

**CHRISTOPHER M. SCHALK**

Spring 2021

Arthur Temple College of Forestry and Agriculture  
Stephen F. Austin State University  
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**EDUCATION**

**Ph.D. Wildlife and Fisheries Sciences** – August 2016 – Distinguished Graduate Student. Texas A&M University, College Station, TX. Dissertation Title: Community Assembly of Neotropical Frogs Across Ecological Scales. Advisor: Dr. Lee Fitzgerald.

**B.S. Environmental Science** – May 2008 – Class Co-Valedictorian. Graduated *Summa Cum Laude* with Honors. State University of New York College of Environmental Science and Forestry, Syracuse, NY.

**PROFESSIONAL EXPERIENCE**

**Assistant Professor of Forest Wildlife Management** – August 2017 – Present – Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University.

**Post-Doctoral Research Associate and Lecturer** – January 2016 – July 2017 – Department of Biological Sciences, Sam Houston State University.

**Research Associate** – January 2016 – August 2016 – U.S. Forest Service, Southern Research Station.

**National Science Foundation GRFP Fellow**, August 2010 – August 2016 – Department of Wildlife and Fisheries Sciences, Texas A&M University.

**Research Assistant** – May 2010 – August 2010 – Department of Wildlife and Fisheries Sciences, Texas A&M University.

**NSF-IGERT Applied Biodiversity Science Fellow** – August 2008 – August 2016 – Department of Wildlife and Fisheries Sciences, Texas A&M University.

**PUBLICATIONS** (\* = Undergraduate Student, ^ = Graduate Student)

Montaña, C.G., E. Liverpool, D.C. Taphorn, **C.M. Schalk**. *In review*. The cost of gold: mercury contamination of fishes in a Neotropical river food web. *Neotropical Ichthyology*.

Montaña, C.G., F.W. Keppeler, C.P. Laughrey\*, **C.M. Schalk**. *In review*. The phenology of metacommunities within ponds: The role of space, time, and environmental gradients. *Hydrobiologia*.

**Schalk, C.M.**, H.A. Hester\*, D. Saenz. *In review*. Advertisement calls for eleven anuran species from the Gran Chaco of Bolivia. *Cuadernos de Herpetología*.

Kulhavy, D.L., D.R. Unger, I. Hung, R.A. Viegut\*, **C.M. Schalk**. *In review*. Integrating unmanned aerial vehicles with citizen science. *Journal of Unmanned Vehicle Systems*.

**Schalk, C.M.**, C.G. Montaña, L.A. Fitzgerald. *In review*. Species packing, functional traits, and community organization of tropical frogs. *Oecologia*.

McInnerney, C.^, C.E. Comer, B.P Oswald, R. Masse, **C.M. Schalk**. *In press*. Avian responses to post oak savannah restoration in eastern Texas. *Journal of Fish and Wildlife*

### **Management.**

- Cove, M.V. et al. (75<sup>th</sup> of 150 authors). *In press*. SNAPSHOT USA 2019: the first coordinated national camera trap survey of the United States. *Ecology*.
- Saenz, D., K.A. Baum, L.A. Fitzgerald, **C.M. Schalk**. 2020. Refining the activity level-predation risk paradigm in larval anuran communities. *Aquatic Sciences*. 83:4. doi: 10.1007/s00027-020-00752-w
- Ward, K.J\*, K.L. Jobe\*, N.C. Schiwitz\*, D. Saenz, **C.M. Schalk**. 2020. On the diversity of erosion control products and its implications for wildlife entanglement. *Journal of Soil and Water Conservation*. 75:82A-87A.
- Ward, K.J\*, K.L. Jobe\*, N.C. Schiwitz\*, D. Saenz, **C.M. Schalk**. 2020. Risk of snake entanglement is affected by installation method of erosion control blankets. *Journal of Fish and Wildlife Management*. 11:273-278. doi: 10.3996/102019-JFWM-087.
- Schiwitz, N.C.\*, **C.M. Schalk**, D. Saenz. 2020. The activity level-predation risk tradeoff in a tadpole guild: Implications for community organization along the hydroperiod gradient. *American Midland Naturalist*. 183:223-232.
- Jobe, K.L.\* , C.G. Montaña, **C.M Schalk**. 2019. Emergent patterns between salamander prey and their predators. *Food Webs*. e00128.
- Montaña, C.G., S. Silva^, D. Hagyar^, J. Wager\*, L. Tieg^, C. Sadeghian^, T.A. Schriever, **C.M. Schalk**. 2019. Revisiting ‘What do tadpoles really eat?’: A ten-year perspective. *Freshwater Biology*. 64: 2269-2282. doi: 10.1111/fwb.13397.
- Lutterschmidt, W.I., J.M. Weidler^, **C.M. Schalk**. 2019. Hot moments and hot spots in the bayou: Patterns of road occurrence in a snake assemblage in Louisiana, USA. *Herpetological Conservation and Biology*. 14:533-545.
- Matich, P., **C.M. Schalk**. 2019. Move it or lose it: interpecific variation in risk response of pond-breeding anurans. *PeerJ*. e6956.
- Ebert, S.E.\* , K.L. Jobe\*, **C.M. Schalk**, D. Saenz, C.K. Adams, C.E. Comer. 2019. Correlates of snake entanglement in erosion control blankets. *Wildlife Society Bulletin*. 43:231-237.
- Kulhavy, D., **C.M. Schalk**, R. Viegut\*, D. Unger, S. Shockley\*, and I. Hung. 2019. Using unmanned aircraft systems (UAS) to quantify mistletoe in urban environments. *Urban Naturalist*. 20:1-10.
- Schalk, C.M.**, M.V. Cove. 2018. Squamates as prey: Predator diversity patterns and predator-prey size relationships. *Food Webs*. e00103.
- Schalk, C.M.**, C.G. Montaña, K. Kralman\*, D.J. Leavitt. 2018. Functional distance and establishment of non-native species with complex life cycles. *Biological Invasions*. 20:1945-1952.
- Montaña, C.G., **C.M. Schalk**. 2018. Correlates of elemental-isotopic composition of stream fishes: The importance of land-use, species identity, and body size. *Journal of Fish Biology*. 92: 944-960.
- Schalk, C.M.**, T. Trees, J.B. Pierce, D.C. Rudolph. 2018. Food habits of sympatric pitvipers of the Western Gulf Coastal Plain, USA. *Herpetological Review*. 49:1-5.
- Leavitt, D.J., **C.M. Schalk**. 2018. Functional perspectives on the dynamics of desert lizard assemblages. *Journal of Arid Environments*. 150:34-41.
- Ceneviva-Bastos, M., C.G. Montaña, **C.M. Schalk**, L. Casatti, P.B. Carmargo. 2017. Responses of aquatic food webs to the addition of structural complexity and basal resource diversity in degraded Neotropical streams. *Austral Ecology*. 42:908-919.
- Schalk, C.M.**, C.G. Montaña, K.O. Winemiller, L.A. Fitzgerald. 2017. Trophic plasticity,

