

PUBLICATIONS

Book editor:

Chen Y., D.C. Chapman, J.R. Jackson, D. Chen, Z. Li, K.J. Killgore, Q.E. Phelps, and M.A. Eggleton, editors. 2016. Fishery Resources, Environment, and Conservation in the Mississippi and Yangtze River Basins. American Fisheries Society Special Symposium No. 84. American Fisheries Society, Bethesda, MD.

Peer-reviewed articles: (*graduate student co-authored, **undergraduate student co-authored)

Eggleton, M.A., Q.C. Fontenot, and J.R. Jackson. 2016. The Lower Mississippi River floodplain ecosystem: current status and future potential. Pages 235-262 in Y. Chen, D.C. Chapman, J.R. Jackson, D. Chen, Z. Li, K.J. Killgore, Q.E. Phelps, and M.A. Eggleton, editors. Fishery resources, environment, and conservation in the Mississippi and Yangtze river basins. American Fisheries Society Special Symposium No. 84. American Fisheries Society, Bethesda, MD.

Hecke, K.B.**, E.L. Brinkman, B.A. Timmons, J.A. Olive, and M.A. Eggleton. 2016. Relationships between growth and hydrology for largemouth bass in the Ouachita River, Arkansas. *Journal of the Southeastern Assn. of Fish and Wildlife Agencies* 3:104-111. (senior project at University of Arkansas at Little Rock)

Fernando, A.V.*, J.N. Ford**, and M.A. Eggleton. 2014. Assessment of the feasibility of using consumer-grade webcams for stereophoto measurement of fish lengths. *Arkansas Environmental, Agricultural and Consumer Sciences Journal* 14:7-12. (undergraduate internship project at UAPB)

Fernando, A.V.*, C.R. Peacock, B.W. Baker, and M.A. Eggleton. 2014. Ageing precision and error analysis of whole-view and sectioned otoliths in largemouth bass and spotted bass. *Journal of the Southeastern Assn. of Fish and Wildlife Agencies* 1:75-82.

Fernando, A.V.** and M.A. Eggleton. 2013. Comparison of the modern fish assemblage in Mound Pond (Lonoke County) with the archeological record. *Journal of the Arkansas Academy of Science* 67:46-52. (undergraduate class project)

Eggleton, M.A., B.G. Batten, C.R. Peacock*, and S.E. Lochmann. 2012. Spotted bass population characteristics and relationships with macrohabitat variables in the Arkansas River, Arkansas. *Proceedings of the Southeastern Assn. of Fish and Wildlife Agencies* 66:49-56.

Peacock, C.R.*, B.G. Batten*, and M.A. Eggleton. 2011. Comparison of various minimum-length limits for the largemouth bass fishery in the Arkansas River, Arkansas. *Proceedings of the Southeastern Assn. of Fish and Wildlife Agencies* 65:148-155.

Eggleton, M.A., J.R. Jackson, and B.J. Lubinski*. 2010. Comparison of gears for sampling littoral-zone fishes in floodplain lakes of the lower White River, Arkansas. *North American Journal of Fisheries Management* 30:928-939.

Eggleton, M.A., B.G. Batten*, and S.E. Lochmann. 2010. Largemouth bass fishery characteristics in the Arkansas River, Arkansas. *Proceedings of the Southeastern Assn. of Fish and Wildlife Agencies* 64:160-167.

Eggleton, M.A., J.R. Jackson, and B.J. Lubinski*. 2009. Potential for a minimum-length limit regulation to improve floodplain lake crappie fisheries in Arkansas. *Proc. of the Southeastern Assn. of Fish and Wildlife Agencies* 63:97-103.

Neal, J.W., M.A. Eggleton, and A.E. Goodwin. 2009. The effects of largemouth bass virus disease on a quality largemouth bass population in Arkansas. *Journal of Wildlife Diseases* 45:766-771.

