

## CURRICULUM VITAE– May 2019

**Kirk Owen Winemiller**

Department of Wildlife and Fisheries Sciences

Texas A&amp;M University

2258 TAMU

College Station, TX 77843-2258

Telephone: (979) 845-5777

Email: [k-winemiller@tamu.edu](mailto:k-winemiller@tamu.edu)Webpage: <https://aquaticceology.tamu.edu>***Professional Positions******Dates***

University Distinguished Professor, Texas A&M University	April 2019-present
Regents Professor, Texas AgriLife Research	Jan. 2009-present
Associate Department Head for Undergraduate Curriculum, Dept. of Wildlife & Fisheries Sciences, Texas A&M University	June 2011-Aug. 2012
Associate Chair, Interdisciplinary Research Program in Ecology and Evolutionary Biology, Texas A&M University	Jan. 2008-Dec. 2009
Founding Chair, Interdisciplinary Research Program in Ecology and Evolutionary Biology, Texas A&M University	Oct. 2004-Dec. 2007
Full Professor, Dept. Wildlife & Fisheries Sciences, Texas A&M Univ.	Sept. 2002-present
Associate Professor, Dept. Wildlife & Fisheries Sciences, Texas A&M U.	Sept. 1996-Aug. 2002
Fulbright Visiting Graduate Faculty, University of the Western Llanos, Guanare, Venezuela	May-Sept. 1997
Visiting Graduate Faculty, University of Oklahoma, Norman, OK	July 1994-1995
Assistant Professor, Dept. Wildlife & Fisheries, Texas A&M University	May 1992-Aug. 1996
Research Associate- Oak Ridge National Lab, Environmental Sciences Division, Oak Ridge, TN & Graduate Program in Ecology, University of Tennessee, Knoxville, TN	1990-1992
Lecturer- Department of Zoology, University of Texas, Austin, TX	1987-88, 1990
Fulbright Research Associate- Zambia Fisheries Department	1989
Curator of Fishes- TNHC, Texas Memorial Museum, Austin, TX	1988-89
Graduate Assistant Instructor- University of Texas, Austin, TX	1981-87

***Education***

Ph.D. (Zoology)– University of Texas, Austin, TX, 1987

M.S. (Zoology)– Miami University, Oxford, OH, 1981

B.A. (Zoology)– Miami University, Oxford, OH, 1978

***External Awards & Professional Honors***

- 2019– University Distinguished Professor, Texas A&M University
- 2019– President-elect, Texas Chapter American Fisheries Society
- 2018– AFS Award of Excellence, American Fisheries Society’s Highest Award for Career Research
- 2018– AFS Fellow (elected), American Fisheries Society
- 2018– ESA Fellow (elected), Ecological Society of America
- 2013– Special Recognition in Fisheries Work, Texas Chapter American Fisheries Society
- 2012– Outstanding Fisheries Research Award, Texas Chapter American Fisheries Society
- 2007– AAAS Fellow (elected), American Association for the Advancement of Science
- 2001– Ecological Society of America Delegate for TAMU 125<sup>th</sup> Anniversary Convocation
- 1997– Southwestern Association of Naturalists George Miksch Sutton Award in Conservation Research (for paper– *SW. Nat.* 40:314-321 co-authored with Anderson, Hubbs, Edwards)
- 1997– U.S. Fulbright Scholar Fellowship (Venezuela)
- 1994– Society of Sigma Xi
- 1992– Mercer Award, Ecological Society of America (for paper– *Ecological Monographs* 60, 331-367)
- 1992– Phi Beta Delta Honor Society for International Scholars (Alpha Eta Chapter)
- 1988-1989– U.S. Fulbright Scholar Fellowship (Zambia)

***Institutional Awards & Professional Honors***

- 2019– University Distinguished Professor, TAMU
- 2018– Senior Faculty Fellow, Texas AgriLife Research, TAMU agency award
- 2017– Vice-Chancellor’s Research Award, College of Agriculture and Life Sciences, TAMU college and agency award
- 2016– Dean’s Outstanding Achievement Award for International Impact, College of Agriculture and Life Sciences, TAMU college-level
- 2015– Distinguished Achievement Award for Research, Association of Former Students, TAMU university system-wide award
- 2013– Dean’s Outstanding Achievement Award for Research as an Interdisciplinary Research Team, College of Agriculture and Life Sciences, TAMU college-level
- 2009– Bush Excellence Award for Faculty International Teaching, TAMU university system-wide award
- 2009– Regents Professor, Texas AgriLife Research, TAMU university system-wide award

- 2008– President’s Award for Excellence in Service to International Students, TAMU university system-wide award
- 2008– Faculty Fellow, Texas AgriLife Research, TAMUS agency award
- 2004– Vice-Chancellor’s Undergraduate Teaching Award, College of Agriculture and Life Sciences, TAMU university and system-level award
- 2003– Vice-Chancellor’s Graduate Teaching Award, College of Agriculture and Life Sciences, TAMU university and system-level award
- 2002– Faculty Fellowship, TAMU university-level award
- 1997– TAMU College of Agriculture and Life Sciences, Neuhaus Teaching Scholarship college-level award
- 1994, 1996– TAMU Nominee (1-of-2) for NSF Presidential Faculty Fellowship system-wide selection
- 1982– University Summer Fellowship (University of Texas) university-wide selection
- 1981– Outstanding Master's Student Research Award (Miami University) university-wide award
- 1980-1981– Graduate Student Achievement Award (Miami University) departmental award
- 1977– Phi Sigma Scientific Honor Society (Miami University) university-wide selection

***Awards Received by Advisees***

- Friedrich Keppeler, PhD student, 2019, Texas A&M Tom Slick Fellowship
- David Saenz, PhD student, 2019, Texas A&M Tom Slick Fellowship
- Daniel Fitzgerald, PhD student, 2018, Haldane Prize awarded annually by the British Ecological Society for best paper published by a young ecologist (Fitzgerald et al. 2017, *Functional Ecology* 31:1135-1144)
- Luke Bower, PhD student, 2017, Texas A&M Tom Slick Fellowship
- Caroline Arantes, PhD student, 2016, Texas A&M Tom Slick Fellowship
- Caroline Arantes, PhD student, 2015, Texas A&M College of Agriculture and Life Sciences, ViceChancellor’s Award for Outstanding Graduate Student Research
- Dan Fitzgerald, PhD student, 2015, Texas A&M Tom Slick Fellowship
- Rebecca Pizano, MSc student, 2013, Texas Chapter American Fisheries Society, Outstanding Graduate Student Research
- Carmen Montaña, PhD student, 2011, Texas A&M College of Agriculture and Life Sciences, ViceChancellor’s Award for Outstanding Graduate Student Research
- Carmen Montaña, PhD student, 2011, Texas A&M Tom Slick Fellowship
- Katherine Roach, PhD student, 2011, Texas Chapter American Fisheries Society, Outstanding Graduate Student Research
- Katherine Roach, PhD student, 2011, Texas A&M Tom Slick Fellowship
- Daniel Fitzgerald, PhD student, 2011, Best Poster, Texas Chapter American Fisheries Society

Sandra Bibiana Correa, PhD student, 2010, Texas A&M Tom Slick Fellowship  
 Allison Pease, PhD student, 2009, Texas A&M Tom Slick Fellowship  
 Katherine Roach, PhD student, 2007, Texas Chapter American Fisheries Society, Clark Hubbs Student Research Award  
 Hernán López Fernández, PhD student, 2003, 2004, Best Paper, Neotropical Ichthyological Association  
 Craig Layman, PhD student, 2004, Texas A&M College of Agriculture and Life Sciences, ViceChancellor's Award for Outstanding Graduate Student Research  
 Craig Layman, PhD student, 2003, US Fulbright Scholar Fellowship  
 Craig Layman, PhD student, 2002, Texas A&M Tom Slick Fellowship  
 Craig Layman, PhD student, 2000, EPA STAR Fellowship  
 Albrey Arrington, PhD student, 2000, Best Paper, Neotropical Ichthyological Association  
 Albrey Arrington, PhD student, 1998, Texas A&M Tom Slick Fellowship  
 Albrey Arrington, PhD student, 1998, Texas A&M Jordan Fellowship  
 David Jepsen, PhD student, 1998, Texas A&M Tom Slick Fellowship  
 Bonnie Ponwith, PhD student, 1997, Texas A&M Jordan Fellowship  
 Bonnie Ponwith, PhD student, 1997, National Security Education Program Fellowship  
 David Jepsen, PhD student, 1995, Texas A&M Jordan Fellowship  
 Alphonse Adite, MSc student, 1994, Phi Beta Delta Honor Society for International Scholars  
 Tamara McGuire, MSc student, 1993, Texas A&M Willie May Harris Fellowship  
 Alphonse Adite, MSc student, 1992, US State Department, Advanced Training in Leadership for Africans Fellowship

### ***Invited Panels and Boards***

2019-2020– Review team for Statewide Synthesis of Environmental Flow Studies, Expert science team contracted by the Texas Water Development Board to review studies conducted under Texas Senate Bill 3 and to make recommendations for future research and applications within an adaptive management paradigm.

2016– Review Panel (1 of 8 members) for proposals submitted to the Aquatic Biodiversity Research Program of the U.S. Agency for International Development (USAID) Partnerships for Enhanced Engagement in Research (PEER) program

2013-2014– Review Team (1 of 4 members) for setting flow criteria for priority tributaries to the Sacramento-San Joaquin Delta in California. The Review Team evaluated the California State Water Resources Control Board's document entitled "Potential Methods to Develop Flow Criteria for Priority Tributaries to the Sacramento-San Joaquin Delta" and made recommendations for strategies and methodologies

2011-present– Bay and Basin Expert Science Team (BBEST) for the Brazos River Basin (elected by regional stakeholder group for this 12-month effort funded by the state); BBEST Co-chair; Ecology Subcommittee. BBEST reviewed scientific information and

- performed analyses to recommend environmental flows for basin rivers, streams and estuaries. Program mandated by Texas SB 3/HB 3 (2007) to assist state agencies in future water rights permitting and regional water planning
- 2010-2016– Board of Trustees, The Texas Nature Conservancy (two 3-year terms); Freshwater Conservation Subcommittee
- 2009– Special Committee to assist the Science Advisory Board for Texas Senate Bill 3 Environmental Flows Committee to produce guidance document on biology overlays for the Bay and Basin Science Teams
- 2008-2014– Bay and Basin Expert Science Team (BBEST) for the Sabine/Neches River Basins and Sabine Lake (elected by regional stakeholder group for state-funded effort); Chair Biology Subcommittee. BBEST reviewed scientific information and performed analyses to recommend environmental flows for basin rivers, streams and estuaries. Program mandated by Texas SB 3/HB 3 (2007) to assist state agencies in future water rights permitting and regional water planning
- 2007– NSF Review Panel, Ecology Program, Division of Environmental Biology, Arlington, VA
- 2006-present– International Advisory Committee, Pan-American Journal of Aquatic Sciences
- 2006– Panel to address management of exotic invasive fishes in Texas, San Antonio River Authority, San Antonio, TX
- 2006-2008– State of Texas, Scientific Advisory Committee (SAC) for the Legislature’s Environmental Flows Committee (Texas Senate Bill 2 program)
- 2004-2007– EPA Texas Aquatic Life Use Committee, US Environmental Protection Agency
- 2004-2005– Panel for Environmental Flows for Caddo Lake, Caddo Lake Institute and The Nature Conservancy, Jefferson, TX
- 2004-2005– NAAT Committee for Aquatic Diversity, Texas Parks and Wildlife Department
- 2004– Advisory Board, Conference on Aquatic Biodiversity Conservation, American Museum of Natural History, New York
- 2004-2011– University Council on Water Resources, TAMU delegate
- 2003-2004– NRC Panel to Review the Texas Instream Flow Program, National Research Council, National Academy of Sciences, Washington, DC
- 2001– Emiquon Science Advisory Council, The Nature Conservancy of Illinois
- 2001-2010– USFWS Rio Grande Fishes Recovery Team (Consultant), US Fish and Wildlife Service
- 2000– EPA Panel, Aquatic Ecosystem Classification, US Environmental Protection Agency, Washington, DC
- 1999-2004– USFWS Devils River Minnow Recovery Team, US Fish and Wildlife Service
- 1999– Program Review Panel, Future of Ichthyology in Bolivia, Cochabamba, Bolivia

1998-2001– Advisory Board, Freshwater Fisheries Management, Texas Parks and Wildlife Department

1998– EPA Panel, Alabama Center for Estuarine Studies, US EPA, Washington, DC

1996– Program Review Panel, River Floodplain Ecology, Universidade Estadual de Maringá, Brazil

1995– NSF Review Panel, Postdoctoral Research Fellowships in Biosciences Related to the Environment, Leesburg, VA

1995– Program Review Panel, All Taxa Biological Inventory, Guanacaste Conservation Area, Costa Rica

1993-1994– EPRI/COMPMECH Coordinator's Committee, Dauphin Island, AL

1990-1991– EPRI/ COMPMECH Committees advising fish population dynamics modeling efforts, Algonquin National Park, Ontario, Canada; Durham, NC; Columbia, SC; Madison, WI

### ***Professional Societies***

American Society of Ichthyologists and Herpetologists (1982-present)

Ecological Society of America (1987-present)

Southwestern Association of Naturalists (1988-present)

Neotropical Ichthyological Association (1989-present)

Society of American Naturalists (1990-present)

American Institute of Biological Sciences (1991-present)

American Fisheries Society (1991-present)

Texas Chapter American Fisheries Society (1992-present)

Society of Sigma Xi (1994-present)

Desert Fishes Council (2001-present)

American Association for the Advancement of Science (2001-present)

Brazilian Ichthyological Society (2003-present)

International Society for River Science (2008-present)

### ***Service to Professional Societies***

Editorial Board (Associate Editor), *Ecology*, *Ecological Monographs*, *Ecosphere*, Ecological Society of America (2001-present)

President-Elect, Texas Chapter American Fisheries Society (2019)

Session Chair, Annual Meeting, American Society of Ichthyologists and Herpetologists, Austin, Texas (2017)

Judge, Poster Presentations, Annual Meeting, Texas Chapter American Fisheries Society, Corpus Christi, Texas (2017)

Award Selection Committee, Clark Hubbs Student Research Award, Texas Chapter American Fisheries Society (2014-present)

Proposed, organized and chaired two special sessions on environmental flows and river ecosystem connectivity at the Meeting of the Ecological Society of America, Austin, TX (2011)

Board of Governors (Elected), American Society of Ichthyologists and Herpetologists (2005-2009)

TAMU Chapter Sigma Xi, Distinguished Scientist Award Selection Committee (2008, 2009)

Buell Award Judge, Ecological Society of America (2001)

Stoye Award Judge, American Society of Ichthyologists and Herpetologists (2000, 2001, 2003)

Nominating Committee (Elected), American Society of Ichthyologists and Herpetologists (1999-2001; Elected Chair 2000-2001)

Assistant Editor, *Journal of Fish Biology*, Fisheries Society of the British Isles (1998-2003)

Board of Governors (Elected), American Society of Ichthyologists and Herpetologists (1997-2001)

Associate Editor, *Transactions of the American Fisheries Society*, American Fisheries Society (1995-1996)

American Fisheries Society, Judge for Publications Award (1995-1998)

American Fisheries Society, Judge for Education Excellence Award (1995-1999)

American Fisheries Society, Judge for Skinner Student Travel Awards (1995)

Texas Chapter American Fisheries Society, Awards Committee (1995)

TAMU Chapter American Fisheries Society, Judge for Student Awards (1995, 1996)

American Society of Ichthyologists and Herpetologists, Editorial Board, *Copeia* (1994-1998)

Ecological Society of America, Judge for Mercer Award (1993, 1994)

American Society of Ichthyologists and Herpetologists, Ichthyology Program Chair & Local Committee (1993)

American Society of Ichthyologists and Herpetologists, Symposium Organizer (1993)

Neotropical Ichthyological Association, Executive Board (1992-1993)

SW & Rocky Mountain Division of the American Association for the Advancement of Science, Local Organizing Committee (1987)

American Society of Mammalogist, Local Organizing Committee (1980)

### ***Research Areas***

General– Population, Community and Ecosystem Ecology; Evolutionary Theory; Aquatic Ecology; Systematics and Biology of Fishes; Freshwater and Estuarine Ecology; Tropical Ecology; Fisheries Management; Conservation Biology.