- environmental gradients, and food-web structure of tropical pond communities. *Freshwater Biology*. 62:519-529.
- Sosa, R.\* , C.M. Schalk. 2016. Seasonal activity and species habitat guilds influence road–kill patterns of Neotropical snakes. *Tropical Conservation Science*. 9:1-12.
- Schalk, C.M. 2016. Predator-induced phenotypic plasticity in an arid-adapted tropical tadpole. *Austral Ecology*. 41:415-422.
- Luhring, T.M., G.M. Connette, C.M. Schalk. 2016. Trap characteristics result in size-biased sampling of two salamander species. *Amphibia-Reptilia*. 37:79-89.
- Schalk, C.M., D. Saenz. 2016. Environmental drivers anuran calling phenology in a seasonal Neotropical ecosystem. *Austral Ecology*. 41:16-27.
- Layman, C.A., S.T. Giery, S. Buhler, R. Rossi, T. Penland, M.N. Henson, A.K. Bogdanoff, M.V. Cove, A.D. Irizarry, C.M. Schalk, S.K. Archer. 2015. A primer on the history of food web ecology: Fundamental contributions of fourteen researchers. *Food Webs*. 4:14-24.
- Schalk, C.M., C.G. Montaña, L.E. Springer\*. 2015. Morphological diversity and community organization of desert anurans. *Journal of Arid Environments*. 122:132-140.
- Schalk, C.M., L.A. Fitzgerald. 2015. Ontogenetic shifts in ambush site selection of a sit-and-wait predator, the Chacoan Horned Frog (*Ceratophrys cranwelli*). *Canadian Journal of Zoology*. 93:461-467.
- Schalk, C.M., C.G. Montaña, J.L. Klemish, E.R. Wild. 2014. On the diet of the frogs of the Ceratophryidae: Synopsis and new contributions. *South American Journal of Herpetology*. 9:90-105.
- Schalk, C.M., M. Sezano\*. 2014. Observations on the use of tarantula burrows by the anurans *Leptodactylus bufonius* (Leptodactylidae) and *Rhinella major* (Bufonidae) in the Dry Chaco ecoregion of Bolivia. *Acta Herpetologica*. 9:99-102.
- Schalk, C.M., C.G. Montaña, M. Libson\*. 2014. Reproductive strategies of two Neotropical killifish, *Austrolebias vanderbergi* and *Neofundulus ornatipinnis* (Cyprinodontiformes: Rivulidae) in the Bolivian Gran Chaco. *Revista de Biología Tropical*. 62:109-117.
- Schalk, C.M., M. Senzano\*, R.L. Cuellar. 2013. Inventory of the reptiles and amphibians from a locality in the Kaa-Iya of the Gran Chaco National Park, Bolivia. *Kempffiana*. 9:26-33.
- Montaña, C.G., C.M. Schalk, D.C. Taphorn. 2012. First record of Van den Berg's Pearlfish, *Austrolebias vanderbergi* (Huber 1995) in Bolivia with comments on its diet and reproductive biology. *Check List*. 8:589-591.
- Patrick, D.A., C.M. Schalk, J.P. Gibbs, H.W. Woltz. 2010. Effective culvert placement and design to facilitate passage of amphibians across roads. *Journal of Herpetology*. 44:618-626.
- Schalk, C.M., T.M. Luhring, B.A. Crawford. 2010. Summer microhabitat use of the greater siren (*Siren lacertina*) and two-toed amphiuma (*Amphiuma means*) in an isolated wetland. *Amphibia-Reptilia*. 31:251-256.
- Schalk, C.M., T.M. Luhring. 2010. Vagility of aquatic salamanders: implications for wetland connectivity. *Journal of Herpetology*. 44:104-109.

**NOTES AND SPECIES ACCOUNTS (\* = Undergraduate Student, ^ = Graduate Student)**

Garcia, N.\* , C.M. Schalk. 2020. *Incilius nebulifer* (Gulf Coast Toad). Polymelia. *Herpetological Review*. 51:99.

Thompson, D.W.\* , C.S. Adams^ , C.M Schalk. 2020. *Farancia abacura* (Red-bellied