Fontaine, B.V.*, C.P. Hutt, and M.A. Eggleton. 2009. Assessment of catch and exploitation of largemouth bass (*Micropterus salmoides*) fisheries in the lower Arkansas River: potential impacts of competitive tournaments. *Proceedings of the Southeastern Assn. of Fish and Wildlife Agencies* 63:111-118.

Lubinski, B.J.*, J.R. Jackson, and M.A. Eggleton. 2008. Relationships between floodplain lake fish communities and environmental gradients in a large river-floodplain ecosystem. *Trans. of the American Fisheries Society* 137:895-908.

- Hargrave, C.W.*, R. Ramirez**, M.A. Brooks**, M.A. Eggleton, K.G. Sutherland, P.R. Deaton*, and H.S. Galbraith*. 2006. Species-specific ecosystem effects enhance production of a primary consumer through indirect food web interactions. *Freshwater Biology* 51:1901-1910.
- Schramm, H.L., Jr. and M.A. Eggleton. 2006. Applicability of the flood-pulse concept to temperate floodplain river ecosystems: thermal and temporal components. *Rivers Research and Applications* 22:543-553.
- Eggleton, M.A., R. Ramirez**, C.W. Hargrave*, K.B. Gido, J.R. Masoner, G.D. Schnell, and W.J. Matthews. 2005. Predictability of littoral-zone fish assemblages through ontogeny in Lake Texoma, Oklahoma-Texas, USA. *Environmental Biology of Fishes* 73:21-36.
- Eggleton, M.A., L.E. Miranda and J.P. Kirk. 2004. The potential for fish predation to impact zebra mussels *Dreissena polymorpha*: insight from bioenergetics models. *Ecology of Freshwater Fish* 13:85-95.
- Eggleton, M.A.* and H.L. Schramm, Jr. 2004. Feeding ecology and energetic relationships with habitat of blue catfish *Ictalurus furcatus* and flathead catfish *Pylodictis olivaris* in the lower Mississippi River, USA. *Environmental Biology of Fishes* 70:107-121.
- Eggleton, M.A., K.B. Gido, W.J. Matthews and G.D. Schnell. 2004. Assessment of anthropogenic influences on littoral-zone aquatic communities of Lake Texoma, Oklahoma-Texas, USA. *Ecohydrology and Hydrobiology* 4:103-117.
- Leao, M.*, M.A. Eggleton, and E.R. Buckner. 2004. Fish utilization and diversity associated with created wetlands within the White River watershed. *Proceedings of the Southeastern Assn. of Fish and Wildlife Agencies* 58:162-173.
- Eggleton, M.A.* and H.L. Schramm, Jr. 2003. Energetic gradients in catfish feeding in the lower Mississippi River, USA. *Ecohydrology and Hydrobiology* 3:27-38.
- Eggleton, M.A.* and H.L. Schramm, Jr. 2002. Caloric densities of selected fish prey organisms from the lower Mississippi River. *Journal of Freshwater Ecology* 17:409-414.
- Eggleton, M.A. and E.L. Morgan. 2000. Rainbow trout production and relations with abiotic factors in two southern Appalachian streams. *Journal of Freshwater Ecology* 15:251-268.
- Schramm, H.L., Jr., M.A. Eggleton*, and R.M. Mayo*. 2000. Habitat conservation and creation: invoking the flood-pulse concept to enhance fisheries in the Lower Mississippi River. *Polskie Archiwum Hydrobiologii* 47:45-62.
- Eggleton, M.A., E.L. Morgan and W.L. Pennington. 1996. Effects of liming on an acid-sensitive southern Appalachian stream. *Restoration Ecology* 4:247-263.
- O'Bara, C.J. and M.A. Eggleton. 1995. Evaluation of three small-scale rainbow trout put-and-take fisheries in Tennessee streams. *Proceedings of the Southeastern Assn. of Fish and Wildlife Agencies* 49:78-87.
- Eggleton, M.A., E.L. Morgan, W.L. Pennington, and T.P. Weaver. 1991. Stream response to limestone additions using a hydropowered dosing apparatus in Laurel Branch, Tennessee. *Acid Rain Mitigation: Liming Technologies and Environmental Considerations* Special Symposium. American Chemical Society – Division of Environmental Chemistry 31:153-157.
- Other articles:**
- Eggleton, M.A., B.G. Batten, B.V. Fontaine, and C.R. Peacock. 2015. "Long-term Arkansas River fishery investigation leads to change in largemouth bass minimum-length limit." *Arkansas Aquafarming* 32(1):1-2.

