brook trout population persistence, how does it work? **Invited**, Annual meeting of the Eastern Brook Trout Joint Venture, Mountain Lake, VA, Oct 2010.

Letcher, B. H., J. Coombs, K.H. Nislow, Maintenance of phenotypic variability: size selection and quantitative genetics of stream-dwelling brook trout, *Advances in the population ecology of stream salmonids*, Luarca, Spain, May 2010.

Letcher, B. H., Population persistence in brook trout: models and forecasts. **Invited** Engineering Department Departmental Seminar, University of Massachusetts, Jan. 2010, Amherst, MA.

Letcher, B. H., Population persistence in brook trout: models and forecasts. **Invited** School of Biology and Ecology Departmental Seminar, University of Maine, Jan. 2010, Orono, ME.

Letcher, B. H., Population persistence in brook trout: models and forecasts. **Invited** Ecology and

evolutionary Biology Departmental Seminar, University of Connecticut, Dec. 2009, Storrs, CT.

- Letcher, B. H., J. Coombs, P. Schueller, K. Griswold, Monitoring Genetically Identifiable Atlantic Salmon in the Connecticut River, **Invited** presentation for Connecticut River Atlantic salmon Assessment Committee Meeting, Dec 2009, Turners Falls, MA
- Letcher, B. H., K. Nislow, Seasonal variation in the relative importance of factors influencing growth, survival and movement of stream salmonids: towards a hierarchical model of population persistence. **Invited** Monster Seminar Jam, NOAA Northwest Science Center, October 2009, Seattle, WA.
- Letcher, B. H., J. Coombs, P. Schueller, K. Griswold, Monitoring Genetically Identifiable Atlantic Salmon in the Connecticut River, Annual Atlantic salmon forum, Feb 2009, Hadley, MA
- Letcher, B. H., K. Nislow, J. Coombs, T. D. Dubreuil, M. O'Donnell. Habitat-dependent growth and survival of brook trout and Atlantic salmon in a small stream – everybody in the pool? American Fisheries Society, 2008 Annual Meeting, Ottawa, ONT.
- Letcher, B.H., Extinction risk due to stream fragmentation in a brook trout population, **Invited** presentation at the DNR/TNC seminar series, January 2008, Boston, MA
- Letcher, B.H., K. Nislow, J. Coombs, M. O'Donnell, and T. Dubreuil. Habitat effects on resident brook trout persistence. Annual Atlantic salmon forum, January 2008, Orono, ME.
- Letcher, B.H. and Nislow, K. Extinction risk due to stream fragmentation in a brook trout population. **Invited** talk, Trout Unlimited Annual Meeting, April 2007, Leominster, MA.
- Letcher, BH. Extinction risk due to stream fragmentation in a brook trout population. **Invited** Departmental Seminar, North Carolina State University, Feb. 2007, Raleigh, NC.
- Letcher, B. H., K. Griswold, J. Coombs, Monitoring Genetically Identifiable Atlantic Salmon in the Connecticut River, Biennial Atlantic salmon forum, Feb 2007, Hadley, MA
- Letcher, B. H., T. D. Dubreuil, M. O'Donnell, J. Zydlewski, B. Connery. Brook trout growth and movements in a Maine coastal stream, Stanley Brook. **Invited** talk, USFWS sea-run trout workshop, Dec. 2006, Hadley, MA.
- Letcher, B. H., T. D. Dubreuil, M. O'Donnell, K. Nislow. Population consequences of Brook trout movements in a fragmented landscape. **Invited** talk, American Fisheries Society Meeting, Sept. 2006, Lake Placid, NY
- Letcher, B.H, Mechanisms maintaining body size variation in stream salmonids. **Invited** talk, International Congress on the Biology of Fishes, July 2006, St. John's Newfoundland, CA

- Letcher, B.H, Causes and consequences of body size variation in stream fish. **Invited** seminar, Organismic and Evolutionary Biology Program, University of Massachusetts, April, 2006.
- Letcher, B. H., T. D. Dubreuil, M. O'Donnell, K. Nislow, Linking stream flow to fish population response: relative effects of flow and temperature variation on Atlantic salmon growth and survival in a small stream. 2005 WRRRC conference, Amherst MA.
- Letcher, B. H., Coombs, J., T. D. Dubreuil, M. O'Donnell, K. Nislow. Piecing together a salmonid production model for a small stream. **Invited** seminar, Trout unlimited Northeast region Annual Science meeting, 2005, Litchfield CT.
- Letcher, B. H., Coombs, J., T. D. Dubreuil, M. O'Donnell, K. Nislow. Piecing together a salmonid production model for a small stream. **Invited** seminar, Harvard Forest seminar series, 2005, Petersham, MA.
- Letcher, B. H., G. Horton, T. D. Dubreuil, M. O'Donnell, Selection on body size in juvenile Atlantic salmon: power of multi-state mark-recapture models to detect size dependent survival, Ecological Society of America, 2004 annual meeting, Portland Oregon.
- Letcher, B. H., G. Horton, T. D. Dubreuil, M. O'Donnell, No selection on size or growth in juvenile Atlantic salmon after accounting for emigration and probability of capture using a multistrata mark-recapture model, Evolutionary and Ecological Ethology of Fishes 2004 meeting, Saudakraukur, Iceland
- Letcher, B. H., T. D. Dubreuil, M. O'Donnell, M. Obedzinski, and K Nislow, Life History Consequences of Variation in Stocking Date for Stream-Dwelling Atlantic Salmon Parr, American Fisheries Society, 2003 Annual Meeting, Quebec City, Quebec, CAN.
- Letcher, B.H, Sources of size variation in stream-dwelling Atlantic salmon parr. **Invited** seminar, Norway Institute of Nature Research, Trondheim, Norway, 2003
- Letcher, B.H. Sources of size variation in stream-dwelling Atlantic salmon. **Invited** seminar, Department of Biology , University of Maine, May 2, 2003.
- Letcher, B.H. Determinants of life history variation in stream-dwelling Atlantic salmon. **Invited** seminar for Biology Department, Worcester Polytechnic Institute, February 18, 2003
- Letcher, B.H., T.D. Dubreuil, M.O. O'Donnell, M. Obedzinski and K. Nislow. Effects of timing of stocking on Atlantic salmon in the West Brook, MA. USFWS Forum on Atlantic Salmon research, Hadley, MA, February, 2003.
- Letcher, B.H. and Nislow, K.H. Determinants of growth and survival across scales: use of parentage assignment to assess heritable variation in juvenile Atlantic salmon. **Invited** presentation at SALGEN quantitative/experimental workshop, Arrendono, Spain, Sept. 2002.

Letcher, B.H. Family differences in growth, survival and movement of stream-dwelling Atlantic salmon parr. EEEF meeting, Quebec City, Quebec, September, 2002.

Letcher, B.H. T.D. Dubreuil, and G. Gries. Incorporation of PIT tag antennas into a long-term, detailed tagging study in a small stream. NMFS PIT tag antenna workshop, Manchester, WA, December, 2001.

Letcher, B.H. and G. Gries. Life-history dependent morphometric variation in stream-dwelling Atlantic salmon. AIC meeting, Center Harbor, NH, September, 2001.

Letcher, B.H. and G. Gries. Family differences in growth and survival of individually-tagged juvenile Atlantic salmon. USFWS Forum on Salmon research, January, 2001.

Letcher, B.H. and G. Gries. Sources of growth variation in individual Atlantic salmon parr in West Brook, MA, USA, International Congress on the Biology of Fishes, Aberdeen, Scotland, 2000.

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