- Mudsnake) Overland Movement. *Herpetological Review*. 51:142-143.
- Childress, J., C.K. Adams, D. Saenz, **C.M. Schalk**. 2019. Bronze frog (*Lithobates clamitans*) entanglement and mortality in an erosion control blanket. *Collinsorum*. 8:11-12.
- Koenig, J.R.\*, K.L. Jobe\*, S.E. Ebert\*, C.S. Adams^, **C.M. Schalk**. 2019. *Liodytes rigida* (Glossy Swampsnake). Geographic Distribution. *Herpetological Review*. 50:530-531.
- Sosa, R., M. Senzano, **C.M. Schalk**. 2019. *Micrurus pyrrhocryptus*. Feeding Habits. *Herpetological Review*. 50:518-519.
- Daza, J.D., L. Price, **C.M. Schalk**, A.M. Bauer, A.R. Borman, J.K. Peterhans. 2017. Predation on Southern Turnip-tailed geckos (*Thecadactylus solimoensis*) by a Spectacled Owl (*Pulsatrix perspicillata*). *Cuadernos de Herpetología*. 31:37-39.
- Schalk, C.M.**, D.J. Leavitt. 2017. *Leptodactylus bufonius*. *Catalogue of American Amphibians and Reptiles*. 905:1-22.
- Springer, L.E.\*, **C.M. Schalk**. 2016. *Lepidobatrachus laevis*. *Catalogue of American Amphibians and Reptiles*. 904:1-16.
- Schalk, C.M.** 2016. *Rhinella major* and *Rhinella schneideri* (Granular and Rococo Toad). Reproductive Behavior. *Herpetological Review*. 47:120-121.
- Schalk, C.M.** 2015. *Physalaemus nattereri* (Cuyaba Dwarf Frog) Tadpole Diet. *Herpetological Review*. 46:613-614.
- Sosa, R.\*, **C.M. Schalk**, L. Braga\*, J.N. Pinto-Ledezema. 2015. *Rhinella amboroensis*. Geographic Distribution. *Herpetological Review*. 46:214.
- Sosa, R.\*, **C.M. Schalk**, L. Braga\*, A.M. Langer. 2015. *Apostolepis multicincta*. Diet. *Herpetological Review*. 46:99.
- Romano, T.J.\*, D.J. Leavitt, **C.M. Schalk**, D.E. Dittmer, L.A. Fitzgerald. 2014. Vertebrate by-catch of pipeline trenches in the Mescalero-Monahans shinnery sands of southeastern New Mexico. *The Prairie Naturalist*. 46:95-96.
- Montaña, C.G., M. Ceneviva-Bastos, **C.M. Schalk**. 2014. New vertebrate prey for the aquatic salamander *Amphiuma means* (Caudata: Amphiumidae). *Herpetology Notes*. 7:755-756.
- Sosa, R.\*, L. Braga\*, **C.M. Schalk**, J.N. Pinto-Ledezma. 2013. *Philodryas psammophidea* (Günther's green racer) Diet. *The Herpetological Bulletin*. 124:24.
- Senzano, M.\*, **C.M. Schalk**. 2013. *Leptodactylus bufonius* (Oven Frog) Predation. *Herpetological Review*. 44:293-294.
- Schalk, C.M.**, D. Ticona\*. 2013. *Rhinella schneideri* (Rococo Toad) Breeding Site. *Herpetological Review*. 44: 299-300.
- Sosa, R.\*, L. Braga\*, **C.M. Schalk**, J.N. Pinto-Ledezma. 2013. *Micrurus serranus* (Coral Verdadera) Diet. *Herpetological Review*. 44:155.
- Sosa, R.\*, L. Braga\*, **C.M. Schalk**, J.N. Pinto-Ledezma. 2012. *Clelia langeri* Diet. *Herpetological Review*. 43:657.
- Schalk, C.M.** 2012. *Pleurodema guayapae*. Egg Predation. *Herpetological Review*. 43: 635.
- Schalk, C.M.**, F. Morales\*. 2012. Predation of a *Rhinella major* (Anura: Bufonidae) by a Pampas Fox (*Lycalopex gymnocercus*) in the Bolivian Gran Chaco. *Herpetology Notes*. 5: 369-370.
- Schalk, C.M.**, C.G. Montaña. 2012. *Liophis poecilogyrus* (Yellow-bellied Liophis) Diet and Foraging Behavior. *Herpetological Review*. 43:148.
- Schalk, C.M.** 2012. *Physalemus biligonigerus* (NCN) Burrow Use. *Herpetological Review*. 43:123-124.

- Acre, M. R., Leavitt, D. J., **C. M. Schalk**. 2012. A second occurrence of a patternless morph of the marbled whiptail (*Aspidoscelis marmorata*) in New Mexico. *Southwestern Naturalist*. 57:206-207.
- Schalk, C.M.**, C.G. Montaña. 2011. *Ceratophrys cranwelli* (Cranwell's Horned Frog) Diet. *Herpetological Review*. 42:409-410.
- Schalk, C.M.** 2010. *Ceratophrys cranwelli* (Cranwell's Horned Frog) Diet. *Herpetological Review*. 41:471.
- Schalk, C.M.** 2010. *Philodryas mattogrossensis* (Two-colored Racer) Diet. *Herpetological Review*. 41:372.
- Schalk, C.M.** 2010. *Liophis peocilogyrus* (Yellow-bellied Liophis) Diet. *Herpetological Review*. 41:366-367.
- Schalk, C.M.** 2010. *Physalaemus biligonigerus* (NCN) Predation. *Herpetological Review*. 41:202.
- Schalk, C.M.**, B.A. Crawford, T.M. Luhring. 2009. A note on predation of the Greater Siren (*Siren lacertina*). *Bulletin of the Chicago Herpetological Society*. 44:56.

#### **TECHNICAL REPORTS AND OTHER PUBLICATIONS (\* = Undergraduate Student)**

- Schalk, C.M.**, D. Saenz, K.L. Jobe\*, N.C. Schiwitz\*, K.J. Ward\*. 2019. Risk of snake entanglement in erosion control materials. Texas Parks and Wildlife Department.
- Ebert, S.E.\* , **C. M. Schalk**, D. Saenz. 2019. Risk of wildlife entanglement in erosion control blankets. Texas Parks and Wildlife Department.
- Schalk, C.M.**, M.A. Kwiatkowski, D. Saenz, S.J. Mullin. 2018. Herpetology at Stephen F. Austin State University. *Herpetological Review*. 49:779-781.
- Schalk, C.M.**, D. Saenz, S.E. Ebert\*, K.L. Jobe\*, C.K. Adams, C.E. Comer. 2018. Field and experimental assessments of the impact of erosion control materials on wildlife. Texas Parks and Wildlife Department.
- Schalk, C.M.** 2012. A study of the aquatic communities and food webs in lentic systems of the Bolivian Gran Chaco. Submitted to: Noel Kempff Mercado Museum of Natural History, Santa Cruz, Bolivia. (In Spanish)
- Schalk, C.M.** 2012. The indirect effects of predators on the growth and development on the tadpoles of *Leptodactylus bufonius*. Submitted to: Kaa-Iya of the Gran Chaco National Park, Santa Cruz, Bolivia. (In Spanish).
- Patrick, D.A., J.P. Gibbs, D.J. Leopold, P.K. Ducey, H.W. Woltz, D. Crane, F. Beaudry, D.V. Popescu, **C.M. Schalk**. 2011 Effects on New York State Roadways on Amphibians and Reptiles: A Research and Adaptive Mitigation Project. NSYDOT Report Project.
- Smolensky, N., **C.M. Schalk**, T.J. Hibbitts. 2010. Natural History of the Vertebrates Laboratory Manual (WFSC 302). Texas A&M University.

#### **GRANTS AND FELLOWSHIPS (Total secured = \$716,971)**

- 2020. C.M. Schalk**. Texas Parks and Wildlife Department. Repatriation of illegally collected Alligator Snapping Turtles back into Texas waters (\$45,000). *Funded*.
- 2020. C.M. Schalk**, C.G. Montaña, D. Saenz, J.J. Apodaca. Office of the Texas Comptroller. Baseline study of Alligator Snapping Turtle (*Macrochelys temminckii*) population viability. (\$397,139). *Not funded*.
- 2020. Schalk, C.M.** Stephen F. Austin State University Mini-Grant. The relationship between trophic position and mercury bioaccumulation in alligator snapping turtles: Do larger