Peacock, C.R., B.G. Batten, B.V. Fontaine, and M.A. Eggleton. March-April 2013. "Current trends: bass growth comes and goes with the flows." *Arkansas Wildlife* 44(2):10-12.

Batten, B. and M. Eggleton. May-June 2009. "Seeing spots: don't forget the black bass family's other member." *Arkansas Wildlife*, pp. 10-11.

Batten, B. and M. Eggleton. 8 April 2009. "Current state of the Arkansas River largemouth bass fishery." *Arkansas Outdoors* (<http://www.agfc.com/news/arkansasoutdoors.aspx>).

Batten, B. and M. Eggleton. 27 April 2005. "Sizing up largemouth bass in Arkansas River." *Arkansas Outdoors* (<http://www.agfc.com/news/arkansasoutdoors.aspx>).

Selected Technical Reports:

Eggleton, M.A., S.H. Jones, C.R. Colen, and O.C. Duffy. 2016. Least Tern survey – lower Arkansas River below Dam 2. Completion report submitted to the U.S. Army Corps of Engineers – Little Rock District, Contract No. W9127S-14-P-0127.

Eggleton, M.A., B.G. Batten, and B.V. Fontaine. 2008. Task 2 – Arkansas River Mitigation Study: Characterization of dike fields prior to proposed notching with respect to fish communities and aquatic habitats in the lower Arkansas River – 2007 project report. U.S. Army Corps of Engineers – Little Rock District and Waterways Experiment Station.

Schnell, G.D., W.J. Matthews, M.A. Eggleton, K.B. Gido, and D.W. Pogue. 2003. System assimilative capacity (SAC) study, Lake Texoma (Oklahoma-Texas): determination of aquatic and sediment eco-effects. Final project report (1999-2001). U.S. Environmental Protection Agency - Kerr Research Laboratory and U.S. Army Corps of Engineers - Tulsa District.

Eggleton, M.A., L.E. Miranda, and J.P. Kirk. 2003. The potential for fish predation to impact zebra mussels *Dreissena polymorpha* across a latitudinal gradient: insight from bioenergetics models. U.S. Army Corps of Engineers Technical Report ERDC/EL TR-03-22.

Schnell, G.D., W.J. Matthews, M.A. Eggleton, K.B. Gido, and D.W. Pogue. 2002. System assimilative capacity (SAC) study, Lake Texoma (Oklahoma-Texas): determination of aquatic and sediment eco-effects. Interim project report (1999-2001). U.S. Environmental Protection Agency - Kerr Research Laboratory and U.S. Army Corps of Engineers - Tulsa District.

Schramm, H.L. Jr. and M.A. Eggleton. 2002. Lower Mississippi River fisheries investigations. Final report (1994-97). U.S. Army Corps of Engineers - Lower Mississippi Valley Division.

Schramm, H.L., Jr., M.A. Eggleton, and R.B. Minnis. 2000. Spatial analysis of floodplain habitat critical to lower Mississippi River fishes using a Geographic Information Systems (GIS) approach. Final report (1999-2000). U.S. Fish and Wildlife Service and U.S. Geological Survey.

