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Research Fisheries Biologist

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EDUCATION

B.S. Fisheries Shanghai University of Fisheries China 1982
M.S. Ecology State University of New York Syracuse 1996
Ph.D. Ecology State University of New York Syracuse 1999

HONORS AND AWARDS:

Adjunct Faculty Michigan State University, Fish and Wildlife Department, 2003—Present
NSERC Postdoctoral Fellowship Natural Science and Engineering Council of Canada, 2001—2002
Sea Grant Fellowship New York Sea Grant Institute, 1995-1996, 1998-1999.
Visiting Scholar Fellowship State University of New York and Chinese Academy of Sciences, 1993-1994

LEADERSHIP TRAINING

Law for the expert witness Michigan State University 2004
Natural resource leadership Michigan State University and Progress Associates 2005
Negotiating and managing conflicts Michigan Department of natural resources 2007
Conflict, collaboration, and consensus Michigan State University 2008
Facilitator excellence Michigan State University 2010

REGULAR AND RECURRING RESPONSIBILITY (2002—Present)

Sock assessments for fisheries management in 1836 treaty waters and Lake Huron across international boundary:
PI of the Federal Aid Project—Assessment of Lake Huron Lake Trout
PI of the Federal Aid Project—Assessment of predator-prey balance for Lake Huron fishery management
PI of Fish and Game Project—Assessment of lake-whitefish stocks in Michigan waters (Lake Huron components)

COMMITTEE ANNUAL REPORTS AND PRESENTATIONS (2002—Present)

Lake Huron Technical Committee and Lake Huron Committee of the Great Lakes Fisheries Commission
The Modeling Subcommittee of Technical Fisheries Committee for 1836 Treaty Waters
Lake Huron Basin Team of Michigan Department Natural Resources, Fisheries Division

SPECIALTY AND EXPERIENCES

Survey design, catch-effort statistics and indices, and age-structured stock assessment 2002—Present
Modeling fish bioenergetics and predator-prey balance in the Great Lakes 1995—Present
Modeling fish life-history dynamics and fish population dynamics 1996—Present
Landscape ecology and fishery productivity in man-made lakes 1982—1992 (China)

RECENT EXTERNAL FUNDING AND BUDGET

2006—2008 Great Lakes Fish and Wildlife Restoration Act: Response of lake trout and Chinook salmon to unprecedented declines in major prey fish abundance in Lake Huron. Amount \$142,000. Co-PI
2008—2009 Great Lakes Fisheries Commission: Coordination workshops concerning lake trout age-1 mortality in the Great Lakes. Amount \$8,746. Co-PI
2010—2012 Great Lakes Fisheries Commission: Quantifying new top-down influences on the rapidly changing food web in the main basin of Lake Huron. Amount \$129,738.76. Leading PI

PROFESSIONAL SOCIETIES

International Association for Great Lakes Research American Fisheries Society

PEER REVIEW FOR PROFESSIONAL JOURNALS

North American Journal of Fisheries Management Transactions of American Fisheries Society
Journal of Great Lakes Research Environmental Biology of Fishes
Canadian Journal of Fisheries and Aquatic Sciences Journal of Theoretical Biology