Specific– Trophic Ecology and Food Web Theory; Regulation of Populations and Community Structure; Dynamics of Fluvial and Estuarine Ecosystems; Life History

Theory; Feeding and Reproductive Biology of Fishes; Fish Evolution; Biodiversity Conservation and Sustainable Use of Natural Resources.

*Refereed Journal Articles (student & postdoc advisees underlined)*

242. Bower, L.M. and K.O. Winemiller. Fish assemblage convergence along stream environmental gradients: an intercontinental analysis. *Ecography*, In press.
241. Soria-Barreto, M., R. Rodiles-Hernández, and K.O. Winemiller. 2019. Trophic ecomorphology of cichlid fishes of Selva Lacandona, Usumacinta, Mexico. *Environmental Biology of Fishes*, In press.
240. Giarrizzo, T., Andrade, M., Schmid, K., Winemiller, K., Ferreira, M., Pegado, T., Chelazzi, D., Cincinelli, A., and Fearnside, P. 2019. Amazonia: the new frontier for plastic pollution. *Frontiers in Ecology and the Environment*, In press.
239. Arantes, C.C., D.B. Fitzgerald, D.J. Hoeinghaus, and K.O. Winemiller. 2019. Impacts of hydroelectric dams on fish and fisheries in tropical rivers through the lens of functional traits. *Current Opinion in Environmental Sustainability* 37:28-40.
238. Moody, E.K., N.K. Lujan, K.A. Roach, and K.O. Winemiller. 2019. Threshold elemental ratios and the temperature dependence of herbivory in fishes. *Functional Ecology* 33:913-923.
237. McMeans, B.C., T. Kadoya, T.K. Pool, G. Holtgrieve, S. Lek, H. Kong, K.O. Winemiller, V. Elliott, N. Rooney, P. Laffaille, and K.S. McCann. 2019. Consumer trophic positions respond variably to seasonally fluctuating environments. *Ecology* 100(2):e02570.
236. Andrade, M., D.B. Fitzgerald, K.O. Winemiller, P.S. Barbosa, and T. Giarrizzo. 2019. Trophic niche segregation among three serrasalmids from rapids of the lower Xingu River, Brazilian Amazon. *Hydrobiologia* 829:265-280.
235. Cunha, E.R., K.O. Winemiller, J.C.B. da Silva, T.M. Lopes, L.C. Gomes, S.M. Thomaz, and A.A. Agostinho. 2019.  $\alpha$  and  $\beta$  diversity of fishes in relation to a gradient of habitat structural complexity supports the role of environmental filtering in community assembly. *Aquatic Sciences*, In press.
234. Arantes, C.C., K.O. Winemiller, M. Petrere, and C.E.C. Freitas. 2019. Spatial variation in aquatic food webs in the Amazon River floodplain. *Freshwater Science* 38(1):213-228.
233. Montag, L., K.O. Winemiller, F.W. Keppeler, H. Leão, N.L. Benone, N.R. Torres, B.S. Prudente, T.O. Begot, L.M. Bower, D.E. Saenz, E.O. Lopez-Delgado, Y.Q. Morales, D.J. Hoeinghaus, L. Juen. 2019. Land cover, riparian zones, and instream habitat influence stream fish assemblages in the eastern Amazon. *Ecology of Freshwater Fish* 28:317-329.



232. Gao, X., M. Fujiwara, K.O. Winemiller, P. Lin, M. Li, and H. Liu. 2019. Regime shift in fish assemblage structure in the Yangtze River following construction of the Three Gorges Dam. *Nature Scientific Reports* 99(1):4212.  
<https://doi.org/10.1038/s41598-019-389993-x>
231. Jin, B.-S., B. Shao, S. Li, H.-M. Qin, G. Ge, and K.O. Winemiller. 2019. Variation in environmental conditions and fish assemblages in sub-lakes of the Poyang Lake floodplain, China. *Fisheries Management and Ecology* 26:131-140.
230. López-Delgado, E.O., K.O. Winemiller, and F.A. Villa-Navarro. 2019. Do metacommunity theories explain spatial variation in fish assemblage structure in a pristine tropical river? *Freshwater Biology* 64:367-379.
229. Colvin, S.A.R., S.M.P. Sullivan, P.D. Shirey, R.W. Colvin, K.O. Winemiller, R.M. Hughes, K.D. Fausch, D.M. Infante, J.D. Olden, K.R. Bestgen, R.J. Danehy, and L. Eby. 2019. Headwater streams and wetlands are critical for sustaining fish, fisheries, and ecosystem services. *Fisheries* 44(2):73-91.
228. Bower, L.M., F.W. Keppeler, E.R. Cunha, Y. Quintana Morales, D.E. Saenz, E.O. Lopez-Delgado, T. Bokhutlo, C.C. Arantes, M.C. Andrade, C.R. Robertson, K.B. Mayes, and K.O. Winemiller. 2019. Effects of hydrology on fish diversity and assemblage structure in a Texan coastal plains river. *Transactions of the American Fisheries Society* 148:207-218.
227. Röpke, C.P., T.H.S. Pires, K.O. Winemiller, D.F. Campos, D.de F. Wolf-Fex, C.P. Deus, and S. Amadio. 2019. Reproductive allocation by Amazon fishes in relation to feeding strategy and hydrology. *Hydrobiologia* 826:291-305.
226. Montag, L.F.A, H. Leão, N.L. Benone, C.S. Monteiro-Júnior, A.P.J. Faria, G. Nicácio, C. Ferreira, D. Garcia, C.R.M. Santos, P.S. Pompeu, K.O. Winemiller, L. Juen. 2019. Contrasting associations between habitat conditions and stream aquatic biodiversity in a forest reserve and its surrounding area in the Eastern Amazon. *Hydrobiologia* 826:263-277.
225. Andrade, M.C., K.O. Winemiller, A. Fortunati, D. Chelazzi, A. Cincinelli, P.S. Barbosa, and T. Giarrizzo. 2019. First account of plastic pollution impacting freshwater fishes in the Amazon: ingestion of plastic debris by piranhas and other serrasalmids with diverse feeding habits. *Environmental Pollution* 244:766-773.
224. Winemiller, K.O., D.C. Taphorn, L.C. Kelso-Winemiller, E.O. López, F.W. Keppeler, and C.G. Montaña. 2018. Fish metacommunity patterns in Caño Maraca, an important nursery habitat in the Western Llanos of Venezuela. *Neotropical Ichthyology* 16(4): e180074 [1-11]. DOI: 10.1590/1982-0024-20180074
223. de Souza e Silva Pegado, T., K. Schmid, K.O. Winemiller, D. Chelazzi, A. Cincinelli, L. Dei, T. Giarrizzo. 2018. First evidence of microplastic ingestion by fishes from the Amazon River estuary. *Marine Pollution Bulletin* 133:814-821.

222. Grubh, A. and K.O. Winemiller. 2018. Spatiotemporal variation in wetland fish assemblages in the Western Ghats region of India. *Knowledge and Management of Aquatic Ecosystems* 419(35):1-12. <https://doi.org/10.1051/kmae/2018023>
221. Huckembeck, S., K.O. Winemiller, D. Loebmann, and A.M. Garcia. 2018. Trophic ecology of two sympatric frogs with contrasting morphology and habitat use in a subtropical wetland. *Herpetologica* 74:207-216.
220. Fitzgerald, D.B., M.H. Sabaj-Perez, L.M. Sousa, A.P. Gonçalves, L.R. Py-Daniel, N.K. Lujan, J. Zuanon, K.O. Winemiller, and J.G. Lundberg. 2018. Diversity and community composition of rapids-dwelling fishes of the Xingu River: Implications for conservation amid large-scale hydroelectric development. *Biological Conservation* 222:104-112.
219. Kaymak, N., K.O. Winemiller, S. Akin, Z. Altuner, F. Polat, and T. Dal. 2018. Spatial and temporal variation in food web structure of an impounded river in Anatolia. *Marine and Freshwater Research* 69:1453-1471.
218. Pease, A.A., M. Mendoza-Carranza, K.O. Winemiller. 2018. Feeding ecology and ecomorphology of cichlid assemblages in a large Mesoamerican river delta. *Environmental Biology of Fishes* 101:867-879.
217. Correa, S.B. and K.O. Winemiller. 2018. Terrestrial-aquatic trophic linkages support fish production in a tropical oligotrophic river. *Oecologia* 186:1069-1078.
216. Arantes, C.C., K.O. Winemiller, M. Petrere, L. Castello, L.L. Hess, and C.E. Freitas. 2018. Relationships between forest cover and fish diversity in the Amazon River floodplain. *Journal of Applied Ecology* 55:386-395.
215. Pianka, E.R., L.J. Vitt, N. Pelegrin, D.B. Fitzgerald, and K.O. Winemiller. 2017. Towards a periodic table of lizard niches, or exploring the lizard niche hypervolume. *The American Naturalist* 190:601-616.
214. Peterson, C.C., F.W. Keppeler, D.E. Saenz, L.M. Bower, and K.O. Winemiller. 2017. Seasonal variation in fish trophic networks in two clear-water streams in the Central Llanos region, Venezuela. *Neotropical Ichthyology*, 15(2), e160125.
213. Fitzgerald, D.B., K.O. Winemiller, M.H. Sabaj Pérez, and L. Sousa. 2017. Using trophic structure to reveal patterns of trait-based community assembly across niche dimensions. *Functional Ecology* 31:1135-1144. doi:10.1111/1365-2435.12838 (Paper awarded the Haldane Prize by the British Ecological Society)
212. Strictar Pereira, L., A.A. Agostinho, and K.O. Winemiller. 2017. Revisiting cannibalism in fishes. *Reviews in Fish Biology and Fisheries* 27:499-513. doi:10.1007/s11160-017-9469-y
211. Strictar Pereira, L., F.W. Keppeler, A.A. Agostinho, and K.O. Winemiller. 2017. Is there

- a relationship between fish cannibalism and latitude or species richness? *PLOS ONE* 12(1): e0169813. doi:10.1371/journal.pone.0169813
210. Röpke, C.P., S. Amadio, J. Zuanon, E. Ferreira, C. Pereira de Deus, T.H.S. Pires, and K.O. Winemiller. 2017. Simultaneous abrupt shifts in hydrology and fish assemblage structure in a floodplain lake in the central Amazon. *Scientific Reports (Nature Publishing Group)* 7:40170. doi:10.1038/srep40170
209. Ou, C., C.G. Montaña, and K.O. Winemiller. 2017. Body size and trophic position relationships among fishes of the Lower Mekong Basin. *Royal Society Open Science* 4:160645.
208. Vitule, J.R.S., A.A. Agostinho, V.M. Azevedo-Santos, V.S. Daga, W.R.T. Darwall, D.B. Fitzgerald, F.A. Frehse, D.J. Hoeninghaus, D.P. Lima Jr., A.L.B. Magalhães, M.L. Orsi, A.A. Padial, F.M. Pelicice, M. Petrere Jr., P.S. Pompeu, and K.O. Winemiller. 2017. We need better understanding about functional diversity and vulnerability of tropical freshwater fishes. *Biodiversity and Conservation* 26(3):757-762.
207. Schalk, C.M., C.G. Montaña, K.O. Winemiller, and L.A. Fitzgerald. 2017. Trophic plasticity, environmental gradients, and food web structure of tropical pond communities. *Freshwater Biology* 62:519-529.
206. Bastos, R.F., F. Corrêa, A.M. Garcia, and K.O. Winemiller. 2017. Are you what you eat? Effects of trophic discrimination factors on estimates of food assimilation and trophic position with a new estimation method. *Ecological Indicators* 75:234-241.
205. Garcia, A.M., K.O. Winemiller, D.J. Hoeninghaus, M.C. Claudino, R. Bastos, F. Correa, S. Huckembeck, J. Vieira, D. Loebmann, P. Abreu, and C. Ducatti. 2017. Hydrologic pulsing promotes spatial connectivity and food web subsidies in a subtropical coastal ecosystem. *Marine Ecology Progress Series* 567:17-28.
204. Fitzgerald, D.B., K.O. Winemiller, M.H. Sabaj Pérez, and L.M. Sousa. 2017. Seasonal changes in the assembly mechanisms structuring tropical fish communities. *Ecology* 98(1):21-31.
203. Pizano-Torres, R.I., K.A. Roach, and K.O. Winemiller. 2016. Response of the fish assemblage to a saltwater barrier and paper mill effluent in the Lower Neches River (Texas) during drought. *Journal of Freshwater Ecology*, doi: 10.1080/02705060.2016.1253622
202. Rodger, A.W., K.B. Mayes, and K.O. Winemiller. 2016. Larval fish abundance in relation to environmental variables in two Texas Gulf Coast rivers. *Journal of Freshwater Ecology* 31(4):625-640.
201. Correa S.B., K.O. Winemiller, and D. Cárdenas. 2016. Isotopic variation among Amazonian floodplains woody plants and implications for food-web research. *Biota Neotropica* 16(2): e20150078.

