




Curriculum Vitae

Paul Fraser Mickle
1021 Balch Blvd. Rm1032
Stennis Space Center, MS 39529
(228)-234-2636
pmickle@ngi.msstate.edu

EDUCATION

Ph.D. Biology (Fish Ecology) 2010
 The University of Southern Mississippi (USM),
Dissertation: Life history and habitat use of juvenile
Alosa alabamae in Northern Gulf of Mexico drainages
Major Advisor: Dr. Jake Schaefer

M.S. Biology (Fish Ecology) 2006
 The University of Southern Mississippi (USM),
Thesis: Life stage and habitat use of juvenile *Alosa*
alabamae within the Pascagoula River basin
Major Advisor: Dr. Brian Kreiser

B.S. Environmental Science 2002
 The University of Florida, Gainesville
Senior Thesis: Condition factor of Red Drum in
different Florida estuaries
Major Advisor: Dr. Clay Montague

PROFESSIONAL EXPERIENCE

Co-Director Northern Gulf institute. (January 2021-Present). Mississippi State University

Associate Director Geosystems Research Institute. (January 2021-Present). Mississippi State University

Associate Research Professor Department of Wildlife Fisheries and Aquaculture. (January 2021-Present). Mississippi State University

Chief Scientific Officer. (April 2017-Present). Mississippi Department of Marine Resources (MDMR).

- Administrator for the Tidelands Public Trust for managed projects
- Administrator for the Grand Bay NERR facility and research programs
- Administrator for the Lyman Fish Hatchery facility and research programs
- Administrator for the Alternative Bulkhead Design Program
- Gulf of Mexico Fisheries Management Council Mississippi Representative

Marine Administrator. (July 2016-April 2017). MDMR, Finfish Deputy Director.

- Program creator of the Tails n' Scales fisheries reporting system
- Lead stock assessment scientist

Biological Coordinator. (Dec. 2014-June 2016). MDMR, Finfish Biological Coordinator

- Fisheries data manager
- Field supervisor

Scientist V. (Sept. 2014-Dec. 2014). MDMR, Finfish Biologist

- Field Technical Coordinator

Post-Doctoral Fellow. (Dec. 2010-August 2014). USM, Department of Coastal Sciences Ocean Springs, MS.

- Life History and Conservation of the Gulf Sturgeon in the Pascagoula River, MS.
- Life History and ecology of Striped Bass in Northern Gulf of Mexico Drainages
- Ecology and food web dynamics of artificial inshore reefs in the Northern Gulf of Mexico

Riverine Taxonomist Consultant. (Oct. 2007 & Oct. 2008) NCASI

- Coordinator of field collections and identifications of fishes above and below GP mill on the Leaf River.

Research Assistantships.

- Dept. Biol. Sci., USM: Graduate student grant for conducting stock assessment of the Alabama shad within the Pascagoula drainage and range-wide population genetic structure
- Life history of the Alabama shad within the Pascagoula River Drainage
- Life history and distribution of the Pearl Darter (*Percina, aurora*) in Mississippi
- National Streams and Rivers Assessment, Mississippi

PEER REVIEWED PUBLICATIONS (Conservation Based Only)

Mickle, P.F., G.S. Ramseur. 2021. Variability in water quality and the biological impacts in the Western Mississippi Sound. *Water Quality Research Journal. In Review.*

Mickle, P., J.L. Herbig, C.R. Somerset, B.T. Chudzik, K.L. Lucas, M.E. Fleming. 2018. Effects of annual droughts on fish communities in Mississippi Sound estuaries. *Estuaries and Coasts*.
<https://doi.org/10.1007/s12237-017-0364-5>.

Peterson, M.S., J.-M. Havrylkoff, P.O. Grammer, P.F. Mickle, W.T. Slack. 2016. Consistent SpatioTemporal estuarine habitat use during emigration or immigration of a western population of Gulf Sturgeon. *Transactions of the American Fisheries Society*. 145:27-43.