- individuals accumulate less mercury? (\$1,020). *Funded.*
- 2020.** Montaña, C.G., **C.M. Schalk**, K. Mayes. Texas Parks and Wildlife Department. Conservation status and life histories of imperiled fish species in East Texas streams. (\$139,175). *Not funded.*
- 2020.** **Schalk, C.M.** Stephen F. Austin State University Publication Support Grant. (\$375). *Funded.*
- 2020.** **Schalk, C.M.** Herpetologists' League. Effects of aquatic predators on energy flow across aquatic-terrestrial ecosystem boundaries. (\$4,994). *Not funded.*
- 2020.** **Schalk, C.M.** Texas Department of Transportation Assessing efficacy of toad exclusion fencing (TEF) at prevent herpetofauna (with an emphasis on Houston toad) from entering construction zones. (\$128,103). *Not funded.*
- 2019.** **Schalk, C.M.,** K.R. Kidd. Wildlife Acoustics. Avian diversity along a forest structural gradient in seasonally flooded bottomland hardwood forests Q4. (\$4,924). *Not funded.*
- 2019.** **Schalk, C.M.,** K.R. Kidd. Wildlife Acoustics. Avian diversity along a forest structural gradient in seasonally flooded bottomland hardwood forests Q3. (\$4,924). *Not funded.*
- 2019.** **Schalk, C.M.** Stephen F. Austin State University Publication Support Grant. (\$499). *Funded.*
- 2019.** **Schalk, C.M.** Stephen F. Austin State University Research Grant Development Award. (\$5,000). *Funded.*
- 2019.** K.R. Kidd, **Schalk, C.M.** Wildlife Acoustics. Avian diversity along a forest structural gradient in seasonally flooded bottomland hardwood forests Q2. (\$4,924). *Not funded.*
- 2019.** **Schalk, C.M.,** D. Saenz. Texas Parks and Wildlife Department. Distribution, occupancy, and mercury bioaccumulation of Alligator Snapping Turtles (*Macrochelys temminckii*) in Texas. (\$150,878). *Funded.*
- 2019.** **Schalk, C.M.,** D. Saenz, C. Shackelford. Texas Parks and Wildlife Department. Ground truthing the species distribution model of Bachman's Sparrow. (\$148,741). *Funded.*
- 2019.** **Schalk, C.M.** Texas Department of Transportation and Texas Parks and Wildlife Department. Risk of snake entanglement in erosion control materials. (\$34,935). *Funded.*
- 2018.** K.R. Kidd, **C.M. Schalk**, J. Stovall, D. Scognamillo, M. McBroom Sustainable Forestry Initiative (SFI). Novel riparian forest regeneration methods to manage SMZs for water quality protection, biodiversity, and ecological resilience. (\$90,587). *Not funded.*
- 2018.** **Schalk, C.M.** U.S. Forest Service, Addendum to: Examining terrestrial food-web structure in managed and unmanaged Shortleaf Pine forests in East Texas. (\$10,000). *Funded.*
- 2018.** Montaña, C.G., D. Peterson, K. Mayes, **C.M. Schalk.** Texas Parks and Wildlife Department. Conservation status of fish communities in La Nana Bayou, East-Central Texas: Historical and current perspectives of native imperiled species following the introduction of non-native species. (\$50,000). *Not funded.*
- 2018.** **Schalk, C.M.,** U.S. Department of Agriculture - McIntire-Stennis Capacity Grant. Mechanisms of community assembly in southern forest ecosystems (\$25,000). *Funded.*
- 2018.** **Schalk, C.M.,** C. Comer, D. Saenz, C. Shackelford. Texas Parks and Wildlife Department. Ground truthing the species distribution model of Bachman's Sparrow. (\$150,785). *Not funded.*
- 2018.** **Schalk, C.M.,** U.S. Forest Service. Examining terrestrial food-web structure in managed and unmanaged Shortleaf Pine forests in East Texas. (\$54,000). *Funded.*
- 2017.** **Schalk, C.M.,** Stephen F. Austin State University Research and Creative Activities Grant. Examining terrestrial food-web structure in managed and unmanaged forests in East

- Texas. (\$19,511). *Funded*.
- 2017. Schalk, C.M., D. Saenz, C. Comer.** Texas Parks and Wildlife Department. Field and experimental assessments of the impact of erosion control materials on wildlife. (\$29,768). *Funded*.
- 2017. Schalk, C.M., D. Saenz. T.L.L.** Temple Foundation. Examining food-web structure and energy flow in managed Shortleaf Pine ecosystems. (\$54,006). *Not funded*.
- 2016. Schalk, C.M., J. Daza, T. Gamble.** Experiment.com. An Adaptive Radiation Under Our Feet? Examining Diversification Patterns in New World Leaf-litter Geckos. (\$2,471). *Funded*.
- 2016. Montaña, C.G., C.M. Schalk, C.W. Hargrave.** EURECA FAST Grant, Sam Houston State University. Effects of climate warming on tadpole feeding, growth and waste production: implications for ecosystem functioning. (\$8,000). *Funded*.
- 2013. Schalk, C.M.** Travel Grant, Ecology & Evolutionary Biology Program, Texas A&M University. (\$1,000). *Funded*.
- 2011. Schalk, C.M.** GPEF Travel Grant, Department of Wildlife and Fisheries Sciences, Texas A&M University. (\$273). *Funded*.
- 2010. Schalk, C.M.** National Science Foundation Graduate Research Fellowship (NSF-GRFP; \$100,500). *Funded*.
- 2008. Schalk, C.M.** National Science Foundation Integrated Graduate Education and Research Traineeship (NSF-IGERT) Applied Biodiversity Science Program at Texas A&M University (\$80,000). *Funded*.

### **TEACHING EXPERIENCE**

#### **Stephen F. Austin State University, Arthur Temple College of Forestry and Agriculture**

Vertebrate Natural History (Every Fall and Spring since FA17)

Wildlife Techniques (Every Spring since SP18)

Field Wildlife Techniques (Every Summer since SU18)

Amphibian Experimental Ecology (SP18; SP19; FA19)

Amphibian Ecology and Conservation (FA18; FA19)

Non-Game Wildlife Ecology (FA 20)

#### **Sam Houston State University, Department of Biological Sciences**

Contemporary Biology (SP16, SP7)

Herpetology (SP16)

Community Ecology (SP17)

#### **Texas A&M University, Department of Wildlife and Fisheries Sciences**

Ornithology (SP10)

Natural History of the Vertebrates (FA10)

#### **SUNY-ESF, Department of Environmental and Forest Biology**

Herpetology (FA07)

### **GRADUATE STUDENT MENTORING**

#### **Graduate Advisor**

**2018-Present. Connor Adams, M.S. Student, (Forestry, SFASU) *Project:*** Food-web and functional trait community structure in east Texas pine forests with varied management regimes.

**2020-Present. David Rosenbaum**, M.S. Student, (Forestry, SFASU) Project: Distribution, occupancy, and mercury bioaccumulation of Alligator Snapping Turtles (*Macrochelys temminckii*) in Texas.