200. Ou, C. and K.O. Winemiller. 2016. Seasonal hydrology drives shifts in production sources supporting fishes in the Lower Mekong River Basin. *Canadian Journal of Fisheries and Aquatic Sciences* 73:1342-1362.
199. Rodger, A.W., K.B. Mayes, and K.O. Winemiller. 2016. Preliminary findings for a relationship between instream flow and Shoal Chub recruitment in the Lower Brazos River, Texas. *Transactions of the American Fisheries Society* 145:943-950.
198. Bailly, D., F.A.S. Cassemiro, K.O. Winemiller, J.A. F. Diniz-Filho, and A.A. Agostinho. 2016. Diversity gradients of Neotropical freshwater fish: evidence of multiple underlying factors in human-modified systems. *Journal of Biogeography* 43:1679-1689.
197. Zuluaga Gómez, M.A., T. Giarrizzo, D.B. Fitzgerald, and K.O. Winemiller. 2016. Morphological and trophic diversity of fish assemblages in rapids of the Xingu River, a major Amazon tributary and region of endemism. *Environmental Biology of Fishes* 99(8):647-658.
196. Possatto, F.E., M.K. Broadhurst, H.L. Spach, K.O. Winemiller, R.B. Millar, K.M. Santos, and M.R. Lamour. 2016. Mapping the temporal-spatial distribution of threatened batoids to improve conservation in a subtropical estuary. *Journal of Fish Biology* 89:1098-1104.
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### **Technical Reports**

- Winemiller, K.O., M. Andrade, C. Arantes, T. Bokhutlo, L. Bower, E. Cunha, F. Keppeler, E. Lopez, Y. Quintana, D. Saenz, K. Mayes and C. Robertson. 2017. Potential influence of exchanges between the Lower Guadalupe River and oxbow lakes on food web dynamics. Texas AgriLife Research, Texas A&M University System. Final Report to the Texas Parks and Wildlife Department. 59 pp. + Appendices.
- Baker, J. and K. Winemiller. 2017. Preliminary results of recreational use attainability analyses of the Double Mountain Fork Brazos River (1241) and Sabana River (1222C). Texas AgriLife Research, Texas A&M University System. Final Report to the Texas Commission of Environmental Quality. 91 pp. + Appendices.
- Baker, J. and K. Winemiller. 2017. Preliminary results of recreational use attainability analyses of the Colorado River below Lake J.B. Thomas (1412) and Beals Creek (1412B). Texas AgriLife Research, Texas A&M University System. Final Report to the Texas Commission of Environmental Quality. 86 pp. + Appendices.
- Winemiller, K., C. Conway, A. Rodger, C. Nessner, and C. Hemingson. 2014. Flow dependent species: life history and habitat associations in Texas Gulf Coast Rivers. Texas AgriLife Research, Texas A&M University System. Final Project Report to the Texas Parks and Wildlife Department, 72 pp. + 10 Appendices.
- Dahm, C., K. Winemiller, M. Kelly, and S. Yarnell. 2014. Recommendations for Determining Instream Flow Criteria for Priority Tributaries to the Sacramento-San Joaquin Delta. Report to the California State Water Resources Control Board. 17 pp.
- Winemiller, K.O., R. Pizano, and C.G. Montaña. 2013. Freshwater Flow Recommendations to Mitigate Effects of Climate Change to the Lower Neches River and Beaumont Unit of the Big Thicket Preserve. Final Project Report for the US National Park Service, Big Thicket Preserve. 110 pp. + Appendices.
- Winemiller, K.O., J. Baker, and S.B. Correa. 2013. Preliminary Results of a Recreational Use Attainability Analysis of Rush-Copperas Creek (1222B), Dry Brach (1255I), Alarm Creek (1226H), Little Green Creek (1226M), Camp Creek (1204A), Trimmier Creek (1216A), Deer Creek (1242J), Pond Creek (1242F), and Middle Yegua Creek (1212A). Texas AgriLife Research, Texas A&M University System. Final Report to the Texas Commission of Environmental Quality. 123 pp. + Appendices.
- Brazos River Basin and Bay Expert Science Team (K.O. Winemiller + 8 coauthors). March 2012. Environmental Flows Recommendation Report, Final Submission to the Brazos River Basin and Bay Area Stakeholder Committee, Environmental Flows Advisory Group, and the Texas Commission on Environmental Quality, 198 pp. + 8 Appendices.
- Winemiller K.O., D. Scott, C.S. Shafer, J. Baker, and S.B. Correa. 2011. Preliminary results of a Recreational Use Attainability Analysis of the Brazos River above Possum Kingdom (1208), Navasota River above Lake Mexia (1210A), East Yegua Creek (1212B), and the Lowe Cibolo Creek (1902). Texas AgriLife Research, Texas A&M University System. Final Report to the Texas Commission of Environmental Quality. 159 pp. + Appendices.
- Winemiller, K.O., N.K. Lujan, R.N. Wilkins, R.T. Snelgrove, A.M. Dube, K.L. Skow, and A.G. Snelgrove. Status of Freshwater Mussels in Texas. Report to Texas A&M Institute of Renewable Natural Resources, College Station, 61 pp.
- King, R.S., K.O. Winemiller, J.M. Taylor, J.A. Black, and A.A. Pease. 2009. Development of



- Biological Indicators of Nutrient Enrichment for Application in Texas Streams. Final Report to Texas Commission on Environmental Quality, §106 Water Pollution Control Grant #98665304. 104 pp.
- Winemiller, K.O., R.S. King, J. Taylor, and A. Pease. 2009. Refinement and Validation of Habitat Quality Indices (HQI) and Aquatic Life Use (ALU) Indices for Application to Assessment and Monitoring of Texas Surface Waters. Final Project Report, TCEQ Contract 582-6-80304, 81 pp.
- Winemiller, K.O., D. Scott, C.S. Shafer, J. Baker, and A. Breden. 2009. Preliminary Results of a Recreational Use Attainability Analysis of 31 Streams in the Brazos River Basin. Final Report to the Texas Commission on Environmental Quality. 92 pp. + 5 Appendices.
- Sabine and Neches Rivers and Sabine Lake Bay Basin and Bay Expert Science Team (K.O. Winemiller + 10 coauthors). Dec. 2009. Environmental Flows Recommendation Report, Final Submission to the Sabine and Neches Rivers and Sabine Lake Bay Basin and Bay Area Stakeholder Committee, Environmental Flows Advisory Group, and the Texas Commission on Environmental Quality, 172 pp. + 18 Appendices.
- Biology Subcommittee of the Sabine and Neches Rivers and Sabine Lake Bay Basin and Bay Expert Science Team (K.O. Winemiller + 3 coauthors). Sabine/Neches BBEST Biological Overlay Approach, 58 pp.
- Baran, E., P.-J. Meynell, Y. Kura, I.G. Baird, G. Gallego, P. Gatke, M. Kruskopf, M. Somonn, M. Samountha, T. Warren, and K.O. Winemiller. 2009. Do dams eat fish? Forecasting, assessing and mitigating the impacts of hydropower dams on fish resources, with special reference to the Lower Mekong Basin. World Fish Center, Phnom Penh, Cambodia. 108 pp.
- Winemiller, K.O., J. Baker, D. Scott, S. Shafer, and S. Correa. 2008. Preliminary results of a recreational use attainability analysis of the Buffalo Bayou/White Oak Bayou stream system in Houston, Texas. Texas AgriLife Research, Texas A&M University System. Final Report to the Texas Commission on Environmental Quality. 57 pp. + 5 Appendices.
- Winemiller, K.O., R. Brandes, T. Bonner, R. King, D. Maidment, S. Davis, G. Ward, E. Hersh, and J. Trungale. 2008. Review of Desk-top Methods for Establishing Environmental Flows in Texas Rivers and Streams. Final Report to the Texas Commission on Environmental Quality. 30 pp.
- Winemiller, K.O., A. Chin, S.E. Davis, D.L. Roelke, L.M. Romero, and B.P. Wilcox. 2005. Summary Report Supporting the Development of Flow Recommendations for the Stretch of Big Cypress Creek below Lake O' the Pines Dam. Final Project Report to the Caddo Lake Institute and The Nature Conservancy. 111 pp.
- Winemiller, K., D. Roelke, A. Chin, S. Davis, B. Wilcox, and L. Romero. 2005. Caddo Lake Annotated Bibliography. Project Report to the Caddo Lake Institute and The Nature Conservancy. 50 pp.
- Winemiller, K.O., T. Bonner, F.P. Gelwick, S. Zeug, and C. Williams. 2004. Response of Oxbow Lake Biota to Hydrologic Exchanges with the Brazos River Channel. Final Project (2003-483-493, 2003-483-003) Report to the Texas Water Development Board.

- Winemiller, K.O., C. Munster, N. Wilkins, B. Wilcox, J. Birnbaum, R. Eyeington, L. Shen, Y. Suharnoto, J.C. Cathey, K. Craig, R. Griffith, R. Lacewell, A. Jones. 2005. Response of Stream and Riparian Biota of the Pedernales River Basin to Variation in Landscape Features and Vegetation Cover. Report to U.S. Army Corps of Engineers, Worth Worth District.
- Winemiller, K.O. May 2003. Biological Monitoring of San Felipe Creek during Construction of New Water Treatment Facility for the City of Del Rio. Final Project Report to City of Del Rio, Texas Water Development Board, US Fish and Wildlife Service, and Texas Parks and Wildlife Department.
- Winemiller, K.O., D.A. Arrington, and R.N. Wilkins. 2002. Aquatic Biota Responses to Alternative Brush Management Scenarios. Report to U.S. Army Corps of Engineers, Worth Worth District.
- Winemiller, K.O. and F.P. Gelwick. 1998. Assessment of Ecological Integrity of Streams in the Brazos-Navasota River Watershed based on Biotic Indicators. Report to Brazos River Authority and Natural Resource Conservation Service (USDA).
- Bussing, W., Winemiller, K., Lopez, M., Bolaños, F., Sasa, M., Donnelly, M., Savage, J., Guyer, C., Solorzano, A., Araya, M., Barrantes, G., Blake, J., Hernández, D., Joyce, F., Loiselle, B., Pereira, A., Mora, J.M., Rodriguez, B., Collado, L.M., Saenz, J., Salazar, J., Vega, V.A. and Yates, T. 1996. An Inventory of the Vertebrate Fauna of the Guanacaste Conservation Area. 123pp.
- Winemiller, K.O. and A.A. Anderson. 1995. Status of *Cyprinodon elegans* and *Gambusia nobilis* in the Phantom Lake Springs Refuge. Report to U.S. Bureau of Reclamation, Albuquerque, New Mexico.
- Winemiller, K.O., W.A. Bussing, M. Lopez. 1995. An Inventory of the Vertebrate Fauna of the Guanacaste Conservation Area (Ichthyofauna). Report to Instituto Nacional de Biodiversidad, San José, Costa Rica.
- Winemiller, K.O. and A.A. Anderson. 1993, 1994. Progress Report for Phantom Springs Refuge Monitoring. Report to U.S. Bureau of Reclamation, Upper Colorado Region, Salt Lake, Utah.
- Winemiller, K.O. 1994. Final Report on the NSF-Funded Workshop, Food Webs: Integration of Patterns and Dynamics. Report to the National Science Foundation, Arlington, Virginia.
- Winemiller, K.O. 1993. Final Report on the NSF-Funded Symposium/Workshop, Fish Ecology in Latin America. Report to the National Science Foundation, Arlington, Virginia.
- Barbarino Duque, A. and K. O. Winemiller. 1993. Results of Preliminary Investigation of the Current Status of Pavón Populations in the Río Pasimoni, Edo. Amazonas. Report to the Ministerio de Ambiente y Recursos Naturales Renovables of the Republic of Venezuela, Caracas, Venezuela.

***Invited Plenary & Symposium Lectures – International***

- 2019– “Inheritors of the Earth: Improbable or Probable Destinies of Freshwater Fishes?”  
Invited plenary lecture, Biennial Conference of the Brazilian Ichthyological Society, Belem, Brazil.
- 2019– “Choosing indicators and models for impact assessment of rivers that have been, or will be, damned” Invited symposium lecture, Biennial Conference of the Brazilian Ichthyological Society, Belem, Brazil.
- 2017– “Why does environmental pulsing promote productivity and resilience?” International Symposium on Flood-pulse Ecosystems, Siem Reap, Cambodia
- 2017– “Improving ecological forecasting by merging periodic tables of niches with individual-based modeling of food web dynamics”, Invited plenary lecture, Biennial Conference of the Brazilian Ichthyological Society, Porto Seguro, Brazil.
- 2017– “Impacts of dams in major tropical rivers”, Invited symposium talk, Biennial Conference of the Brazilian Ichthyological Society, Porto Seguro, Brazil.
- 2015– “Functional Traits, Convergent Evolution, and Periodic Tables of Niches”, Invited plenary lecture, IV Latin American Symposium of Ichthyology, San José, Costa Rica.
- 2015– “Functional Traits, Convergent Evolution, and Periodic Tables of Niches”, Invited plenary lecture, Congreso Colombiano de Ictiología, Leticia, Colombia.
- 2015– “Functional Traits, Convergent Evolution, and Periodic Tables of Niches”, Invited symposium talk, Special Session on Functional Traits in Fish Ecology, Biennial Conference of the Brazilian Ichthyological Society, Recife, Brazil.
- 2013– “Ecologia de Redes Tróficas – Analogia com Cartografia e Anatomia”, Plenary talk, 20<sup>th</sup> Biennial Conference of the Brazilian Ichthyological Society, Maringá, Brazil.
- 2013– “Coexistência de Peixes com Diferentes Estratégias de Vida: Respostas Nicho-Dependentes a Variações Ambientais”, Roundtable, 20<sup>th</sup> Biennial Conference of the Brazilian Ichthyological Society, Maringá, Brazil.
- 2013– “Programa Ciência sem Fronteiras: Conselhos para Encontrar uma Instituição e um Orientador no Exterior”, Roundtable, 20<sup>th</sup> Biennial Conference of the Brazilian Ichthyological Society, Maringá, Brazil.
- 2012– “Food Web Ecology– Analogy with Cartography and Anatomy” Plenary talk, Fifth Argentinian Congress of Limnology, Santa Fe, Argentina.
- 2011– “Ecologia de Peixes Neotropicais: Situação Atual e Perspectivas” Plenary talk, 19<sup>th</sup> Biennial Conference of the Brazilian Ichthyological Society, Manaus, Brazil.
- 2009– “Are Successful Fish Invasions Only from Species-rich into Species-poor Communities?” Invited talk, Symposium: The Future of Fish Biogeography, Annual Meeting of the International Ecological Society, Brisbane, Australia.
- 2003– “Food Web Science: Moving on the Path from Abstraction to Prediction” (Plenary lecture) Third Decadal Food Web Symposium, Giessen, Germany.
- 2003– “Ecology of African Fishes: Scientific Paradigms and Resource Conservation” (Plenary lecture) African Fish and Fisheries Conference, Cotonou, Benin.
- 2003– “Sources of Production for Food Webs” in Large Rivers, 2<sup>nd</sup> Large Rivers Symposium, Phnom Penh, Cambodia.