O'Bara, C.J., M.A. Eggleton, C.R. Drumwright, and C.S. Loftis. 1996. Influence of water-level fluctuations and habitat enhancement on recruitment of black basses and crappies in Chickamauga Reservoir, Tennessee. Interim project report (1992-95). Tennessee Wildlife Resources Agency.

Morgan, E.L., M.A. Eggleton, V.D. Adams, and W.L. Pennington. 1993. Laurel Branch acid precipitation mitigation program (APMP). Laurel Branch, Tennessee Acid Precipitation Mitigation Program (APMP). Final report (1985-91). U.S. Fish and Wildlife Service.

INVITED SPEAKER

2016. Training future fish hatchery scientists: three decades of experience at the University of Arkansas at Pine Bluff. Invited paper presented at the *Hatchery Fish Biologist: a Career for the Future* symposium at the American Fisheries Society annual meeting, August 23, 2016, Kansas City, MO.

2016. Fish assemblage responses to different secondary channel designs in the lower Mississippi River: a template for river restoration. Invited paper presented at the *Application of Methods and Techniques and Collaborations in Managing and Conserving Large River Basin Fishery Resources and Environment* at the American Fisheries Society annual meeting, August 25, 2016, Kansas City, MO.

2013. The National Cooperative Fisheries Scholars program: challenges for post graduates. Invited paper presented in the *A Big Tent: Building a Stronger Society and Workforce Through Professional Diversity* symposium at the American Fisheries Society annual meeting, September 9, 2013, Little Rock, AR.

2011. The National Cooperative Fisheries Scholars program: a model for producing minority fisheries professionals. Invited paper presented in the *Managing Diversity in a Changing World* symposium at the American Fisheries Society annual meeting, September 6, 2011, Seattle, WA.

2004. Catfish energetics in the lower Mississippi River: Implications towards floodplains and flood-pulses in regulated temperate rivers. Invited seminar presented to the Department of Natural Resources, Ohio State University, May 20, 2004, Columbus, OH.

2004. Catfish feeding ecology and bioenergetics in the lower Mississippi River. Invited seminar presented at the *Arkansas Large Rivers Symposium* of the Arkansas Chapter of the American Fisheries Society annual meeting, February 3, 2004, Pine Bluff, AR.

2003. Assessment of stress on aquatic communities in Lake Texoma, Oklahoma-Texas. Invited seminar presented to the Biology Department, Emporia State University, April 9, 2003, Emporia, KS.

2000. Thermal dimension of the “flood-pulse” concept in the lower Mississippi River. Invited paper presented in the *Mississippi River Basin: Ecology, Issues, and Management* symposium at the American Fisheries Society annual meeting, August 23, 2000, St. Louis, MO.

1999. *Sampling fishes in large rivers*. Workshop conducted at the Southern Division American Fisheries Society Mid-Year Technical Meeting, February 26, 1999, Chattanooga, TN.

1999. Habitat conservation and creation: invoking the “flood-pulse” concept to enhance fisheries in the Lower Mississippi River. Invited paper presented at the 6th annual meeting of the Lower Mississippi River Conservation Commission, May 10, 1999, Memphis, TN.

1995. Status of reservoir fisheries in the middle Tennessee River. Invited paper presented in the *Current Status of Tennessee Fisheries* symposium at the Tennessee Chapter of the American Fisheries Society annual meeting, February 27, 1995, Crossville, TN.

1991. Stream response to limestone additions using a hydropowered dosing apparatus in Laurel Branch, Tennessee. Invited paper presented in the *Acid Rain Mitigation: Liming Technologies and Environmental Considerations* symposium at the International Meeting of the American Chemical Society, April 5, 1991, Atlanta, GA.

SELECTED PRESENTATIONS (Last 7 years)

Skoog, M.L., Y. Chen, and M.A. Eggleton. 2016. Water quality and fish community structure characteristics in middle-order, low gradient streams in the Mississippi Alluvial Plain. Paper given at the Oklahoma Natural Resources Conference, Oklahoma City, OK.