**2020-Present. Jake Swanson**, M.S. Student, (Environmental Science, SFASU) Project: Fish functional diversity and occupancy across Texas riverscapes. Co-advised with C.G. Montaña.

**2020-Present. Ashley Wahlberg**, PhD. Student, (Forestry, SFASU) Project. Ecology of the non-native spider, the Brown Widow (*Latrodectus geometricus*). Co-advised with L. Porter.

**2020-Present. Liam Wolff**, M.S. Student, (Forestry, SFASU) Project: Spatiotemporal factors affecting occupancy and phenology of a declining savanna songbird.

**2021-Present. Tatiana Suarez-Joaqui**, PhD. Student, (Forestry, SFASU) Project: Amphibian community ecology.

#### **Committee Member**

**2020-Present. Erin Shepta**, M.S. Student, (Department of Biology, SFASU).

**2020-Present. Eamonn Thurmond**, M.S. Student, (ATCOFA, SFASU).

**2018-2020. McKenzie Wasley**, M.S. Student, (Department of Biology, SFASU).

**2018-Present. Ashley Kobisk**, M.S. Student, (Department of Biology, SFASU).

**2019-2020. Morgan Beckham**, M.S. Student, (Department of Biology, SFASU).

**2018. Courtney McInnerney**, M.S. Student (ATCOFA, SFASU).

#### **UNDERGRADUATE STUDENT MENTORING**

**2018-Present. Kasey Jobe** (SFASU) *Project*: Predators diversity and size relationships in salamanders, Installation method and snake entanglement in erosion control blankets. *Outcome*: Two poster presentations, one oral presentation, three publications. **1<sup>st</sup> place undergraduate poster, Terrestrial Ecology and Management section, 2<sup>nd</sup> best overall undergraduate poster at Texas Academy of Science Annual Meeting; 5<sup>th</sup> place poster, ATCOFA URC.**

**2019-2020. John-Mike Arnett** (SFASU) *Project*: Niche partitioning among introduced and native lizards. *Outcome*: One poster presentation. **7<sup>th</sup> place poster, ATCOFA URC.**

**2019-2020. Dylan Thompson** (SFASU) *Project*: Effects of forest management on lizard abundance. *Outcome*: Two poster presentations. **4<sup>th</sup> place poster, ATCOFA URC.**

**2019. Krista Ward** (SFASU) *Project*: Installation method and snake entanglement in erosion control blankets. *Outcome*: Two poster presentations, two publications. **Awarded Top Scholar – ATCOFA.**

**2018-2019. Sarah Ebert** (SFASU) *Project*: Impacts of erosion control materials on wildlife. *Outcome*: Co- authored publication. Poster presentation and three oral presentations. **Tied – 1<sup>st</sup> place undergraduate oral presentation – Texas A&M University’s Ecological Integration Symposium; 1<sup>st</sup> place, Conservation Ecology section and 2<sup>nd</sup> best overall undergraduate talk at Texas Academy of Science Annual Meeting.**

**2018-2019. Nick Schiwitz** (SFASU) *Project*: Quantifying activity levels in larval anurans and snake entanglement in erosion control blankets. *Outcome*: Two posters presentations, three oral presentations, three publications. **Awarded Top Scholar – ATCOFA.**



- 2018-2019. Hailey Hester** (SFASU) *Project:* Descriptions Bolivian frog calls. *Outcome:* Two poster presentations, one publication. **2<sup>nd</sup> place undergraduate poster presentation – Texas A&M University’s Ecological Integration Symposium.**
- 2016–2018. Clay Laughrey** (SHSU) *Project:* Species co-occurrence patterns across pond microhabitats. *Outcome:* Successfully funded grant proposals, Poster presentation at SHSU Undergraduate Research Symposium. **Awarded best poster.**
- 2016–2017. Kelsey Kralman** (SHSU) *Project:* Functional perspectives on frog invasions. *Outcome:* Poster presentation at SHSU Undergrad Research Symposium, Co-authored publication.
- 2013–2016. Ronald Sosa** (Universidad Autonoma Gabriel Rene Moreno) *Licenciatura Thesis:* Road-kill patterns of Neotropical snakes. *Outcome:* Co-authored six publications.
- 2012–2013. Laura Springer** (TAMU) *Project:* Morphological diversity of Chihuahuan Desert anurans and *Lepidobatrachus laevis* Catalogue Account. *Outcome:* Co-authored two publications, Poster presentation at TAMU Ecological Integration Symposium **Awarded 2<sup>nd</sup> place best poster.**
- 2012. Marco Senzano** (Universidad Autonoma Gabriel Rene Moreno) *Licenciatura Thesis:* Diet of Chaco frogs. *Outcome:* Co-authored three publications.
- 2011–2012. Monika Libson** (TAMU) *Project:* Reproductive biology Chaco killifish. *Outcome:* Poster presentation at TAMU Ecological Integration Symposium (**Awarded best poster**), Co-authored publication.
- 2010–2012. Doris Ticona** (Universidad Autonoma Gabriel Rene Moreno) *Licenciatura Thesis:* Community structure of macroinvertebrates in Chaco ponds. *Outcome:* Co-authored publication.
- 2009–2010. Olivia Ochoa** (TAMU) *Project:* Ontogenetic vulnerability of tadpoles to predation. *Outcome:* Successfully funded grant proposal.

### **HONORS AND AWARDS**

- 2020. Undergraduate Research Mentor of the Year**, Stephen F. Austin State University.
- 2017. Distinguished Graduate Student**, Association of Former Students, Texas A&M University.
- 2013. Outstanding PhD. Student**, Department of Wildlife and Fisheries Sciences, Texas A&M University.
- 2009. Honorable Mention**, The National Science Foundation’s Graduate Research Fellowship Program.
- 2008. Class Co-Valedictorian**, SUNY-ESF.