- 1999– “Role of Fishes in Tropical Floodplain Food Webs”, Plenary talk- 1st Congress of Bolivian Limnology and Aquatic Resources Management, Cochabamba, Bolivia.
- 1998– “Tropical River Food Webs-Effects of Fish Movement”, Plenary talk- 13th Biennial Conference of the Brazilian Ichthyological Society, São Carlos, Brazil.
- 1998– “Effects of Seasonality and Fish Movement on Tropical River Food Webs”, Symposium on Tropical Fish Biology, Fisheries Society of the British Isles, Southampton, England (with D. Jepsen).
- 1998– “Migratory Fishes Subsidize Foodwebs of Oligotrophic Rivers in the Neotropics”, Symposium on Cross-Habitat Exchanges of Nutrients, Consumers, and Predators, International Ecological Society, Florence, Italy.
- 1994– “Structural and Functional Aspects of Diversity”, (Keynote) Symposium on Fishes and Their Habitat, Lyon, France.
- 1994– “Food Webs”, Ann. Meet. Canadian Society of Zoologists, Winnipeg, Canada.

***Invited Plenary & Symposium Lectures – Professional Society***

- 2015– “Evidence for Biotic Resistance in Highly Diverse Tropical Rivers”, Invited symposium contribution, Centennial Conference of the Ecological Society of America, Baltimore, MD (with D. Fitzgerald).
- 2015– “Influence of Deforestation on Fish Diversity and Biomass in the Amazon River”, Invited symposium contribution, Centennial Conference of the Ecological Society of America, Baltimore, MD (with C. Arantes).
- 2009– “Biodiversity, Ecological Complexity and Flood Dynamics of Tropical Rivers: Can We Make River Ecology a Predictive Science?” Plenary talk, Biennial Meeting of the International Society for River Science, Tampa, FL.
- 2004– “In Search of the Periodic Table of Niches: Fishes Could Help Ecological Alchemy Evolve into Modern Science” Pianka Symposium, Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists, Norman, OK.
- 2003– “Life History Strategies, Population Regulation, and Their Implications for Fisheries Management” Exploring Beverton’s Legacy Symposium, Ann Meet. American Fisheries Society, Quebec City, Canada.
- 1999– “Variation in Fish Assemblages of Brazos River Oxbow Lakes”, Invited Talk, Freshwater and Marine Science Session, Ann. Meet. Texas Academy of Sciences, Seguin, TX.
- 1998– “The Influence of Life History Strategies on Dynamics of Exploited Fish Populations from Lakes to Oceans”, Symposium on Ecology of Exploited Fish Populations- from Lakes to Oceans, American Society for Limnology and Oceanography, St. Louis, MO.
- 1997– “Conservation of Aquatic Diversity of River Floodplains: An Intermediate Disturbance Perspective”, Symposium on Conservation of Large River Floodplains, Annual Meeting of the Society for Conservation Biology (with D. Jepsen).
- 1996– “Relationships between Fish Life History Strategies and Population Responses to Disturbances” (Plenary lecture), Ann. Meet. AFS Western Div., Eugene, OR.

- 1996– “Longterm Dynamics of a Floodplain Fish Assemblage in the Venezuelan Llanos”, Neotropical Ichthyology Symposium, Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists, New Orleans, LA.
- 1995– “Fisheries and Water Management in River-Swamp Systems”, Ann. Meet. AFS, Tampa, FL.
- 1995– “Imperiled Fishes and Aquatic Communities Across the Southern Landscape: Spatiotemporal Data Bases for the 21st Century”, Ann. Meet. AFS, Tampa, FL.
- 1993– “Fish Ecology in Latin America” (Organizer- NSF funded symposium), Ann. Meet. ASIH, Austin, TX.
- 1992– “Convergence and Divergence of Cichlid Fishes”, Ecomorphology Symposium, Ann. Meet. ASIH, Champaign, IL.
- 1991– “Individual-Based Approach to Modeling Fish Population Dynamics”, Ann. Meet. AFS, San Antonio, TX.

***Invited Plenary & Symposium Lectures – Other***

- 2015– “Flows and Fish in Texas Rivers (& The Things We Do To Them)”, Invited plenary lecture, Big Thicket Science Conference, Nacogdoches, Texas
- 2014– “Functional Traits, Convergent Evolution, and Periodic Tables of Niches”, Plenary talk, Annual Graduate Student Symposium, Biology Department, University of Louisiana at Lafayette.
- 2006– “The Challenge of Keeping All the Parts: Research Needs for Informing Environmental Flows Policy” Plenary talk, Charting the Course Conference, State Capitol, Austin, TX.
- 2005– “Seeking a Sound Ecological Environment: Issues of Scale for Biotic Indicators of Flow Variation” Plenary talk, Flow for the Future Conference, San Marcos, TX.
- 2004– “Scale and Resolution in Instream Flow Assessment” Instream Flow Workshop hosted by Texas River and Reservoir Management Society and Texas Chapter American Fisheries Society, College Station, TX.
- 2004– “Interplay between Scale, Resolution, Life History, and Prediction of Food Web Dynamics” First Annual Peter Yodzis Ecology Symposium, University of Guelph, Canada.
- 2001– “Life History Strategies and Population Regulation: Theory Predicts Consequences for Supplemental Stocking of Tarpon”, 1<sup>st</sup> International Tarpon Symposium, Port Aransas, TX
- 1996, 1995, 1994, 1993– “Science Technology and Youth”, Texas A&M Univeristy, College Station.
- 1995– "Texas Endangered Species", Fossil Rim, TX.
- 1993– “Food Webs: Integration of Patterns and Dynamics” (Organizer- NSF funded symposium), Ft. Collins, CO.
- 1990– Compmech Bay Anchovy Workshop, Raleigh, NC.
- 1988– "Organization for Tropical Studies Silver Anniversary Symposium", Univ. of Miami, FL.

1988– Plenary speaker, Texas Cichlid Association, San Antonio, TX.

1986– Tropical Rainforest Symposium, Institute of Latin American Studies, Austin, TX.

### *Invited Seminars*

2017– Kamutjonga Inland Fisheries Institute, Namibia; University of Dayton; Annual Hynes Lecture, University of New Brunswick, Fredericton, NB, Canada; seminar, University of New Brunswick, Fredericton, NB, Canada; seminar, University of New Brunswick, Saint John, NB, Canada.

2016– Distinguished Speaker Series – University of Alabama at Huntsville; Royal University of Phnom Penh, Cambodia; Sam Houston State University; Annual Brandt Lecture – North Carolina State University

2015– Universidade Estadual de Londrina, Brazil; Universidade Estadual de Paraná Oeste, Brazil; Texas A&M University, EEB Program

2014– Annual Minshall Lecture – Idaho State University; Dept. of Biology, University of Louisiana at Lafayette; EEB Program, Texas A&M University

2013– Texas A&M University-Dept of WFSC; University of Wyoming; Nanchang University, Nanchang, China; Fudan University, Shanghai, China

2012– Texas A&M University (ABS seminar series); University of North Texas

2011– Cornell University; Virginia Tech University; Texas Tech University; Baylor University (2 talks: the Floyd and Lorene Davidson Lecture plus one departmental seminar)

2010– Borlaug Institute at Texas A&M University; Charles Darwin University, Australia; Rivers Institute, Griffith University, Australia; University of Oklahoma

2009– Sam Houston State University; University of Toronto

2008– University of Nebraska; Texas A&M University-Applied Biodiversity Science Series

2007– North Carolina State University

2006– Auburn University; University of Illinois; University of Texas at Tyler; Texas A&M University at Galveston; Oklahoma State University

2005– University of Central Florida; Universidad Veracruzana; Ohio State University

2004– Southern Illinois University

2003– University of New Mexico/University of Alabama (NSF-IGERT Symposium); TAMU Department of Rangeland Ecology and Management

2002– University of Minnesota; University of Texas at Austin; Colorado State University

2001– Sam Houston State University

2000– University of South Florida; University of the Western Llanos, Venezuela

1999– University of New Mexico; Texas Watershed Working Group (TAMUS-TTVN)

- 1998– University of Miami; Florida International University, Institute of Ecology, University of Georgia; TAMU Department of Rangeland Ecology and Management
- 1997– TAMU Entomology Department
- 1996– TAMU Society for Conservation Biology; Universidade Estadual de Maringá, Brazil; University of Miami
- 1995– Texas Aquaculture Association; University of Texas Marine Science Institute; TAMU International Agriculture Program
- 1994– Tulane University; 2 talks for University Oklahoma
- 1993– 3 talks for Universidade Estadual de Maringá, Brazil; Vanderbilt University
- 1992– University of Texas Marine Science Institute
- 1991– University of Guelph; Texas A&M University; Miami University of Ohio; University of Tennessee; 2 talks for Virginia Tech University; Vanderbilt University; University of Maryland; Bowling Green State University; Philadelphia Academy of Natural Sciences; SUNY- Syracuse
- 1990– Oak Ridge National Lab; University of Wisconsin Milwaukee
- 1989– Arizona State University
- 1987– University of Texas Marine Science Institute
- 1985– Tortuguero National Park, Costa Rica; Organization for Tropical Studies, Costa Rica
- 1983– Organization for Tropical Studies, Costa Rica

### ***Contributed Papers at Professional Meetings***

- 2019– “Osmoregulatory evolution in freshwaters: Juxtaposition of differentially expressed genes and outlier loci of an Amazon cichlid in contrasting pH and ionic environments” Ann. Meet. Society for Integrative and Comparative Biology, Tampa, FL (with S. Willis & L. Rocha)
- 2018– “Do Exchanges between the Guadalupe River channel and oxbow lakes influence food web dynamics? Ann. Meet. American Fisheries Society, Atlantic City (with M. Andrade, C. Arantes, T. Bokhutlo, L. Bower, E. Cunha, F. Keppeler, E. Lopez, K. Mayes, Y. Quintana, C. Robertson & D. Saenz)
- 2018– “Do Exchanges between the Guadalupe River channel and oxbow lakes influence food web dynamics? Ann. Meet. Ecological Society of America, New Orleans (with M. Andrade, C. Arantes, T. Bokhutlo, L. Bower, E. Cunha, F. Keppeler, E. Lopez, K. Mayes, Y. Quintana, C. Robertson & D. Saenz)
- 2018– “Canopy arthropods function as trophic links between floodplain forests and fishes in nutrient-poor black-water Amazonian rivers” Ann. Meet. Ecological Society of America, New Orleans (with S.B. Correa)
- 2018– “Fish assemblage convergence along environmental gradients and microhabitats in small freshwater streams” Ann. Meet. Ecological Society of America, New Orleans (with L. Bower)

- 2018– “Exploring asymmetries in the relationship between body size and trophic level using a multi-trait approach” Ann. Meet. Ecological Society of America, New Orleans (with F. Keppeler & C. Montaña)
- 2018– “Seasonal and spatial variation in fish assemblages of a Caribbean coastal drainage in Guatemala” Ann. Meet. Ecological Society of America, New Orleans (with Y. Quintana, C. Barrientos & E. López)
- 2018– “ $\alpha$ - and  $\beta$ -diversity of freshwater fishes in relation to habitat complexity indicate a trade-off between environmental filtering and species interaction” Ann. Meet. Ecological Society of America, New Orleans (with E. Cunha, L. Gomes, A. Agostinho, J da Silva & T. Lopes)
- 2018– “A model simulating interactions between hydrology, landscape, species traits and biotic interactions to predict food web dynamics in a neotropical freshwater ecosystem” Ann. Meet. Ecological Society of America, New Orleans (with P. Piana, E. Cunha, A. Agostinho, L. Gomes)
- 2018– “Productivity and stability in temporally forced food webs” Ann. Meet. Ecological Society of America, New Orleans (with C. Bieg, K. McCann, L. Johnson & B. McMeans)
- 2018– “The effects of melanocortin hormones on the electric organ discharge of two weakly electric fish” Ann. Meet. Ecological Society of America, New Orleans (with C. Saeinz & M. Markham)
- 2018– “Osmoregulation in freshwaters: Gene expression in the gills of a Neotropical cichlid in contrasting pH and ionic environments”. Ann. Meet. American Society of Ichthyologists and Herpetologists, Rochester, NY (with S. Willis, D. Saenz, G. Wang, C. Hollenbeck, L. Rocha D. Portnoy & J. Cai)
- 2018– “Potential influence of exchanges between the Lower Guadalupe River and oxbow lakes on food web dynamics” Ann. Meet. TX Ch. Amer. Fish. Soc., College Station, TX (with M. Andrade, C. Arantes, T. Bokhutlo, L. Bower, E. Cunha, F. Keppeler, E. Lopez, K. Mayes, Y. Quintana, C. Robertson & D. Saenz)
- 2018– “Disentangling the role of environmental and spatial processes in the metacommunity structure of stream fishes in a large Neotropical River” Ann. Meet. TX Ch. Amer. Fish. Soc., College Station, TX (with E. Lopez-Delgado & F. Villa-Navarro)
- 2018– “Is trophic level related to body size in Texas fishes?” Ann. Meet. TX Ch. Amer. Fish. Soc., College Station, TX (with F. Keppeler & C. Montaña-Schalk)
- 2018– “Flow-specific floodplain inundation modeling, availability of suitable spawning habitat and recruitment of Alligator Gar in the lower Trinity River” Ann. Meet. TX Ch. Amer. Fish. Soc., College Station, TX (with D. Hoeinghaus, J. Jensen, A. Pease, D. Buckmeier, N. Smith, D. Daugherty, T. Hardy & Y. Allen)
- 2018– “Variation in environmental conditions and fish assemblages in sub-lakes of the Poyang Lake floodplain, China” Ann. Meet. TX Ch. Amer. Fish. Soc., College Station, TX (with B. Jin, J. Si, & B. Shao)
- 2018– “Functional diversity of stream fish assemblages in the Eastern Amazon: Oil palm plantations acting as an environmental filter” Ann. Meet. TX Ch. Amer. Fish. Soc., College Station, TX (with T. Begot, N. Benone, and L. Montag)