Mickle, P., J. F. Schaefer, S.B. Adams, B.R. Kreiser, W.T. Slack. 2016. River conditions in two drainages of the northern Gulf of Mexico during successful hatching of Alabama Shad (*Alosa, alabamae*). *Fishery Bulletin*. 114:503-512.

Mickle, P. M., J. S. Franks, B. R. Kreiser, G. J. Gray, J. M. Higgs, J.-M. Havrylkoff. 2016. *Alosa alabamae* (Jordan and Evermann, 1896) (Teleostei: Clupeidae), first documented marine specimen. *South Eastern Naturalist*.

Mickle, P. M., M. S. Peterson, J.-M. Havrylkoff, P. O. Grammer. 2014.

- Morphometric comparisons of the threatened Gulf Sturgeon (*Acipenser oxyrinchus desotoi*) in western and eastern population extremes. *Journal of Applied Ichthyology*. 30(6):1168-1173. (doi:10.1111/jai.12559).
- Grammer, P. O., P. F. Mickle, M. S. Peterson, J.-M. Havrylkoff, W. T. Slack. Activity patterns of Gulf Sturgeon (*Acipenser oxyrinchus desotoi*) in the staging area of the Pascagoula River during fall outmigration. 2015 *Ecology of Freshwater Fish*. 9p. proof (doi:10.1111/eff.12168).
- Peterson, M. S., J.-M. Havrylkoff, P. O. Grammer, P. F. Mickle, W. T. Slack, K. M. Yeager. 2013. Macro-benthic prey and physical habitat characteristics in a western Gulf Sturgeon population: differential estuarine habitat use patterns. *Endangered Species Research*. 22:159-174.
- Mickle, P., J.F. Schaefer, D.A. Yee, and S. Adams. 2013. Diet of juvenile Alabama Shad (*Alosa alabamae*) in two Northern Gulf of Mexico drainages. *Southeastern Naturalist*. 12(1) 233-237.
- Mickle, P., J. Schaefer, S. Adams, and B. Kreiser. 2010. Habitat Use of Age 0 Alabama Shad in the Pascagoula River drainage, USA. *Ecology of Freshwater Fish*. 19:107-115.
- Schaefer, J.F., B.K. Kresier, P. Mickle, C. Champagne and D. Duvernell. 2009. Patterns of co-existence and hybridization among two topminnows (*Fundulus euryzonus* and *Fundulus olivaceus*) in a riverine contact zone. *Ecology of Freshwater Fish*. 18:360-368.
- Matamoros, W.A., P. Mickle, J. Schaefer, W. Arthurs, J. Ikoma, R. Ragsdale. 2009. First record of *Agonostomus monticola* (Family: Mugilidae) in Mississippi freshwaters with notes of its distribution in the southern USA. *The Southeastern Naturalist* 8(1):175-178.
- Ross, S.T., W.T. Slack, R.J. Heise, M.A. Dugo, H. Rogillio, B.R. Bowen, P.F. Mickle, R.W. Heard. 2009. Estuarine and coastal habitat use of Gulf Sturgeon (*Acipenser oxyrinchus desotoi*) in the North-Central Gulf of Mexico. *Estuaries and Coasts*. 32:360–374.
- Bowen, B.R., B. Kreiser, P. F. Mickle, J. Schaefer, and S. B. Adams. 2009. Phylogenetic relationships among North American *Alosa* species (Clupeidae). *Journal of Fish Biology*. 72: 1188-1201.