### **MEDIA**

- 2020.** Society of American Foresters Innovation Zone. “Undergraduate Research at SFA: Why it Matters” November 2020.
- 2020.** ATCOFA, Nacogdoches, TX. “Alligator snapping turtle data collection” 3 June 2020. <https://www.youtube.com/watch?v=8pQrVs8bRiY&t=13s>
- 2020.** ATCOFA, Nacogdoches, TX. “Checking snake box traps as part of graduate research focused on food-web and community structure” 7 July 2020. <https://www.youtube.com/watch?v=plHCNRugb9M&t=1187s>
- 2020.** Lufkin Daily News, Lufkin, TX. “SFA researchers study iconic, threatened turtle” 13 July

- 2020.
- 2020.** The Panola Watchman, Panola, TX. “Researchers study threatened turtle species of Southeast” 5 July 2020.
- 2020.** The Daily Sentinel, Nacogdoches, TX. “Researchers study threatened turtle species of Southeast” 21 June 2020.
- 2019.** The Wildlife Society, Washington D.C. “Erosion blankets can tie snakes into knots” 17 July 2019. <https://wildlife.org/wsb-erosion-blankets-can-tie-snakes-into-knots/>
- 2019.** ATCOFA, Nacogdoches, TX. “Living alongside snakes in East Texas” 13 May 2019. <https://www.youtube.com/watch?v=MbgajTgmwjl&t=25s>
- 2018.** Texas Parks and Wildlife Magazine, Austin, TX. “How did the wildlife cross the road?”. October 2018 Issue. Pp 42-47.
- 2018.** KTRE News, Lufkin, TX. “Nacogdoches researchers look for snake-friendly construction mesh”. Aired 23 August 2018. <http://www.ktre.com/story/38951343/nacogdoches-researchers-look-for-snake-friendly-construction-mesh>
- 2018.** KETK News, Tyler, TX. “Grant awarded to East Texas researchers to save snakes”. Aired 21 August 2018. <https://www.easttexasmatters.com/news/local-news/grant-awarded-to-east-texas-researchers-to-save-snakes/1386389492>
- 2018.** SFA News, Nacogdoches, TX. “Researchers receive Texas Parks and Wildlife grant devoted to wildlife conservation.” Posted 20 August 2018. <http://www.sfasu.edu/10028.asp>
- 2018.** ATCOFA, Nacogdoches, TX. “Schalk Snake Research” 28 June 2018. <https://www.youtube.com/watch?v=3ZA-w195ass&t=175s>
- 2018.** KETK News, Tyler, TX. “Alligator gar myths, misconceptions”. Aired 15 June 2018.
- 2018.** KTRE News, Lufkin, TX. “Citizens can help SFA scientists in Roadkill of Texas Project” Aired 1 March 2018. <http://www.ktre.com/story/37628171/citizens-can-help-sfa-scientists-in-roadkill-of-texas-project>

### **INVITED TALKS**

- 2019.** Snake entanglement in erosion control blankets: Causes, consequences, and conservation. Rotary Club, Nacogdoches, TX.
- 2019.** Snake entanglement in erosion control blankets: Causes, consequences, and conservation. Texas Parks and Wildlife Department, Austin, TX.
- 2019.** Community organization and conservation of snakes in the Piney Woods of East Texas. Department of Forestry, Beihua University, Jilin City, China.
- 2016.** Community assembly of Neotropical frogs across ecological scales. Department of Biological Sciences, Sam Houston State University, Huntsville, TX.
- 2016.** Community assembly of Neotropical frogs across ecological scales. Forensic Laboratory for Investigative Entomological Sciences. Texas A&M University. College Station, TX.
- 2014.** Patrones de las comunidades de un gremio de anuros tropicales. Primero Congreso Paraguayo de Herpetología, Asociación Paraguaya de Herpetología, Asuncion, Paraguay.
- 2014.** Ecology and Conservation of Giant Salamanders (*Siren* and *Amphiuma*). North Carolina Herpetological Society Fall Meeting. Raleigh, NC.

### **CONFERENCE ACTIVITY/PARTICIPATION**

#### **Conference Organized**

- 2010.** 11<sup>th</sup> Annual Ecological Integration Symposium: Understanding Patterns and Processes

Across Scales. Texas A&M University, College Station, TX.

**Oral Presentations** (\* = Undergraduate Student, ^ = Graduate Student)

- 2020. C.M. Schalk**, K.L. Jobe\*, K.J. Ward, S.E. Ebert, C.K. Adams, D. Saenz. Snake entanglement in erosion control blankets: causes, consequences, and conservation. Kansas Herpetological Society. Virtual Conference.
- 2020. C.S. Adams**^, **C.M. Schalk**, D. Saenz. Trophic and community structure of snake assemblages in shortleaf pine forests with different management regimes. Ecological Integration Symposium. College Station, TX. **Awarded Best Presentation – Fishes and Reptiles Section.**
- 2020. C.M. Schalk**, K.L. Jobe\*, K.J. Ward\*, S.E. Ebert\*, C.K. Adams, D. Saenz. Snake entanglement in erosion control blankets: causes, consequences, and conservation. Southeast Partners in Amphibian and Reptile Conservation. Nauvoo, AL.
- 2020. C.S. Adams**^, **C.M. Schalk**, D. Saenz. Trophic and community structure of snake assemblages in shortleaf pine forests with different management regimes. Southeast Partners in Amphibian and Reptile Conservation. Nauvoo, AL.
- 2020. R. Viegut**\*, D.L. Kulhavy, **C.M. Schalk**, D. Unger, I. Hung, Y. Zhang. Spatial analysis and reporting biases of Texas roadkills using citizen science. Texas Chapter of the Wildlife Society. Corpus Christi, TX.
- 2019. R. Viegut**\*, D.L. Kulhavy, **C.M. Schalk**, D. Unger, I. Hung, Y. Zhang. Spatial analysis of roadkills of Texas using iNaturalist. East Texas GIS and GPS User Group Annual Meeting. Nacogdoches, TX.
- 2019. C.S. Adams**^, **C.M. Schalk**, D. Saenz. Community organization of a snake guild in shortleaf pine forests. Texas Herpetological Society Meeting. Alpine, TX.
- 2019. C.S. Adams**^, **C.M. Schalk**, D. Saenz. Community organization of a snake guild in shortleaf pine forests. Southwestern Partners in Amphibian and Reptile Conservation. Rodeo, NM.
- 2019. S.E. Ebert**\*, K.L. Jobe\*, **C.M. Schalk**, D. Saenz, C.K. Adams, C.E. Comer. Correlates of snake entanglement in erosion control blankets. Joint Meeting of Ichthyologists and Herpetologists. Snowbird, UT.
- 2019. C.M. Schalk**, M.V. Cove. Squamates as prey: Predator diversity patterns and predator-prey size relationships. Joint Meeting of Ichthyologists and Herpetologists. Snowbird, UT.
- 2019. N.C. Schiwitz**\*, **C.M. Schalk**, D. Saenz. Activity level and predation risk in a tadpole guild: Implications for species' distributions along the hydroperiod gradient. Joint Meeting of Ichthyologists and Herpetologists. Snowbird, UT.
- 2019. K.L. Jobe**\*, C.G. Montaña, **C.M. Schalk**. Caudates as prey: Predator diversity and size-relationship patterns. Joint Meeting of Ichthyologists and Herpetologists. Snowbird, UT.
- 2019. C.S. Adams**^, D. Saenz, **C.M. Schalk**. Community organization of a snake guild in shortleaf pine forests. Ecological Integration Symposium. College Station, TX.
- 2019. S.E. Ebert**\*, K.L. Jobe\*, **C.M. Schalk**, D. Saenz, C.K. Adams, C.E. Comer. Correlates of snake entanglement in erosion control blankets. Ecological Integration Symposium. College Station, TX. **Tied first place - best undergraduate oral presentation.**
- 2019. S.E. Ebert**\*, K.L. Jobe\*, **C.M. Schalk**, D. Saenz, C.K. Adams, C.E. Comer. Correlates of snake entanglement in erosion control blankets. Texas Academy of Science, Brownwood, TX. **Best undergraduate paper presentation, Conservation Ecology section; 2nd best**