- 2018– “Evaluating the effects of different land uses on habitat and fish assemblages in amazon rainforest streams” Ann. Meet. TX Ch. Amer. Fish. Soc., College Station, TX (with L. Montag, H. Leão, N. Benone, B. Prudente, T. Begot, N. Torres, D. Hoeninghaus, L. Bower, F. Keppeler, D. Saenz, E. Lopez-Delgado, Y. Quintana & L. Juen)
- 2017– “Wabash River food web before and after an ecosystem transition” Ann. Meet. Soc. Freshwater Sci., Raleigh, NC (with M. Pyron, R. Shields, M. Minder, B. Murry & J. Becker)
- 2017– “Using fish functional traits for individual-based modeling to simulate food-web dynamics in river-floodplain systems” Ann. Meet. Amer. Soc. Ichthyol. Herpetol., Austin, TX (with P. Piana, E. Cunha, A. Agostinho & L. Gomes)
- 2017– “Relationship between Forest Cover and Fish Diversity in the Amazon River” Ann. Meet. Amer. Soc. Ichthyol. Herpetol., Austin, TX (with C. Arantes)
- 2017– “Fish assemblage convergence along environmental gradients and microhabitats in small freshwater streams” Ann. Meet. Amer. Soc. Ichthyol. Herpetol., Austin, TX (with L. Bower)
- 2017– “Is There a Relationship between Fish Cannibalism and Latitude or Species Richness?” Ann. Meet. Amer. Soc. Ichthyol. Herpetol., Austin, TX (with L. Strictar Perreira, F. Keppeler & A. Agostinho)
- 2017– “Effects of Melanocortin Hormones on the Electric Organ Discharge of Two Weakly Electric Fish” Ann. Meet. Amer. Soc. Ichthyol. Herpetol., Austin, TX (with D. Saenz, M. Markham & J. Alves Gomes)
- 2017– “RNA-seq analysis of osmoregulation in an Amazonian cichlid: Deciphering the mechanisms constraining distributions of white and black water fishes” Ann. Meet. Amer. Soc. Ichthyol. Herpetol., Austin, TX (with S. Willis, D. Saenz, G. Wang, C. Hollenbeck, J. Cai & D. Portnoy)
- 2017– “Fish biomass and functional diversity are positively associated with forest cover in the Amazon River floodplains”, International Symposium on Flood-pulse Ecosystems, Siem Reap, Cambodia (with C. Arantes, et al.)
- 2017– “Hydroelectric dams in the tropics: impending threats to biodiversity and fisheries”, Texas Chapter American Fisheries Soc., Corpus Christi.
- 2016– Seasonal changes in the functional community assembly of tropical fishes, Annual Meeting of the Ecological Society of America, Portland, Oregon (with D. Fitzgerald, M. Sabaj and L. Sousa).
- 2016– Global Patterns of Fish Functional Diversity and Trait Convergence along Species Richness and Environmental Gradients, Annual Meeting of the American Society of Ichthyologists and Herpetologists, New Orleans, Louisiana (with L. Bower).
- 2014– Weighing interaction strength in stream food webs: Importance of incorporating density data, Annual Meeting of the Ecological Society of America, Davis, California (with M. Ceneviva-Bastos and L. Casatti).

- 2014– Fishes and food webs in the Mekong River and its tributaries: a preview of life after new dams are constructed, Annual Meeting of the American Society of Ichthyologists and Herpetologists, Chattanooga, Tennessee (with C. Ou).
- 2014– Influence of deforestation on fisheries in the Amazon floodplains, Annual Meeting of the American Society of Ichthyologists and Herpetologists, Chattanooga, Tennessee (with C. Arantes, M. Petrere, L. Castello, and C. Freitas).
- 2014– Food web structure of the Lower Xingu River: A unique and immediately imperiled ecosystem in the Lower Amazon Basin, Annual Meeting of the American Society of Ichthyologists and Herpetologists, Chattanooga, Tennessee (with D. Fitzgerald, M. Zuluaga, T. Giarrizzo, M. Sabaj, N. Lujan, L. Sousa, L. Rapp, J. Zuanon and J. Lundberg).
- 2014– Trophic ecology of omnivorous fishes in the Yeşilirmak River Basin, Turkey, in relation to seasons and a hydroelectric dam, Annual Meeting of the American Society of Ichthyologists and Herpetologists, Chattanooga, Tennessee (with N. Kaymak, S. Akin, Z. Altuner, F. Polat and T. Dal).
- 2014– Intra-annual flow variation and its impact on larval fish abundance in two Texas Gulf Coast rivers, Annual Meeting of the American Society of Ichthyologists and Herpetologists, Chattanooga, Tennessee (with A. Rodger and C. Krabbenhoft).
- 2014– Trophic plasticity of tropical tadpoles along environmental gradients. Annual Meeting of the American Society of Ichthyologists and Herpetologists, Chattanooga, Tennessee (with C. Schalk, C. Montaña, and L. Fitzgerald).
- 2013– Environmental Flows Under Texas Senate Bill 3: Did We Leave Enough Water for the Fishes? Annual Meeting of the Texas Chapter American Fisheries Society, Conroe, Texas.
- 2013– The Impact of Droughts on Fish Assemblage and Water Quality in the lower Neches River: Implications for Environmental Flow Recommendations, Annual Meeting of the Texas Chapter American Fisheries Society, Conroe, Texas (with R. Pizano)
- 2013– Effects of a Dam on the Structure of the Icefish Species Assemblage in Nanyi Lake, Eastern China, Annual Meeting of the Texas Chapter American Fisheries Society, Conroe, Texas (with Z. Wang)
- 2012– Trophic diversity in the evolution and community assembly of loricariid catfishes. Ann. Meet. Society for the Study of Evolution, Ottawa, Canada (with N. Lujan and J. Armbruster)
- 2012– Diet-morphology correlations in the radiation of South American geophagine cichlids (Perciformes: Cichlidae: Cichlinae). Ann. Meet. Society for the Study of Evolution, Ottawa, Canada (with H. López-Fernández, C. Montaña, and R. Honeycutt)
- 2012– Hydrogen sulfide, bacteria, and fish: a unique food chain supported by chemoautotrophs. Ann. Meet. Texas Chapter Amer. Fisheries Soc., Galveston, TX (with K. Roach)
- 2012– Morphological assembly patterns in tropical and temperate percomorph fishes. Ann. Meet. Texas Chapter Amer. Fisheries Soc., Galveston, TX (with C.G. Montaña)
- 2012– Are successful fish invasions only from species-rich into species-poor communities?

- Ann. Meet. Texas Chapter Amer. Fisheries Soc., Galveston, TX (with D. Fitzgerald, M. Tobler)
- 2012– Drought conditions threaten the lower Neches River and Big Thicket National Preserve. Ann. Meet. Texas Chapter Amer. Fisheries Soc., Galveston, TX (with R. Pizano, N. Lujan)
- 2011– Anthropogenic impacts and longitudinal, elevational effects on the periphyton, macroinvertebrate, and fish communities of an Amazonian headwater. Ann. Meet. Ecological Soc. of Amer., Austin, TX (with D. Jacobsen, N. Lujan, V. Meza V., K. Roach, V. Rimarachin C., and J. Arana M.)
- 2011– Habitat-associated morphology of cichlid and centrarchid species assemblages: Tropical temperate convergence in perciform fishes? Ann. Meet. Ecological Soc. of Amer., Austin, TX (with C. Montaña)
- 2011– Functional trait diversity and trait-environment relationships in Central Texas stream-fish assemblages: Implications for biomonitoring. Ann. Meet. Ecological Soc. of Amer., Austin, TX (with A.A. Pease, J.M. Taylor, and R.S. King)
- 2011– Using stomach contents, stable isotopes and morphometrics to quantify resource partitioning among fruit-eating fishes in Amazon floodplain habitats. Ann. Meet. Ecological Soc. of Amer., Austin, TX (with S.B. Correa)
- 2011– Food web structure in floodplain habitats of the Oueme River, Benin, West Africa. Ann. Meet. Ecological Soc. of Amer., Austin, TX (with A.T. Jackson and A Adite)
- 2011– Do wastewater treatment plants cause abnormal effects in mosquitofish in the Houston bayous? Ann. Meet. Ecological Soc. of Amer., Austin, TX (with C.D. Watkins and M. Mora)
- 2011– Flooding drives one-way connectivity of aquatic food webs across spatial and temporal scales in a subtropical coastal lagoon. Ann. Meet. Ecological Soc. of Amer., Austin, TX (with A.M. Garcia, D.J. Hoeinghaus, M. Claudino, R. Bastos, F. Correa, S. Huckembeck, J. Vieira, D. Loebmann, P. Abreu, and C. Ducatti)
- 2011– Never enough data, never enough time: theoretical and practical sticking points in determining environmental flows. Ann. Meet. Texas Chapter Amer. Fisheries Soc., San Marcos
- 2011– The influence of hydrology, light penetrance, and nutrients on production sources for fishes in six floodplain rivers. Ann. Meet. Texas Chapter Amer. Fisheries Soc., San Marcos (with K.A. Roach)
- 2011– Using stable isotopes to reveal food web structures in the Mekong River and its tributaries. Ann. Meet. Texas Chapter Amer. Fisheries Soc., San Marcos (with C. Ou)
- 2011– Stable isotope analysis reveals food web structure and watershed impacts along the fluvial gradient of a Mesoamerican coastal river. Ann. Meet. Texas Chapter Amer. Fisheries Soc., San Marcos (with D.J. Hoeinghaus, A.A. Pease, P.C. Esselman, R.L. Honeycutt, D. Gbanaador, E. Carrera, and J. Payne)

- 2011– Texas mussels in national museums: a survey of biodiversity collections for records of Texas freshwater mussels. Ann. Meet. Texas Chapter Amer. Fisheries Soc., San Marcos (with N. Lujan, J. Groce, and T. Snelgrove)
- 2011– Ecomorphological correlates in temperate floodplain centrarchid fishes. Ann. Meet. Texas Chapter Amer. Fisheries Soc., San Marcos (with C.G. Montaña)
- 2011– Inferring trophic resource partitioning among Amazonian floodplain serrasalmid fishes from  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  stable isotopes, stomach contents and ecomorphological data. Ann. Meet. Texas Chapter Amer. Fisheries Soc., San Marcos (with S.B. Correa)
- 2011– Trophic resource partitioning among frugivorous fishes in floodplain forests of the Colombian Amazon. XI Colombian Meeting of Ichthyology. Universidad del Tolima and Asociación Colombiana de Ictiólogos. Ibagué, Tolima, Colombia (with S.B. Correa)
- 2010– Do wastewater treatment plants cause abnormal effects in mosquitofish? Annual Meeting of the Society for Ecotoxicology, Portland Oregon (with C. Watkins, M. Mora)
- 2010– An ecological study of mercury bioaccumulation in the Madre de Dios watershed, Peru. Ann. Meet. North American Benthological Society, Santa Fe, New Mexico (with K. Roach, N. Jacobsen, D. Brightsmith, C. Fiorello)
- 2010– Seasonality and dietary patterns in Neotropical piscivores. Ann. Meet. Amer. Soc. Ichthyologists and Herpetologists, Providence, Rhode Island (with C. Montaña, C. Layman)
- 2008– Comparative ecology of two *Crenicichla* species (Teleostei: Cichlidae) in a Venezuelan Neotropical floodplain river. Ann. Meet. Amer. Soc. Ichthyologists and Herpetologists, Montreal, Canada (with C. Montaña)
- 2007– Evaluation of conceptual models of fish reproduction in floodplain rivers: A life history-based approach. Ann. Meet. Ecological Soc. Am., San Jose, California (with S. Zeug)
- 2007– The Rio Casiquiare removed the physical barrier between the Orinoco and Amazon Basins and replaced it with an environmental filter. Ann. Meet. Am. Soc. Ichthyol. Herpetol., St. Louis, Missouri (with H. Lopez, T. Taphorn, L. Nico, A. Barbarino)
- 2007– Experimental test for determining the feeding efficiency of digging/sifting Neotropical cichlids. Ann. Meet. Am. Soc. Ichthyol. Herpetol., St. Louis, Missouri (with C. Watkins, H. Lopez, S. Willis)
- 2007– Divergence times of Neotropical cichlids and some implications for South American freshwater fish biogeography. Ann. Meet. Am. Soc. Ichthyol. Herpetol., St. Louis, Missouri (with H. Lopez, R. Honeycutt)
- 2007– A multilocus phylogeny of the Neotropical Cichlidae. Ann. Meet. Am. Soc. Ichthyol. Herpetol., St. Louis, Missouri (with H. Lopez, R. Honeycutt, C. Crane)