FUNDING (LAST 6 Years Only)

- | | |
|---------|--|
| 2019 | Tidelands Trust, "Alternative Bulkhead Design", \$68,000 (Co-PI w/J. Whittmann) |
| 2019 | Environmental Protection Agency, "Living Shorelines", \$340,000 (Co-PI w/K. Dillon, M. Andus, W. Brantley) |
| 2019 | Tidelands Trust, "Clam Aquaculture in Mississippi", \$87,000 (PI) |
| 2018-19 | Tidelands Trust, "Marine Aquaculture", \$600,000 (PI) |
| 2017-19 | Liaison of Gulf Council \$67,000 (PI) |
| 2016-19 | National Fish and Wildlife Foundation, "Reef fish assessment for Mississippi Coastal and Nearshore Gulf Waters", \$3,200,000 for Phases I-III (Co-PI w/multiple Mississippi Researchers) |
| 2015 | Tidelands Trust, "Acoustic study of movement and life history of Red Drum", \$71,000 (PI) |

- 2012-13 U.S. Fish & Wildlife Service, "Restoration and monitoring of Striped Bass in the tributaries and coastal water of Mississippi", \$49,842 (Co-PI w/L. Nicholson & M. Peterson).
- 2010-13 Mississippi Department of Marine Resources – Coastal Impacts Assessment Program (MS.R.749), "Striped Bass restoration for the Mississippi Gulf Coast." \$300,000 (Co-PI w/L. Nicholson & M. Peterson). \$175,004 to Peterson & Mickle.
- 2010-15 Mississippi Department of Marine Resources – Coastal Impacts Assessment Program (MS.R.727), "Colonization and succession of new habitats: Implications for the success of artificial reefs." \$850,000 (Co-PI w/P. Biber, K. Dillon, C. Rakocinski & M. Peterson). \$113,303 to Peterson & Mickle.

INSTRUCTION

- 2017 Bio 1135 (Introduction to Biology II)
- 2016 Bio 1134 (Introduction to Biology I)
- 2015 Bio 1135 (Introduction to Biology II)
- 2014 BIO 1134 (Introduction to Biology)
- 2012-14 COA 422 (Shark Biology, Guest lecture-Food Web Ecology)
- 2005-10 BSC 111L, BSC111LHonors (Biology)
- 2009 BSC 103 (Biology, Guest lecture-Population dynamics)
- 2008 BSC 747 (Multivariate Techniques, Guest lecture-Ecosystem modeling)
- 2005 BSC 692 (Ecology of Color, Guest lecture-Physiology)
- 2003-04 BSC 110L, BSC 110LHonors

GRADUATE STUDENT COMMITTEE WORK

- Lauren Liddon (M.S. student). The effects of wave action on fish assemblages across an exposure gradient.
- Cher Newman (M.S. student). Age, growth, mortality, and the affects of trawling on Longspined Porgy, *Stenotomus caprinus*. Recipient of the Southern Division AFS Best Poster Award (\$50). (Co-Director)
- Brinton Barnes (M.S. student). Diets of predatory fishes in relation to reef type and seasonal differences on inshore reefs in the northern Gulf of Mexico. (Co-Director)
- Jennifer Green (M.S. student). Ecology of Striped Bass, *Morone saxatilis*. (Co-Director)

CERTIFICATIONS

- NAUI Open water scuba
- Veterinary surgical techniques (Aquatic organisms)
- First Aid/CPR
- Threatened and Endangered species handling
- Ecopath assessment modeling

PROFESSIONAL AFFILIATIONS

- Gulf of Mexico Fisheries Management Council member 2017-present
- Gulf of Mexico Fisheries Management Council SSC member 2015-2016

Southeastern Fishes Council 2012-2013
American Society of Ichthyology and Herpetology 2005-2012
American Fisheries Society (AFS) 2003-present
MAFS Student Caucus President 2005
Graduate Student Forum 2003-2010
Graduate Student Forum President 2006

PROFESSIONAL REFERENCES

1. Joe Spraggins
Executive Director
The Mississippi Department of Marine Resources
1141 Bayview Ave.
Biloxi, MS 39530
Joe.spraggins@dmr.ms.gov

2. Jake Schaefer Ph.D.
Biology Department
The University of Southern Mississippi
118 College Drive #5018
Hattiesburg, MS 39406
jake.schaefer@usm.edu
601-266-4928

3. Tom Mohrman
Director of Marine Programs
The Nature Conservancy
10910 Highway 57, Suite C
Vanceleave, MS 39564
228-591-1116 Ext. 105