PEER REVIEWED PUBLICATIONS

- He, J. X., Stewart, D. J., and Rudstam, L. G. 2012. Chapter 22. Growth parameters as growth indices in time-varying environments: a comparison among four approaches to using the von Bertalanffy growth function. American Fisheries Society (In Press).
- He, J. X., Ebener, M. P., Riley, S. C., Cottrill, A., Kowalski, A., Koproski, S., Mohr, L., and Johnson, J. E. 2012. Lake Trout Status in the Main Basin of Lake Huron, 1973–2010, North American Journal of Fisheries Management 32: 402-412.
- Fitzsimons, J. D., Brown, S., Brown, L., Honeyfield, D., He, J., Johnson, J. E. 2010. Increase in lake trout reproduction in Lake Huron following the collapse of alewife: relief from thiamine deficiency or larval predation? Aquatic Ecosystem Health & Management 13:73–84.
- He, J. X., Bence, J. R., Johnson, J. E., Clapp, D. F., and Ebener, M. P. 2008. Modeling variation in mass-length relations and condition indices of lake trout and Chinook salmon in Lake Huron: a hierarchical Bayesian approach. Transactions of the American Fisheries Society 137: 801-817.
- Hensler, S. R. Jude, D. J., and He, J. 2008. Burbot growth and diets in Lakes Michigan and Huron: an ongoing shift from native species to round gobies. American Fisheries Society Symposium 59: 91-107.
- Muir, A. M., Ebener, M. P., He, J. X., and Johnson, J. E. 2008. A Comparison of the scale and otolith methods of age estimation for lake whitefish in Lake Huron. North American Journal of Fisheries Management 28: 625-635.
- He, J. X., and Bence, J. R. 2007. Modeling annual growth variation using a hierarchical Bayesian approach and the von Bertalanffy growth function, with application to lake trout in southern Lake Huron. Transactions of American Fisheries Society 136: 318-330.
- Riley, S. C., He, J. X., Johnson, J. E., O'Brien, T. P., and Schaeffer, J. S. 2007. Evidence of widespread natural reproduction by lake trout *Salvelinus namaycush* in the Michigan Waters of Lake Huron. Journal of Great Lakes Research 33:917–921.
- Sitar, S. P., and He, J. X. 2006. Growth and maturity of hatchery and wild lean lake trout during population recovery in Michigan Waters of Lake Superior. Transactions of American Fisheries Society 135: 915-923.
- Pothoven, S. A., Nalepa, T. F., Madenjian, C. P., Rediske, R. R., Schneeberger, P. J., and He, J. X. 2006. Energy density of lake whitefish *Coregonus clupeaformis* in Lakes Huron and Michigan. Environmental Biology of Fishes 76:151–158.
- He, J. X., Rudstam, L. G., Forney, J. L., VanDeValk, A. J., and Stewart, D. J. 2005. Long-term patterns in growth of Oneida Lake walleye: a multivariate and stage-explicit approach for applying the von Bertalanffy growth function. Journal of Fish Biology 66: 1459-1470.
- Johnson, J. E., He, J. X., Woldt, A. P., Ebener, M. P., and Mohr, L. C. 2004. Lessons in rehabilitation stocking and management of lake trout in Lake Huron. American Fisheries Society Symposium 44: 161-175.
- He, J., and Stewart, D. J. 2002. A stage-explicit expression of the von Bertalanffy growth model for understanding age at first reproduction of Great Lakes fishes. Canadian Journal of Fisheries and Aquatic Sciences 59: 250-261.
- He, J., and Stewart, D. J. 2001. Age and size at first sexual maturity of fishes: Predictive models based only on growth trajectories. Ecology 82: 784-791.
- He, J., and Stewart, D. J. 1998. Ontogeny of energetic relationships and potential effects of tissue turnover: A comparative modeling study on lake trout. Canadian Journal of Fisheries and Aquatic Sciences 55: 2518-2532.
- He, J., and Stewart, D. J. 1997. Comment - Measuring the bioenergetic cost of fish activity in situ using a globally dispersed radio tracer (¹³⁷Cs). Canadian Journal of Fisheries and Aquatic Sciences 54: 1953-1954.
- He, J. 1991. Assessment of fish productivity in reservoirs: an approach of landscape ecology. Pages 291-296 *in* D. Xiao, Editor. Theories, methods, and application of landscape ecology. Chinese Forestry Publisher. Beijing, China.
- He, J. 1990. Calculation of fishery productivity on the basis of age structure of fish populations. Fisheries Science 9(2): 41-45.
- He, J., and Dai, E. 1990. Annulus and the young-of-the-year check on scales of silver carp and bighead. Chinese Journal of Zoology 25(3): 11-12.
- He, J., Wang, W., and Dai, E. 1990. Ecological regions and geographical environmental indices of reservoirs fish productivity in Hunan Province. Research on Agricultural Modernization 11(2): 37-41.
- He, J. 1989. Comprehensive researches on agricultural ecosystems. The Journal of Ecology [Shengyang, China] 8(6): 63-65.
- He, J., Yin, M., and Dai, E. 1986. Age and growth of silver carp and bighead in a reservoir, implication for prudent stocking procedure. Reservoir Fisheries 4(4):1-6.