- 2007– Niche overlap and ecomorphological disparity in Mesoamerican cichlid communities. Ann. Meet. Am. Soc. Ichthyol. Herpetol., St. Louis, Missouri (with A. Pease, J. Cochran, H. Lopez)
- 2007– Oxbow lakes hydrologic and biotic connectivity with the lower Brazos River. Ann. Meet. Texas Academy of Science (with R. Mathews, J. Furnans, S. Zeug, T. Bonner, C. Williams, T. Osting)
- 2006– Comparison of dietary and isotope-based food web structure of four Central American coastal streams. Ann. Meet. Am. Soc. Ichthyol. Herpetol., New Orleans, Louisiana (with S. Zeug, C. Roberston, C. Saenz, B. Winemiller)
- 2006– Habitat attributes influence ontogenetic diet shifts of gizzard shad (*Dorosoma cepedianum*) in a large floodplain river. Ann. Meet. Am. Soc. Ichthyol. Herpetol., New Orleans, Louisiana (with S. Zeug, D. Peretti)
- 2006– Structure of diverse tropical river food webs: Landscape determinants, introduced species and ecological efficiency of exploited systems. Ann. Meet. Am. Soc. Ichthyol. Herpetol., New Orleans, Louisiana (with D. Hoeninghaus, A. Agostinho)
- 2006– Resource use among sympatric gar species (Lepisosteidae) in the middle Brazos River and associated oxbows. Ann. Meet. Am. Soc. Ichthyol. Herpetol., New Orleans, Louisiana (with C. Robertson, S. Zeug)
- 2006– Snake species richness in relation to habitat in the post oak savannah of east central Texas. Ann. Meet. Am. Soc. Ichthyol. Herpetol., New Orleans, Louisiana (with J. Putegnat, L. Fitzgerald)
- 2006– Variation in food web structure along the longitudinal gradient of the Bladen-Monkey River, Belize. Ann. Meet. Am. Soc. Ichthyol. Herpetol., New Orleans, Louisiana (with A. Pease, E. Carrera, D. Gbaanador, J. Payne, J. Putegnat, G. Tamez, R. Honeycutt, P. Esselman, W. Heyman)
- 2006– Phenotype-environment correlations in the putative adaptive radiation of South American geophagine cichlids (Perciformes, Labroidei). Ann. Meet. Am. Soc. Ichthyol. Herpetol., New Orleans, Louisiana (with H. Lopez, R. Honeycutt, A. Pease)
- 2006– Response of Brazos River fish assemblages to hydrological connectivity. Ann. Meet. S. Div. Amer. Fisheries Soc., San Antonio, TX (with S. Zeug, R. Mathews, T. Osting)
- 2005– Seasonal fish effects on benthic ecology of a neotropical floodplain river. Ann. Meet. Am. Soc. Ichthyol. Herpetol., Tampa, FL (with J. Cotner, D. Roelke, J.V. Montoya)
- 2004– Seasonal variability in benthic and water column productivity in a Venezuelan llanos river. Ann. Meet. Ecol. Soc. Amer., Portland, OR (with J. Cotner, D. Roelke, J.V. Montoya)
- 2004– Experimental demonstrations of seasonal fish effects on benthic ecology of a neotropical floodplain river. Ann. Meet. Ecol. Soc. Amer., Portland, OR (with D. Roelke, J.V. Montoya, C. Layman, J. Cotner)

- 2004– Seasonal variation of productivity and respiration in a tropical blackwater river: The role of allochthonous organic matter derived from savannah and gallery forest, and inorganic nutrients. Ann. Meet. Ecol. Soc. Amer., Portland, OR (with D. Roelke, C. DelCastillo, J.V. Montoya, S. Davis, J. Cotner)
- 2004– Hydrological seasonality and spatio-temporal dynamics of physico-chemical variables of a tropical floodplain river. Ann. Meet. Ecol. Soc. Amer., Portland, OR (with J.V. Montoya, D. Roelke, J. Cotner)
- 2004– From short to long: factors influencing food chain length in a species-rich tropical floodplain river. Ann. Meet. Ecol. Soc. Amer., Portland, OR (with D.A. Arrington, C. Layman)
- 2004– Body size and seasonal hydrology drive predator-prey dynamics in a complex river food web. Ann. Meet. Ecol. Soc. Amer., Portland, OR (with C. Layman, D.A. Arrington, D. Jepsen, C. Montaña)
- 2004– Predicting the Ecological Response to Increased Base Flows in Ephemeral Texas Streams: Results from Field Investigations. Water Resource Conference, Portland, OR (with N. Wilkins, R. Lacewell, R. Griffiths)
- 2004– Association between brush cover and stream fish assemblages in the Pedernales River Basin, Texas: Preliminary findings. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists, Norman, OK (with J. Birnbaum)
- 2004– Seasonal ecological dynamics of oxbow lakes of a temperate floodplain river. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists, Norman, OK (with S. Zeug, S. Tarim)
- 2004– Comparative ecology of gars species (Lepisosteidae) in the Brazos River and associated oxbow lakes. Ann. Meet. Texas Chapter Amer. Fisheries Soc., College Station, TX (with C. Robertson, S. Zeug)
- 2004– Status of *Dionda diaboli* and report of established populations of exotic fish species in lower San Felipe Creek, Val Verde County, Texas. Ann. Meet. Texas Chapter Amer. Fisheries Soc., College Station, TX (with H. Lopez)
- 2004– Association between brush cover and stream fish assemblages in the Pedernales River Basin, Texas: Preliminary findings. Ann. Meet. Texas Chapter Amer. Fisheries Soc., College Station, TX (with J. Birnbaum and D. Hoeninghaus)
- 2004– Seasonal ecological dynamics of oxbow lakes of a temperate floodplain river. Ann. Meet. Texas Chapter Amer. Fisheries Soc., College Station, TX (with S. Zeug, S. Tarim)
- 2003– Response of streams to variation in vegetation in the Pedernales watershed. Ann. Meet. Amer. Geophysical Union, San Francisco, CA (with L. Shen, B. Wilcox, C. Munster, N. Wilkins)
- 2003– Fish assemblages of the Casiquaire, zone of biotic interchange between Upper Orinoco and Rio Negro. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists, Manaus, Brazil (with H. Lopez, D. Arrington, D. Taphorn, L. Nico, A. Barbarino)

- 2003– Local vs. regional factors: a meta-analysis of Texas stream fish assemblages. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists, Manaus, Brazil (with J. Birnbaum, D. Hoeinghaus)
- 2003– Spatiotemporal variation in fish assemblage structure in tropical floodplain creeks. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists, Manaus, Brazil (with D. Hoeinghaus, C. Layman, D. Arrington)
- 2003– Habitat complexity and fish morphological diversity in a Neotropical floodplain river. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists, Manaus, Brazil (with S. Willis, H. Lopez)
- 2003– Phenotypic characters predict fish assemblage differences among netted and un-netted lagoons of a speciose tropical river. Ann. Meet. Ecol. Soc. Amer., Savanha, Georgia (with C.A. Layman)
- 2003– Local vs. regional factors: a meta-analysis of Texas stream fish assemblages. Ann. Meet. Soc. Southw. Nat., Norman, Oklahoma (with J. Birnbaum, D. Hoeinghaus)
- 2003– Reconciliation of neutral and deterministic models of community assembly in the Cinaruco River, Venezuela. Ann. Meet. N. Amer. Benthological Soc. (with D.A. Arrington, C. A. Layman)
- 2003– Using small-scale exclusion experiments to predict impacts of fishing in a tropical floodplain river fish community. 2<sup>nd</sup> Large Rivers Symposium, Phnom Penh, Cambodia (with C. Layman)
- 2003– Organization and maintenance of biological diversity in tropical floodplain rivers. 2<sup>nd</sup> Large Rivers Symposium, Phnom Penh, Cambodia (with D.A. Arrington)
- 2002– Diel variation in fish assemblage structure on river sandbanks of a Neotropical blackwater river. Ann. Meet. Amer. Soc. Ichthyol. Herpetol. (with D.A. Arrington)
- 2002– Predation effects on littoral fish assemblage of a Neotropical blackwater river. Ann. Meet. Ecological Soc. Amer. (with C. Layman)
- 2001– Foodweb structure of tropical rivers with different biogeochemical attributes. Ann. Meet. Ecological Soc. Amer. (with D. Jepsen)
- 2001– Assembly of fishes and macroinvertebrates in a large neotropical floodplain river: The role of structural habitat complexity. Ann. Meet. Ecological Soc. Amer. (with D.A. Arrington)
- 2001– Taxonomy and new records of pike characins (*Acestrorhynchus* spp.) from Venezuela. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists (with H. Lopez)
- 2001– Temporal variation of food web structure in a coastal wetland fringing Matagorda Bay, Texas. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists (with S. Akin)
- 2000– Food web structure of South American rivers with different biogeochemistry revealed by stable isotopes. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists (with D. Jepsen)

- 2000– Habitat structure and tropical fish assemblages: a test of the random associations hypothesis. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists (with D.A. Arrington)
- 2000– Spatial and temporal variation in the food web of Mad Island Marsh, Matagorda Bay. Ann. Meet. Soc. S.W. Naturalists (with S. Akin)
- 1999– Spatial variation in fish assemblages of Brazos River oxbow lakes. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists (with J. Cotner & S. Tarim)
- 1999– A review of Venezuelan species of *Hypophthalmus*. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists (with H. Lopez)
- 1999– The effects of environmental parameters on the distribution and abundance of gulf menhaden, *Brevoortia patronus*, in Mad Island Marsh, Matagorda Bay, Texas. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists (with S. Akin)
- 1998– Reproductive ecology of the tarpon snook (*Centropomus pectinatus*) in a tropical estuary with evidence of protandry. Symposium on Tropical Fish Biology, Fisheries Soc. British Isles (with B. Ponwith & W. Neill)
- 1998– Stable isotopes for comparison of sources of production in four tropical rivers. Western Division American Fisheries Society (coauthored with D. Jepsen)
- 1998– Influence of exotic smallmouth bass on fish assemblages of the Devils River, Texas. Ann. Meet. Southeastern Society of Biologists (co-authored with M. Robertson)
- 1997– Conservation of aquatic diversity of river floodplains: An intermediate disturbance perspective. Symposium on Conservation of Large River Floodplains, Ann. Meet. Soc. Cons. Biol. (with D.B. Jepsen)
- 1996– Effects of sportfish management on desert fishes in Texas, Ann. Meet. AFS Western Div., Eugene, OR.
- 1996– Spatial and temporal variation in fish assemblage structure at Village Creek. Big Thicket Science Conference, Beaumont, TX (co-authored with L. Moriarty)
- 1996– Fish population and community structure in Brazos River oxbow lakes. Joint Ann. Meet. Texas and Oklahoma Chapters Amer. Fish. Soc. (with S. Tarim, J.B. Cotner, D.E. Shormann)
- 1996– Fish Population and Community Structure of Oxbow Lakes of the Brazos River. Ann. Meet. Amer. Soc. Ichthyologists & Herpetologists (with S. Tarim)
- 1996– Fish populations and community structure in oxbow lakes of the Brazos River floodplain. Ann. Meet. Southwestern Soc. of Naturalists (with S. Tarim)
- 1995– The influence of fish life histories and natural disturbance on food web structure in oxbows of the Brazos River. Ann. Meet. Amer. Fish. Soc. (with J.B. Cotner, D.E. Shormann)



- 1995– Fish effects on phytoplankton and zooplankton communities in Brazos River oxbows. Ann. Meet. Amer. Fish. Soc. (with J.B. Cotner, D.E. Shormann)
- 1995– Texas fish assemblages following three decades of environmental change. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists (with A.A. Anderson, C. Hubbs, R.J. Edwards)
- 1995– The Phantom Lake Springs refuge for endangered desert fishes. Ann. Meet. Texas Chapter Amer. Fish. Soc. (with A.A. Anderson)
- 1995– Identifying food web interactions in Brazos River oxbow lakes. Ann. Meet. Amer. Soc. Limnol. & Oceanogr. (with D.E. Shormann, J.B. Cotner)
- 1995– Life history theory and responses of fish populations to perturbations. Ann. Meet. Soc. for Conservation Biology
- 1995– Phantom Lake Spring refuge for two endangered fishes. Ann. Meet. Soc. for Conservation Biology (with A.A. Anderson)
- 1995– Fish Communities of Lake Nokue, Benin, West Africa. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists (with A. Adite)
- 1994– Life history, carrying capacity and fisheries management. Ann. Meet. Texas Chapt. Amer. Fish. Soc.
- 1994– Ecology of catfishes of the Upper Zambezi River floodplain. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists (with L.C. Kelso Winemiller)
- 1994– Texas fish assemblages following three decades of environmental change. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists (with A.A. Anderson, C. Hubbs, R.J. Edwards)
- 1994– Fish assemblage-habitat relationships in a Texas blackwater stream. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists (with L.J. Moriarty)
- 1993– Comparative ecology of pavon in Southern Venezuela: Ann. Meet. Am. Soc. Ichthyologists & Herpetologists (with A. Barbarino, D.C. Taphorn)
- 1993– Convergence in a specialized foraging mode: tube-snouted weakly electric fishes. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists (with C. Marrero)
- 1993– Comparative ecology of African pike and tigerfish in the Upper Zambezi River floodplain. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists (with L. Kelso Winemiller)
- 1993– Agonistic behaviors exhibited by juvenile smallmouth bass in laboratory and field conditions. Ann. Conf. SE Fish & Wildl. Assoc. (with M.J. Sabo, E.J. Pert)
- 1992– Ecological and morphological diversification in riverine cichlid fishes. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists (with L.C. Kelso Winemiller, A. Brenkert)
- 1991– Life history theory as a comparative framework for the individual-based approach to fish population dynamics. Ann. Meet. Am. Fisheries Society

- 1991– Life history strategies among North American freshwater and marine fishes: theoretical implications of a multivariate analysis. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists
- 1990– A new species of piscivorous cichlid fish (genus *Serranochromis* ) from the Upper Zambezi floodplain. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists
- 1988– Seasonal and inter-site variation in food web properties among neotropical fish assemblages. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists
- 1987– A reappraisal of life history strategies: patterns among South American fishes. 63rd Ann. Meet. SW & Rocky Mt. Div. Am. Assoc. for the Advancement of Science
- 1987– A reappraisal of life history strategies: Patterns among South American fishes. Ann. Meet. Am. Soc. Ichthyologists & Herpetologists
- 1982– Foraging behavior and competition between largemouth and smallmouth bass (*Micropterus* ). Ann. Meet. Am. Soc. Ichthyologists & Herpetologists
- 1981– Comparative ethology of largemouth and smallmouth black bass (*Micropterus* ). Ann. Meet. Animal Behavior Soc.
- 1980– Effects of interspecific competition on predatory behavior of largemouth (*M. salmoides*) and smallmouth black bass (*M. dolomieu* ). Ann. Meet. Animal Behavior Soc.
- 1980– Smallmouth bass nesting in Indian Creek, Ohio. 42nd Midwest Fish & Wildl. Conf. (with D.H. Taylor)

#### ***Postdoctoral Research Associates Advised***

- Hernan López-Fernández, Texas A&M University (2006-2007) Associate Professor, University of Michigan.
- Michael Tobler, University of Zürich (2008-2010) Assistant Professor at Kansas State University.
- John Baker, University of Florida (2008-2015) Research Director, Catalina Island Preserve, CA.
- David Hoeinghaus, Texas A&M University (2009) Associate Professor at the University of North Texas.
- Nathan Lujan, Auburn University (2009-2012) Postdoctoral Research Associate at the Smithsonian Institution, Washington, DC.
- Eduardo R. Cunha, Universidade Estadual de Maringá (2018-present)

#### ***Graduate Students Advised as Major Professor – PhD***

- David B. Jepsen, Ph.D. 1999, Fisheries Scientist, Oregon Department of Natural Resources, Eugene, OR.
- Soner Tarim, Ph.D. 2002, CEO of Harmony Science Academy network of charter schools.