**undergraduate presentation overall.**

- 2019.** C.S. Adams<sup>^</sup>, D. Saenz, **C.M. Schalk**. Community organization of a snake guild in shortleaf pine forests. Texas Chapter of the Wildlife Society. Montgomery, TX.
- 2019.** S.E. Ebert\*, K.L. Jobe\*, **C.M. Schalk**, D. Saenz, C.K. Adams, C.E. Comer. Correlates of snake entanglement in erosion control blankets. Texas Chapter of the Wildlife Society. Montgomery, TX.
- 2019.** N.C. Schiwitz\*, **C.M. Schalk**, D. Saenz. Activity level and predation risk in a tadpole guild: Implications for species' distributions along the hydroperiod gradient. Texas Chapter of the Wildlife Society. Montgomery, TX.
- 2019.** **C.M. Schalk**, C.P. Laughrey, L.M. Bower, C.G. Montaña. Species co-occurrence patterns along environmental gradients in pond microhabitats. Texas Chapter of the Wildlife Society. Montgomery, TX.
- 2019.** D.L. Kulhavy, D. Unger, R. Viegut\*, S. Shockley\*, **C.M. Schalk**, I. Hung. Comparison of leafy mistletoe from ground observations and unmanned aerial systems. Southern Forest Insect Work Conference, San Antonio, TX.
- 2018.** R. Viegut\*, I. Hung, D.L. Kulhavy, **C.M. Schalk**, D. Unger. Using Unmanned Aircraft Systems (UAS) to quantify mistletoe in urban environments. East Texas GIS and GPS User Group Annual Meeting, Nacogdoches, TX.
- 2018.** I. Hung, R.A. Viegut\*, D. Kulhavy, **C.M. Schalk**, D. Unger. Using a DJI Phantom 4 Pro sUAS for Aerial Analysis of Mistletoe Plants in Nacogdoches, Texas. Society of American Foresters National Conference, Portland, OR.
- 2018.** R.A. Viegut\*, D. Kulhavy, **C.M. Schalk**, I. Hung, D. Unger, S. Shockley. Mistletoe Plant Spatial Distribution Using a DJI Phantom 4 sUAS for iNaturalist and Safety in Nacogdoches, Texas. Texas International Society of Arboriculture, Waco, TX.
- 2018.** C.G. Montaña. **C.M. Schalk**, T. Schriever, T. M. S. D. G. Silva, D. Hagyar, J. Wager, L. Tieg, C. Sadeghian. Revisiting 'What do tadpoles really eat?': A ten-year perspective. Joint Meeting of Ichthyologists and Herpetologists, Rochester, NY.
- 2018.** N.C. Schiwitz\*, **C.M. Schalk**, D. Saenz. Interspecific variation in activity level of larval anurans: Implications for their distribution along the hydroperiod gradient. SFASU Undergraduate Research Conference, Nacogdoches, TX.
- 2018.** C.P. Laughrey\*, C.G. Montaña, **C.M. Schalk**. Spatiotemporal patterns of larval amphibians along environmental gradients in pond microhabitats in East Texas. TAMU Ecological Integration Symposium, College Station, TX.
- 2018.** **C.M. Schalk**, C.G. Montaña, K. Kralman\*, D.J. Leavitt. Functional distance and establishment of non-native species with complex life cycles. Texas Chapter of the Wildlife Society. Dallas, TX.
- 2017.** **C.M. Schalk**, C.G. Montaña, K. Kralman\*, D.J. Leavitt. Functional distance and establishment of non-native species with complex life cycles. Joint Meeting of Ichthyologists and Herpetologists. Austin, TX.
- 2017.** D.J. Leavitt, **C.M. Schalk**. Functional perspectives on the dynamics of desert lizard assemblages. Joint Meeting of Ichthyologists and Herpetologists. Austin, TX.
- 2016.** **C.M. Schalk**, D. Saenz. Dynamics in anuran calling phenology: implications for surveys and monitoring programs. Joint Meeting of Ichthyologists and Herpetologists. New Orleans, LA.
- 2014.** **C.M. Schalk**, D. Saenz. Abiotic drivers of anuran calling activity in a seasonal Neotropical environment. Joint Meeting of Ichthyologists and Herpetologists.

Chattanooga, TN.

- 2014. C.M. Schalk, C.G. Montaña, L.A. Fitzgerald, K.O. Winemiller.** Trophic plasticity of tropical tadpoles along environmental gradients. The Statistics and Zoology Graduate Student Research Symposium, North Carolina State University, Raleigh, NC.
- 2013. C.M. Schalk, C.G. Montaña, L.A. Fitzgerald, K.O. Winemiller.** Trophic plasticity of tropical tadpoles along environmental gradients. Joint Meeting of Ichthyologists and Herpetologists. Albuquerque, NM.
- 2013. C.M. Schalk, C.G. Montaña, L.A. Fitzgerald, K.O. Winemiller.** Trophic plasticity of tropical tadpole ecomorphs. Ecological Integration Symposium, College Station, TX.
- 2011. C.M. Schalk.** Community structure of tadpoles along environmental gradients in the Bolivian Gran Chaco. Ecological Society of America, Austin, TX.
- 2011. J.M. Taillon, C.M. Schalk.** The application of biological conservation techniques for aguajals in southeastern Peru's Madre de Dios Region. George Wright Society Conference: New Orleans, LA.
- 2010. J.M. Taillon, C.M. Schalk.** The potential of aguajal concessions for profitable conservation in the Peruvian Amazon. Texas A&M University's Ecological Integration Symposium, College Station, TX. **2<sup>nd</sup> place, Graduate Student Oral Competition.**
- 2009. C.M. Schalk.** Mechanisms of community assembly in a guild of tropical anurans. Departmental Graduate Seminar, TAMU, College Station, TX
- 2008. C.M. Schalk.** Microhabitat use of permanently aquatic salamanders in an isolated wetland. SREL REU Symposium, Aiken, SC.
- 2008. C.M. Schalk, T.M. Luhring.** Dispersal capabilities of permanently aquatic salamanders; implications for wetland connectivity. Joint Meeting of Ichthyologists and Herpetologists. Montreal, Quebec, Canada.
- 2007. C.M. Schalk.** Dispersal capability of permanently aquatic salamanders among isolated wetlands. SREL REU Symposium, Aiken, SC. SUNY-ESF Herpetology Class, Syracuse, NY.

