Joshuah S. Perkin, Ph.D.  
curriculum Vitae

# Education

## Contact

**Josh Perkin, Ph.D.**  
Assistant Professor

Ecology and Conservation Biology

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https://www.riverscapeecology.org/

2012 Doctor of Philosophy, Biology. Kansas State University.

2009 Master of Science, Aquatic Resources. Texas State University.

2006 Bachelor of Science, Aquatic Biology. Texas State University.

# Professional Experience

2017-current: Assistant Professor, Texas A&M University Department of Ecology and Conservation Biology

2014-2017: Assistant Professor, Tennessee Technological University Department of Biology

2012-2013: Postdoctoral Research Associate, Kansas State University, Div

# Scholarly activity

## Key Extramural Funding

**National Science Foundation**

* Conservation incentives and the socio-spatial dynamics of water sustainability
* Dynamics of Integrated Social and Environmental Systems Program
* Co-PI was awarded $210,768 of $1,596,980 total budget.

**U.S. Army Corps of Engineers**

* Multiscale patterns and predictors of fish distributions in five Texas river basins
* Co-PI was awarded $355,586 of $7,500,000 total budget

**Texas Parks and Wildlife Department**

* Distribution, abundance, and status of Llano River Carpsucker (Carpiodes sp. cf. carpio). $109,400.
* Assessing abundance, sex ratio, and space use by suckermouth armored catfish to enhance control efforts. $50,419.
* Measuring and predicting movement ecology for imperiled Great Plains fishes in Texas. $141,558.
* Lateral movements and tributary habitat uses of alligator gar in the lower Brazos River. $99,641.
* Temporal trajectories and landscape correlates for stream fish community change. $200,000.
* Ecological forecasting and conservation contingency planning for imperiled Great Plains fishes in Texas. $91,218.

## Key Publications

**Recent**

* Steffensmeier, Z.D., S.K. Brewer, M. Wedgeworth, T.A. Starks, A.W. Rodgers, E. Nguyen, and J.S. Perkin. In Press. Conservation at the nexus of niches: Multidimensional niche modelling to improve management of Prairie Chub (*Macrhybopsis australis*). North American Journal of Fisheries Management.
* Roberts, H.C., M.R. Acre, M.P.A. Claus, F.J. Kappen, K.O. Winemiller, D.J. Daugherty, and J.S. Perkin. In Press. Tributary streams provide migratory fish with access to floodplain habitats in a regulated river: Evidence from Alligator gar, Atractosteus spatula. Canadian Journal of Fisheries and Aquatic Sciences.
* Perkin, J.S., M.R. Acre, J.K. Ellard, A.W. Rodger, J.F. Trungale, K.O. Winemiller, and L.E. Yancy. In Press. Flow-recruitment relationships for Shoal Chub (*Macrhybopsis hyostoma*) and implications for managing environmental flows. North American Journal of Fisheries Management.
* Troia, M.J, and J.S. Perkin. 2022. Can fisheries bioenergetics modelling refine spatially explicit assessments of climate change vulnerability? Conservation Physiology 10(1):coac035
* Hay, A., C. Riggins, T.C. Heard, C. Garoutte, Y. Rodriguez, F. Fillipone, K. Smith, N. Menchaca, J. Williamson, and J.S. Perkin. 2022. Movement and mortality of invasive suckermouth armored catfish during a spearfishing control experiment. Biological Invasions.
* Perkin, J.S., C.G. Montaña, E.J. Nogueira, B.B. Brandão, G.M.T. Mattox, and K.W. Conway. 2022. Estimated richness and environmental correlates of miniature fish assemblages in the Rio Jacundá, Brazil. Neotropical Ichthyology 20(2):e210051.
* Steffensmeier, Z.D., M. Wedgeworth, L.E. Yancy, N.S. Santee, S.K. Brewer, and J.S. Perkin. 2022. Paradigm versus paradox on the prairie: Testing competing stream fish movement frameworks using an imperiled Great Plains minnow. Movement Ecology 10:8.

**High Impact**

* Perkin, J.S., K.B. Gido, J. Falke, K. Fausch, H. Crockett, E. Johnson, and J. Sanderson. 2017. Groundwater declines are linked to changes in Great Plains stream fish assemblages. Proceedings of the National Academy of Sciences 114:7373-7378.
* Perkin, J.S., K.B. Gido, A.R. Cooper, T.F. Turner, M.J. Osborne, E.R. Johnson, and K.B. Mayes. 2015. Fragmentation and dewatering transform Great Plains stream fish communities. Ecological Monographs 85:73-92.
* Perkin, J. S., and K. B. Gido. 2012. Fragmentation alters stream fish community structure in dendritic ecological networks. Ecological Applications 22:2176-2187.
* Perkin, J. S., and K. B. Gido. 2011. Stream fragmentation thresholds for a reproductive guild of Great Plains fishes. Fisheries 36:371-383.