- Senol Akin, Ph.D. 2001, Professor and Chair, Department of Fisheries and Aquaculture, Gaziosmanpasa University, Turkey.
- Gregory W. Stunz (co-advised with T. Minello), Ph.D. 1999, Endowed Professor of Marine Biology at the Harte Institute, Texas A&M University at Corpus Christi.
- Bonnie J. Ponwith (co-advised with W. Neill), Ph.D. 1999, Regional Director, Office for Science and Technology, NOAA/NMFS, Washington, DC.
- D. Albrey Arrington, Ph.D. 2002, Director of the Loxahatchee River Water Conservation District, Jupiter, FL.
- Hernán Lopéz Fernández, Ph.D. 2004, Associate Professor and Curator of Ichthyology, University of Michigan, Ann Arbor, MI.
- Craig A. Layman, Ph.D. 2004, Associate Professor, North Carolina State University, Raleigh, NC.
- David Hoeinghaus, Ph.D. 2005, Associate Professor, University of North Texas, Denton.
- Alphonse Adite, Ph.D. 2006 Université Abomey-Calavi. Professor and Department Chair, Université Abomey-Calavi, Benin.
- Steven Zeug, Ph.D. 2007, Biologist with Cramer Fish Sciences, Auburn, CA.
- Jose Vicente Montoya (co-advised with D. Roelke), Ph.D. 2008, Associate Research Professor, Instituto Venezolano de Ciencias, Caracas, Venezuela.
- Allison Pease, Ph.D. 2010, Associate Professor, Texas Tech University, Lubbock, TX.
- Sandra Bibiana Correa, Ph.D. 2012, Assistant Professor at Mississippi State University, Starkville, MS.
- Carmen Montaña, Ph.D. 2012, Assistant Professor, Sam Houston State University, Huntsville, TX.
- Katherine Roach, Ph.D. 2012, Postdoc Research Associate, University of Wisconsin, Madison, WI.
- Chouly Ou, Ph.D. 2013, Instructor, Virginia Tech University, Blacksburg, VA.
- Daniel Fitzgerald, Ph.D. 2016, Science Director, Harpeth Conservancy, Nashville, TN.
- Caroline Arantes, Ph.D. 2017, Postdoc, Michigan State University, Lansing, MI.
- Luke Bower, Ph.D. 2013-current.
- David Saenz, Ph.D. 2013-current.
- Edwin Lopez, Ph.D. 2013-current.
- Pablo Gesundheit, Ph.D. 2014-current w/ medical leave of absence.
- Friedrich Keppeler, Ph.D. 2015-current.
- Thethela Bokhutlo, Ph.D. 2015-current.
- Yasmin Quintana, Ph.D. 2017-current.

***Graduate Students Advised as Major Professor – MSc***

- Nora E. Valdes, M.Sc. 1995, Superintendent of Environmental Protection – PEMEX, Mexico.

- Loren J. Moriarty, M.Sc. 1995, Lecturer at Salisbury University, Maryland.
- Alphonse Adite, M.Sc. 1995, Professor and Department Chair, Université Abomey-Calavi, Benin.
- David B. Jepsen, M.Sc. 1995, Fisheries Scientist, Oregon Department of Natural Resources, Eugene, OR.
- Tamara L. McGuire, M.Sc. 1995, Marine biologist, Alaska.
- John D. Williams, M.Sc. 1995, Commercial fisherman, Alaska.
- Christopher C. Peterson, M.Sc. 1997, Physician (M.D.), San Angelo, TX.
- Michael S. Robertson, M.Sc. 1999, Biologist, Wyoming Department of Natural Resources, Laramie, WY.
- Archis Grubh, M.Sc. 2002, Biologist, River Studies Unit, Texas Parks and Wildlife Department, San Marcos, Texas.
- Jenny Peet (Birnbbaum), M.Sc. 2005, Scientist, Massachusetts Department of Environmental Protection.
- Clint Robertson, M.Sc. 2007, Biologist, River Studies Unit, Texas Parks and Wildlife Department, San Marcos, Texas.
- Jennifer Biederman (Cochran), M.Sc. 2008, Professor, Winona State University, Winona, MN.
- Crystal Watkins, M.Sc. 2011, Scientist, Texas Commission on Environmental Quality, Dallas, TX.
- Elizabeth Carrera, M.Sc. 2012, Landscape architect, Seattle, WA.
- Andrew Jackson, M.Sc. 2012, Contractor, LaCrosse, WI.
- Rebecca Pizano, M.Sc. 2013, Environmental consultant, Houston, TX.
- Anthony Rodger, M.Sc. 2015, Biologist, Oklahoma Department of Natural Resources, Oklahoma City, OK.

***Host, Advisor & Collaborator of Visiting International Scientists at Texas A&M***

- Aniello Barbarino, Instituto Nacional de Investigaciones Pecuarias, Venezuela (1993, 2003)
- Eloisa Revaldaves, Universidade Estadual de Maringá (1999-2000)
- Alexandre Garcia, Universidade Federal de Rio Grande do Sul (2000, 2001)
- Miriam Pilz Albrecht, Universidade Federal de Rio de Janeiro (2004, 2006)
- Carmen Montaña, Universidad de los Llanos Occidentales (2005)
- Miriam Soria Barreto, Colegio de la Frontera Sur (2006)
- Danielle Peretti, Universidade do Estado do Rio Grande do Norte (2005-2006)
- Erico Takahashi, Universidade Estadual Paulista (2009-2010)
- Fabio Cop Ferreira, Universidade Estadual Paulista- Rio Claro (2010-2011)
- João Paulo Alves Pagotto, Universidade Estadual de Maringá (2012-2013)
- Mônica Ceneviva Bastos, Universidade Estadual de São Paulo (2013)
- Nehir Kaymak, Gaziosmanpasa University (2013-2104)

Fernanda Possatto, Universidade Federal do Paraná (2014-2015)  
 Cristhiana Röpke, Instituto Nacional de Pesquisas do Amazonia (2014-2015)  
 Jaqueline de Bem, Universidade Federal de Santa Catarina (2014-2015)  
 Friedrich Keppeler, Universidade Federal de Rio Grande do Sul (2014)  
 Rodrigo Ferreira Bastos, Universidade Federal de Rio Grande do Sul (2015-2016)  
 Larissa Strictar, Universidade Estadual de Maringá (2015-2016)  
 Eduardo Cunha, Universidade Estadual de Maringá (2016)  
 Marcelo Andrade, Universidade Federal do Pará (2016)  
 Tiago Begot, Universidade Federal do Pará (2017)  
 Laisa Cavalheiro, Universidade Federal do Rio Grande do Sul (2017-2018)  
 Sonia Huckembeck, Universidade Federal do Rio Grande (2017-2018)  
 Dr. Francisco Garcia de Leon, Universidad de Tamaulipas, Mexico (2000)  
 Dr. Erica Pellegrini Caramaschi, Universidade Federal de Rio de Janeiro, Brazil (2001-2002)  
 Dr. Alphonse Adite, Université Abomey-Calavi, Benin (2004, 2009)  
 Dr. Alexandre Garcia, Universidade Federal de Rio Grande do Sul, Brazil (2004, 2005, 2007)  
 Dr. Rocio Rodiles, El Colegio de la Frontera Sur, Mexico (2004, 2016-2017)  
 Alfonso Gonzales, Colegio de la Frontera Sur (2006)  
 Dr. Donald C. Taphorn, Universidad de Los Llanos Occidentales, Venezuela (2007)  
 Dr. Sunil Chaudhary, T M Bhagalpur University, India (2008)  
 Dr. Ursulla Pereira Souza, Universidade Estadual Paulista- Rio Claro, Brazil (2010)  
 Dr. Zhongsuo Wang, Capital Normal University, Beijing, China (2012-2013)  
 Dr. Luis Espinola, Instituto Nacional de Limnología, Santa Fe, Argentina (2014)  
 Dr. Pitagoras Piana, Universidade Estadual do Oeste do Paraná, Brazil (2016)  
 Dr. Miriam Soria Barreto, El Colegio de la Frontera Sur, Mexico (2016)  
 Dr. Binsong Jin, Nanchang University, China (2017-2018)  
 Dr. Luciano Montag, Universidade Federal do Pará, Brazil (2017-2018)  
 Marlucci Mueller Rebalato, Universidade Federal do Rio Grande do Sul (2018-2019)  
 Dr. Larissa Strictar, Universidade Estadual de Maringá (2018-2019)

***Summary Table of Advisees & International Visiting Scholars***

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	Texas A&M	Other Institutions
Postdoc, advisor	6	15

PhD, major advisor, coadvisor	25	1
PhD, committee member, examiner	49	22
PhD, host, advisor for visiting international scientists	-	23
MSc, major advisor	16	-
MSc, committee member	44	-
Undergraduate, advisor	49	5

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### *Courses Taught*

Texas A&M University:

REN205, Fundamentals of Ecology-undergraduate, 3 cr  
 WFSC400, Fisheries Survey- upper level undergraduate, 3 cr  
 WFSC484/5, Internship/Directed Independent Studies- undergraduate, variable cr  
 WFSC/BIOL462, Amazon River Tropical Biology- undergraduate course, 3 cr, includes  
 class sessions plus a 10-day fieldtrip to the Amazon  
 WFSC605, Community Ecology, graduate, 3 cr  
 WFSC/ENTO624, Dynamics of Populations- graduate, 4 cr  
 WFSC681, Seminar in Ecology- graduate, 1 cr  
 WFSC689, Conservation Biology- graduate- team taught, 3 cr  
 WFSC685, Directed Independent Studies- graduate, variable cr  
 EE602, Population Ecology- graduate- 1 cr  
 EE603, Community Ecology- graduate- team taught, 1 cr

Inland Fisheries Research and Development Institute, Phnom Penh, Cambodia:  
 Fisheries Techniques (graduate & professional, 14 registrants) 2017

Universidad Central de Costa Rica, San Jose, Costa Rica:  
 Community Ecology (graduate & professional, 25 registrants) 2015

Congreso Colombiano de Ictiología, Leticia, Colombia:  
 Food Web Ecology (graduate & professional, 20 registrants) 2015

Universidade Estadual de Maringá, Brazil:  
 Food Web Ecology (graduate, 30 registrants) 2014  
 Metacommunities and Assembly Rules (graduate, 29 registrants) 2015

Brazilian Ichthyological Congress, Invited Graduate Short Course: Fish Population and  
 Community Dynamics (65 paid registrants) 1999

University of the Western Llanos, Venezuela, Graduate Program in Renewable Natural  
 Resources, Visiting Fulbright Lecturer:  
 Advanced Ecology (graduate course)- Su1997  
 Population Dynamics (graduate course)- Su1997

University of Oklahoma, Visiting Faculty:

ZOO4970/5970, Food Webs and Aquatic Systems-graduate-1994

University of Texas, Lecturer:

BIO304, Population and Environmental Biology-majors- (3 semesters)

ZOO369, Basic Ecology-upper division majors- 1990

BIO301L, Biology: Microbes to Man- nonmajors- 1990

### ***Service as Reviewer***

**Funding proposals:** National Science Foundation, National Geographic Society, Rufford Grant Foundation, Critical Ecosystem Partnership Fund Indo-China, World Wildlife Fund Fuller Fellowships, Swiss National Science Foundation, US Environmental Protection Agency, NOAA/National Marine Fisheries Service, TAMU-Mexico CONICIT Program, Georgia Sea Grant, New York Sea Grant, Austrian Science Fund, Texas Natural Resource Conservation Commission, American Association for the Advancement of Science, Houston Advanced Research Center, Michigan Sea Grant, Templeton Foundation, Texas Comptroller

**Journal Publications:** *Science, Nature, Proceedings of the National Academy of Science USA, Scientific Reports, The American Naturalist, Ecology, Ecological Monographs, Ecosphere, Transactions of the American Fisheries Society, North American Journal of Fisheries Management, Limnology and Oceanography, Ecology Letters, Conservation Letters, Nature Sustainability, Copeia, Environmental Biology of Fishes, Canadian Journal of Fisheries and Aquatic Sciences, Biochemical Systematics and Ecology, Journal of Fish Biology, Oecologia, Acta Oecologia, Oikos, Trends in Ecology and Evolution, Journal of the North American Benthological Society, Journal of Animal Ecology, Journal of Tropical Ecology, Ecology of Freshwater Fish, Fish and Fisheries, Marine & Freshwater Research, Conservation Biology, Texas Journal of Science, Estuaries, Archiv für Hydrobiologie, Acta Scientiarum, Biological Invasions, Biotropica, Brenesia, Biollania, Estuaries, Marine Ecology Progress Series, Hydrobiologia, Journal of Freshwater Ecology, Reviews in Fish Biology, River Research and Applications, Southwestern Naturalist, Fishery Bulletin, Aquatic Living Resources, Cybium, Scientia Guaianae, Ichthyological Explorations of Freshwaters, Bulletin de la Peche et de la Pisciculture, Journal of Aquatic Ecosystem Health, Environmental Management, Southeastern Fishes Council Proceedings, Georgia Water Resource Conference Proceedings, Revista de Vida Silvestre Tropical, Revista Boliviana de Ecología y Conservación Tropical, Zootaxa, Aquatic Invasions*

**Book Publishers:** Academic Press, Chapman & Hall Publishers, Blackwell Scientific Publishers, Elsevier Publishers, MacMillan Press, W.H. Freeman Publishers, Princeton University Press, American Fisheries Society- *Reservoir Symposium Volume, Stream Fish Ecology Volume*, University of Chicago Press.