- Lochmann, S.E., M.A. Eggleton, G.F. Farris, and K.B. Hecke. 2016. Lake Saracen bank angler creel survey and management implications. Paper given at the Arkansas Chapter AFS meeting, Fairfield Bay, AR.
- Haukenes, A.H., M.A. Eggleton, S.E. Lochmann. Training future fish scientists: undergraduate research experiences. Paper given at the International Congress on the Biology of Fishes, June 12-16, 2016, San Marcos, TX.
- Fernando, A.V. and M.A. Eggleton. 2015. Largemouth bass recruitment in southeastern Arkansas. Paper given at the Arkansas Chapter AFS meeting, Benton, AR.
- Cauthon, D.Z., R.M. Graham, T.R. Thomas, and M.A. Eggleton. 2015. Fisheries assessment of Cummins Lake in southern Jefferson County, Arkansas. Paper given at the 2015 UAPB Research Forum, Pine Bluff, AR.
- Skoog, M.L., C.T. Laskodi, Y. Chen, and M.A. Eggleton. 2015. Water quality and fish community structure characteristics of third/fourth-order streams in the Mississippi Alluvial Plain ecoregion. Paper given at the National American Fisheries Society meeting, Portland, OR.
- Fernando, A.V., A. Pruhs, and M.A. Eggleton. 2014. Towards a model for largemouth bass recruitment specific to southeast Arkansas. Paper presented at the Arkansas Chapter AFS meeting, Rogers, AR.
- Hecke, K.B., E.L. Brinkman, B.A. Timmons, and M.A. Eggleton. 2014. Relationships between growth and hydrology for largemouth bass in the Ouachita River, Arkansas. Paper presented at the Arkansas Chapter AFS meeting, Rogers, AR.
- Fernando, A.V., C.R. Peacock, B.W. Baker, and M.A. Eggleton. 2013. Ageing precision and error analysis of whole-view and sectioned otoliths in largemouth bass and spotted bass. Paper presented at the Southeastern Assn. of Fish and Wildlife Agencies annual meeting, Oklahoma City, OK.
- Eggleton, M.A., B.G. Batten, C.R. Peacock, and S.E. Lochmann. 2012. Spotted bass population characteristics and relationships with macrohabitat variables in the Arkansas River, Arkansas. Paper presented at the Southeastern Assn. of Fish and Wildlife Agencies annual meeting, Hot Springs, AR.
- Peacock, C.R., B.G. Batten, and M.A. Eggleton. 2012. Exploring the utility of various minimum-length limits for the largemouth bass fishery in the Arkansas River. Paper presented at the Southern Division of AFS annual meeting, Biloxi, MS.
- Peacock, C.R., B.G. Batten, and M.A. Eggleton. 2011. Comparison of various minimum-length limits for the largemouth bass fishery in the Arkansas River, Arkansas. Paper presented at the Southeastern Assn. of Fish and Wildlife Agencies annual conference, Nashville, TN.
- Peacock, C.R. and M.A. Eggleton. 2011. Relationship between hydrology of the Arkansas River and the resident largemouth bass *Micropterus salmoides* population. Paper presented at the Association of 1890 Research Director's annual conference, Atlanta, GA.
- Peacock, C.R., B.G. Batten, and M.A. Eggleton. 2011. Applicability of the Flood-Pulse paradigm to largemouth bass *Micropterus salmoides* in the highly regulated Arkansas River. Paper presented at the American Society of Ichthyology and Herpetology annual conference, Minneapolis, MN.
- Eggleton, M.A., B.G. Batten, and S.E. Lochmann. 2010. Largemouth bass fishery characteristics in the Arkansas River, Arkansas. Paper presented at the Southeastern Assn. of Fish and Wildlife Agencies annual conference, Biloxi, MS.
- I have authored or co-authored over 100 additional oral and poster presentations since 1987.