

Publications:

Tyler, J.A. and Rutherford, E.S. *In Press*. An Individual-Based Modeling Analysis of the Effect of River Restoration Efforts on Steelhead Populations in the Manistee River, Michigan. Transactions of the American Fisheries Society.

Tyler, J.A. and Bolduc, M.B. *In Press*. Individual variation in bioenergetic rates of YOY rainbow trout. Transactions of the American Fisheries Society.

Kracker, L.M., Zhou, L., Jech, J.M., Horne, J.K., Tyler, J.A., Brandt, S.B. 2003. Spatial and temporal structure in fish distributions: A Lake Ontario case study. In: M. Munawar (Ed.), State of Lake Ontario (SOLO): Past, Present and Future. Ecovision World Monograph Series. Backhuys Publishers, Leiden, The Netherlands.

Brandt, S. B., Mason, D. M. McCormick, M. Lofgren, B., Hunter, T. and Tyler, J. A. 2002. Climate Change: Implications for Habitat Quality and Fish Growth Performance in the Great Lakes. American Fisheries Society Symposium 32:61-76.

Tyler, J. A. and Brandt, S. B. 2001. Spatial models of fish habitat quality: Does growth rate potential relate to fish growth? Ecology of Freshwater Fish 10:43-56.

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Walline, P.D., Tyler, J.A., Brandt, S.B., Ostrovsky, I. and Jech, J.M. 2000. Lavnun Abundance: How changes may affect Lake Kinneret's zooplankton. Archive fur Hydrobiologia Special Issue Advances in Limnology 55:491-511.

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Van Winkle, W., Holcomb, B.D., Jager, H.I., Tyler, J.A., Whitaker, S.Y., Shuter, B.J. 1997. Regulation of energy acquisition and allocation to respiration, growth and reproduction: conceptual framework and examples using rainbow trout. pp. 103-138 in *Early life history and recruitment of fish populations*, R.C.Chambers and E.A. Trippel, eds. Chapman & Hall.

- Rose, K.A., Tyler, J. A., Singhdermott, D., DeAngelis, D.L., and Rutherford, E.S. 1996. Multispecies modeling in fish populations. pp. 194-222 in *Computers in fisheries research*, B. Megrey and E. Moksness, eds. Chapman & Hall publishers.
- Rose, K. A., Tyler, J. A., Chambers, R.C., MacPhee,G., and Danila, D.J. 1996. Simulating winter flounder population dynamics using coupled individual-based YOY and Leslie matrix models. *Canadian Journal of Fisheries and Aquatic Sciences* 53:1071-1091.
- Tyler, J. A., and Gilliam, J. F. 1995. Ideal free distributions of stream fish: a model and test with minnows, *Rhinichthys atratulus*. *Ecology* 76:580-592.
- Tyler, J. A. and Clapp, D.P. 1995. Perceptual constraints on stream fish habitat selection: effects of food availability and water velocity. *Ecology of Freshwater Fish* 4:9-16
- Chambers, R.C., Rose, K.A., and Tyler, J. A. 1995. Recruitment and recruitment processes of young-of-the-year winter flounder, *Pleuronectes americanus*, at different latitudes: implications of an individual-based simulation model. *Netherlands J. Sea Research* 34:19-43.
- Tyler, J. A., and Rose, K. A. 1994. Individual variability and spatial heterogeneity in fish population models. *Reviews in Fish Biology and Fisheries* 4:91-123.
- Tyler, J. A. 1993. Effects of water velocity, group size, and prey arrival rate on the capture efficiency of stream-drift by *Rhinichthys atratulus*. *Canadian Journal of Fisheries and Aquatic Sciences* 50:1055-1061.

Manuscripts in Preparation:

- Rutherford, E.S., Tyler, J.A. Hinz, L., And Allen, J.D. Effects of historic changes in river discharge on steelhead populations in three tributaries of Lake Michigan: an individual-based modeling analysis. For submission to *Transactions of the American Fisheries Society*.