**TV/Film:** Zebra Film Productions, National Geographic Television, Discovery Channel, British Broadcasting Corporation

### ***Institutional Service***

Faculty advisor for 4 student organizations

Service on 9 university-level committees

Service on 6 college-level committees  
 Service on 21 departmental committees  
 Service on 4 interdisciplinary program committees  
 Faculty senate, 2006-2009  
 Authored MOUs with 4 foreign institutions

<b><i>External Research Grants, Contracts &amp; Awards</i></b>	<b><i>period</i></b>	<b><i>amount</i></b>
Texas Water Development Board- Environmental flow regime assessment and development of a monitoring framework ( <u>PI</u> ; with 6 CoPIs)	2019-2020	\$240,000
Texas Water Development Board- Statewide synthesis of environmental flow studies ( <u>CoPI</u> ; PI is T. Hardy, Texas State Univ.; total project budget is \$240,000)	2018-2020	25,000
National Science Foundation- Dissertation improvement grant for L.M. Bower: Intercontinental functional trait patterns and comparison of fish assemblages ( <u>PI</u> )	2016-2018	10,230
Texas Commission on Environmental Quality- RUAA for steams in Texas ( <u>PI</u> )	2015-2017	370,000
Texas Parks and Wildlife Department - Potential influence of exchanges between the Lower Guadalupe River and oxbow lakes on food web dynamics ( <u>PI</u> )	2015-2017	70,794
Gulf Coast Prairie Landscape Conservation Cooperative via contract with Univ. North Texas- Quantification of alligator gar recruitment dynamics using a river-stage specific floodplain inundation model ( <u>CoPI</u> ; PI is D.J. Hoeinghaus; total project budget is \$200,000)	2015-2017	12,595
Texas Water Research Institute- RUAA for Arenosa Creek ( <u>PI</u> )	2015	78,532
Texas Water Development Board via contract with BioWest- Environment flows research for the Brazos River Basin ( <u>CoPI</u> ) (Other CoPIs, E. Oborny, T. Bonner, G. Guillen, B. Brooks, J. Duke; total project budget is \$312,000)	2014-2015	25,000
Texas Commission for Environmental Quality- RUAA for streams in Texas ( <u>PI</u> )	2014-2015	270,000
CAPES, Science Without Borders (Programa Pesquisador Visitante Especial)(Collaborator)(PIs are A. Agostinho and L. Gomes, Univ. Est. de Maringá, Brazil)(total budget for collaborative project to synthesize knowledge and model dynamics of the Upper Paraná	2014-2016	88,712



River ecosystem is \$192,583)

NSF, Belmont Forum, Collaborative Research: Maintaining productivity and incomes in the Tonle Sap fishery in the face of climate change ( <u>CoPI</u> )(PI is L. Hannah, Conservation International, total award for collaborative project is \$620,845)	2013-2016	37,514
Texas Parks and Wildlife Department/SWG- Flow dependent species: life history and habitat associations in Texas Gulf Coast Rivers ( <u>PI</u> ; CoPI is K. Conway)(\$110,000 was to my lab)	2013-2014	135,000
National Science Foundation, DEB- Collaborative Research: Baseline survey of the Lower Xingu River rapids, Brazil: a highly diverse, globally unique, and immediately imperiled ecosystem ( <u>PI</u> )(PI of a separate companion NSF grant fro this collaborative research project is J. Lundberg; CoPIs are N. Lujan & M. Sabaj)	2013-2016	126,585
National Science Foundation, EAR-CR-Water Sustainability and Climate: Integrative modeling of the interactions, connectivity and interdependence of water systems and ecosystem services in the Lower Mekong Basin ( <u>Collaborator</u> , PIs J. Felkner, S. Shaikh) (Total project budget is \$150,000)	2012-2013	3,000
Texas Commission for Environmental Quality- RUAA for Texas rivers and streams ( <u>PI</u> )	2011-2013	240,357
National Park Service, Gulf Coast Cooperative Ecosystems Studies Unit- Freshwater flow recommendations to mitigate effects of climate change to estuarine habitats ( <u>PI</u> )	2011-2013	76,375
Texas Commission for Environmental Quality- RUAA for streams in the Brazos River Basin ( <u>PI</u> ; CoPIs D. Scott, S. Shafer) (My budget = \$284,291)	2010-2011	299,512
TXDoT contract with IRNR- Assessing the Status of Freshwater Mussels in Texas ( <u>PI</u> ; CoPI N. Wilkins)	2009-2010	28,168
Texas Commission for Environmental Quality- RUAA for streams in the Brazos River Basin ( <u>PI</u> ; CoPIs D. Scott, S. Shafer) (My budget = \$293,025)	2009-2010	384,731
International Sportfish Fund- Funds donated by the estate of Carolyn Kelso Weirichs for fisheries ecology research ( <u>PI</u> )	2009	1,000,000
National Science Foundation- Dissertation improvement grant for A.A. Pease: Fish assemblage structure and functional trait diversity along a longitudinal fluvial gradient ( <u>PI</u> )	2008-10	10,780

Conselho Nacional de Desenvolvimento Científico e Tecnológico, Brazil- Structure and dynamics of aquatic food webs of Lagoa do Peixe National Park, Brazil. ( <u>CoPI</u> ; PI A. Garcia; other CoPIs J. Vieira, D. Hoeninghaus, P. Abreu, D. Loebman)(My budget is ~0.5K)	2008-09	20,315
National Geographic Society- Diversity among endemic fishes in the Rio Iriri, Xingu Basin, Para State, Brazil ( <u>CoPI</u> ; PI H. Lopez; other CoPIs I. Farias, L. Rapp-Py-Daniels, T. Hrbek, G. Orti, S. Willis)	2008-09	16,310
Texas Commission for Environmental Quality- Recreational Use attainability analysis (RUAA) for bayous in Houston, Texas ( <u>PI</u> ; CoPIs D. Scott, S. Shafer)(My budget = \$181,736)	2008	343,000
Texas Commission for Environmental Quality- Review of desktop methodology for establishing environmental flows in Texas rivers and streams ( <u>PI</u> )	2007-08	107,000
Texas Commission for Environmental Quality- Development of biological indicators of nutrient enrichment for application in Texas streams ( <u>CoPI</u> with a budget of \$39,619; PI- R. King, Baylor)	2007-09	70,769
National Science Foundation- IGERT: Applied biodiversity science graduate training grant ( <u>CoPI</u> ; PI L. Fitzgerald; other CoPIs A. Stronza, U. Kreuter, T. Lacher) (My budget in support of 3 trainees is ~250K)	2007-12	3,002,038 <i>+TAMUS match of \$100,000</i>
National Science Foundation- REU Supplement to: Adaptive radiation and evolutionary convergence in Neotropical cichlids ( <u>PI</u> )	2007-08	12,000
National Science Foundation, DEB- Adaptive radiation and evolutionary convergence in Neotropical cichlids ( <u>PI</u> ; CoPI R.L. Honeycutt) (My budget = 232,239)	2005-09	232,239
Texas Commission for Environmental Quality- Refinement and validation of habitat quality indices (HQI) and aquatic life use (ALU) indices for application to assessment and monitoring of Texas surface waters ( <u>PI</u> ; CoPI R. King, Baylor Univ.)(My budget = \$204,050)	2005-90	371,050
National Science Foundation- Biological Instrumentation- A capillary based automated sequencer for high throughput sequencing and genotyping at the Center for Biosystematics & Biological Diversity ( <u>CoPI</u> ; PI A. Cognato; other CoPIs J. Bickham, R. Honeycutt, J. Manhart, R. Long, A. Pepper)(budget shared equally)	2004-06	129,985 <i>+TAMUS match of \$54,423</i>
National Science Foundation- Dissertation improvement grant for C.A. Layman: Complex effects of humans and piscivores on fish	2004-05	8,030

assemblages in a species-rich tropical river (PI)

The Nature Conservancy- Development of draft environmental flow recommendations for Caddo Lake ( <u>PI</u> )	2004-05	67,000
Texas Water Development Board- Response of oxbow lake biota to hydrologic exchanges with the Brazos River channel ( <u>PI</u> ; CoPI F. Gelwick) (My budget = \$72,000)	2003-04	72,000
U.S. Army Corps of Engineers- Response of stream and riparian biota of the Pedernales River Basin to variation in landscape features and vegetation cover ( <u>PI</u> ; CoPIs N. Wilkins, C. Munster, B. Wilcox, J. Cathey) (My budget = \$66,250)	2003-04	254,000
National Science Foundation- REU Supplement to: Variable effects of nutrients, productivity, consumption and the flood pulse..... ( <u>PI</u> )	2003-04	6,000
U.S. Army Corps of Engineers- Response of stream and riparian biota of the Edwards Plateau to variation in landscape features and vegetation cover ( <u>PI</u> ; CoPIs N. Wilkins, C. Munster, B. Wilcox) (My budget = 56K)	2003	56,000
National Science Foundation- Undergraduate Mentoring in Environmental Biology. ( <u>CoPI</u> ; PI R. Honeycutt; other CoPIs R. Autenrieth, L. Fitzgerald, F. Gelwick, H. Wilkerson)(My budget ~ 300K)	2002-07	442,000
National Science Foundation- REU Supplement to: Variable effects of nutrients, productivity, consumption and the flood pulse..... ( <u>PI</u> )	2002-03	6,000
National Science Foundation- Variable effects of nutrients, productivity, consumption and the flood pulse on floodplain river ecosystems. ( <u>PI</u> ; CoPIs D. Roelke, J. Cotner)(my budget ~ 230K)	2001-05	310,000
National Science Foundation- REU Supplement to: Variable effects of nutrients, productivity, consumption and the flood pulse..... ( <u>PI</u> )	2001-02	6,000
National Geographic Society- Ecological determinants of biodiversity in a neotropical blackwater river ( <u>PI</u> )	2001-02	11,475
National Science Foundation- Dissertation improvement grant for D.A. Arrington: Evaluation of a model of local community assembly in a temporally dynamic, species rich neotropical river ( <u>PI</u> )	2001-02	6,005
City of Del Rio/Texas Water Development Board- San Felipe Creek environmental monitoring ( <u>PI</u> )	2001-03	44,129
U.S. Army Corps of Engineers- Ecosystem/wildlife implications of brush management for water runoff ( <u>CoPI</u> ; PI- N. Wilkins)(my budget = 65K)	2001-02	155,840
National Science Foundation- Workshop on biodiversity of the Niger River corridor in Mali. ( <u>CoPI</u> ; PI- F. Pezold, Univ. of LA at Monroe) (My budget ~ 2K)	2000-01	37,090

National Geographic Society- Ecological survey of fish diversity in Benin, West Africa. (PI)	2000-01	11,740
International Sportfish Fund (donated funds)- Research on neotropical fishes. (PI)	2000	5,600
National Geographic Society- Population structure of migratory fishes. (PI)	2000	16,720
National Geographic Society- Biological survey of the upper Rio Pasimoni, Venezuela. (PI)	1998-99	18,000
International Sportfish Fund (donated funds)- Research on neotropical fishes. (PI)	1998-99	12,800
Tour Apure- <i>In-kind support</i> (lodging, fuel) for river food web project. (PI)	1998-99	12,000
Brazos River Authority- Biotic indicators of ecological integrity in the Brazos-Navasota River watershed. (PI)	1998-99	36,600
National Geographic Society- First biological survey of Venezuela's Upper Rio Siapa. (PI)	1998-99	14,425
Texas Nature Conservancy- Spatiotemporal fish survey of Mad Island Marsh Preserve. (CoPI, F. Gewick- PI)(My budget ~ 5K)	1997-99	6,725
Texas Nature Conservancy- Effects of an introduced predator on fishes in the Dolan Falls preserve. (PI)	1997-98	2,025
U.S. Fulbright Scholar Program- Teaching/research in Venezuela. (PI)	1996-97	20,000
National Geographic Society- Longitudinal patterns of river fish assemblages. (PI)	1996-97	11,025
U.S. Bureau of Reclamation- Phantom Springs refuge for endangered fishes. (PI)	1993-95	18,100
Electric Power Research Institute- COMPMECH sponsorship for grad student (PI)	1993-96	40,500
Tour Apure- <i>In-kind support</i> (lodging) for peacock bass project. (PI)	1993-94	9,000
Corporación Electrificación del Caroní- <i>In-kind support</i> (food, lodging). (PI)	1993-94	5,000
ASOMUSEO- <i>In-kind support</i> (vehicle rental waivers) peacock bass project. (PI)	1993-94	9,600
Fundación Fluvial de Los Llanos- Ecology of peacock bass in Venezuela. (CoPI, D. Taphorn PI)	1993	3,500
National Science Foundation- Food webs: Integration of patterns and dynamics. (PI; G. Polis, M. Vanni, J. Moore CoPIs)(My budget ~ 20K)	1993	21,800

National Science Foundation- Fish ecology in Latin America. (PI)	1993	21,100
National Geographic Society- Ecology of peacock bass in southern Venezuela. (PI)	1993	5,700
Texas Nature Conservancy- Composition and structure of Texas fish assemblages. (PI)	1993	1,100
National Geographic Society- Prey defense against piranhas in Venezuela. (PI)	1991	3,800
U.S. Fulbright Senior Research Scholarship- Variation in food webs of fish assemblages in Zambia, central Africa. (PI)	1988-89	34,000
NSF- Comparative ecomorphology & community ecology of neotropical fishes. (PI)	1985	4,500
National Geographic Society- Fish biology and community structure in Venezuela. (PI)	1984	6,000
Tinker Foundation- Fish diversity and community structure on Atlantic and Pacific slopes of Costa Rica. (PI)	1983	2,000
Sigma Xi, Grants in Aide of Graduate Student Research. (PI)	1980-81	1,350

***Institutional Research Grants, Contracts & Awards***

	<b><i>period</i></b>	<b><i>amount</i></b>
TAMU Faculty Fellowship	2002-08	\$100,000
Texas A&M Office of Research-Minigrant- Convergent evolution in neotropical cichlids based on molecular phylogenetics. (PI)	2000	1,310
TAMU Interdisciplinary Research Initiative- Migratory fish and food web subsidy- a stable isotope approach. (PI)	1998-99	22,416
Texas A&M Office of Research-Minigrant- Stable isotope of sulfur for examining the role of migratory fish in food webs. (PI)	1998	1,300
Neuhaus Teaching Scholarship- Learning problems in ecology. (PI)	1997	2,560
TAES Research Enhancement Program- Brazos River nutrient/carbon exchange. (CoPI, J. Cotner- PI)(My budget 30K)	1996-97	36,600
TAES Research Enhancement Program- Brazos River floodplain ecosystems. (PI)	1993-95	67,900
TAMU International Programs- International travel grant. (PI)	1993	500