USGS Conte Anadromous Fish Research Center publication relevant to EBTJV

Horton G E., B.H. Letcher, and W.L. Kendall. **In** **Press**. 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.

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-dependent effects of temperature on brook trout (*Salvelinus fontinalis*) growth, 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

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.

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.

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](http://wos.isiknowledge.com.silk.library.umass.edu:2048/?SID=B5CcMHG246KGjanl1Oe&Func=Abstract&doc=1/3), Evol. Ecol. Res. 7:643-650.

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.

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.

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.