**Poster Presentations (\* = Undergraduate Student, ^ = Graduate Student)**

- 2020. K. J. Ward, K.L. Jobe\*, N.C. Schiwitz, D. Saenz, C.M. Schalk.** Does installation method affect snake entanglement in erosion control blankets? Kansas Herpetological Society. Virtual Conference.
- 2020. J.M. Arnett\*, C.S. Adams^, C.G. Montaña, C.M. Schalk.** Mediterranean House Geckos exploit novel resources in a recipient lizard assemblage. SFASU's Undergraduate Research Conference, Nacogdoches, TX.
- 2020. D.W. Thompson\*, C.S. Adams^, D. Saenz, C.M. Schalk.** Increased management frequency decreases lizard abundance in forest ecosystems. SFASU's Undergraduate Research Conference, Nacogdoches, TX.
- 2020. K.L. Jobe\*, K. J. Ward\*, N.C. Schiwitz\*, D. Saenz, C.M. Schalk.** Does installation method affect snake entanglement in erosion control blankets? SFASU's Undergraduate Research Conference, Nacogdoches, TX. **Awarded Top Scholar.**
- 2020. K.L. Jobe\*, K.J. Ward\*, N.C. Schiwitz\*, D. Saenz, C.M. Schalk.** On the diversity of erosion control products: Implications for snake entanglement. SFASU's Undergraduate Research Conference, Nacogdoches, TX.
- 2020. K. Li\*, C.G. Montaña, C.M. Schalk.** Morphological variation of bluegill (*Lepomis macrochirus*) populations across environmental gradients in East Texas. Ecological

- Integration Symposium. College Station, TX.
2020. D. Rosenbaum<sup>^</sup>, **C.M. Schalk**, D. Saenz. Distribution, occupancy, and mercury load in Texas alligator snapping turtles. SFASU Graduate Research Conference. Nacogdoches, TX.
2020. J. Swanson<sup>^</sup>, C.G. Montaña, **C.M. Schalk**. Fish community assembly across riverine systems of east-central Texas. SFASU Graduate Research Conference. Nacogdoches, TX.
2020. L.G. Wolff<sup>^</sup>, **C.M. Schalk**, D. Saenz, C.E. Shackelford. Spatiotemporal factors affecting occupancy and phenology of a declining songbird. SFASU Graduate Research Conference. Nacogdoches, TX. **Awarded Best Poster.**
2020. D. Rosenbaum<sup>^</sup>, **C.M. Schalk**, D. Saenz. Distribution, occupancy, and mercury load in Texas alligator snapping turtles. Ecological Integration Symposium. College Station, TX.
2020. J. Swanson<sup>^</sup>, C.G. Montaña, **C.M. Schalk**. Fish community assembly across riverine systems of east-central Texas. Ecological Integration Symposium. College Station, TX.
2020. L.G. Wolff<sup>^</sup>, **C.M. Schalk**, D. Saenz, C.E. Shackelford. Spatiotemporal factors affecting occupancy and phenology of a declining songbird. Ecological Integration Symposium. College Station, TX.
2020. D. Rosenbaum<sup>^</sup>, **C.M. Schalk**, D. Saenz. Distribution, occupancy, and mercury load in Texas alligator snapping turtles. Southeast Partners in Amphibian and Reptile Conservation. Nauvoo, AL.
2020. T. Massey\*, B.K. Smith\*, S. Harbuck\*, M. Woodin\*, **C.M. Schalk**, D. Saenz. Comparative calling phenology of anurans across ecosystems. Southeast Partners in Amphibian and Reptile Conservation. Nauvoo, AL.
2020. D.W. Thompson\*, C.S. Adams<sup>^</sup>, D. Saenz, **C.M. Schalk**. Increased management frequency decreases lizard abundance in forest ecosystems. Southeast Partners in Amphibian and Reptile Conservation. Nauvoo, AL.
2020. C.S. Adams<sup>^</sup>, **C.M. Schalk**, D. Saenz. Effects of forest management on snake functional diversity. Southeast Partners in Amphibian and Reptile Conservation. Nauvoo, AL.
2020. K.L. Jobe\*, K.J. Ward\*, N.C. Schiwitz\*, D. Saenz, **C.M. Schalk**. On the diversity of erosion control products: Implications for snake entanglement. Southeast Partners in Amphibian and Reptile Conservation. Nauvoo, AL.
2020. J.M. Arnett\*, C.S. Adams<sup>^</sup>, C.G. Montaña, **C.M. Schalk**. Mediterranean House Geckos exploit novel resources in a recipient lizard assemblage. Southeast Partners in Amphibian and Reptile Conservation. Nauvoo, AL.
2020. **C.M. Schalk**, C.S. Adams<sup>^</sup>, D.W. Thompson\*, K.L. Jobe\*, K.J. Ward\*, D. Saenz. Summer activity patterns of snakes in shortleaf pine forests. Southeast Partners in Amphibian and Reptile Conservation. Nauvoo, AL.
2020. J.G. Barnett\*, **C.M. Schalk**, D. Scognmillo. Estimates of latency to initial detection for mammalian species in upland mixed pine-hardwood forests in Eastern Texas. Texas Chapter of the Wildlife Society. Corpus Christi, TX.
2020. A. Martinez, C.G. Montaña, **C.M. Schalk**. Does urbanization affect life history parameters of the Western Mosquito fish (*Gambusia affinis*)? Texas Chapter of the American Fisheries Society. Waco, TX.
2020. C.G. Montaña, M. Beckham<sup>^</sup>, D. Peterson, **C.M. Schalk**. The complex nature of conservation in urbanized streams: A case study in La Nana Bayou, East Texas. Texas Chapter of the American Fisheries Society. Waco, TX.

2019. B. Baker\*, J. Alfred\*, K.L. Jobe\*, **C.M. Schalk**, D. Saenz. Calling phenology of a winter-breeding assemblage of anurans in a coastal prairie ecosystem. Arthur Temple College of Forestry and Agriculture Undergraduate Research Showcase, Nacogdoches, TX.
2019. D.W. Thompson\*, M. Cullins\*, C. Garcia\*, W. Forbes, **C.M. Schalk**, D. Saenz. Anuran calling phenology of a summer breeding guild in a coastal prairie ecosystem. Arthur Temple College of Forestry and Agriculture Undergraduate Research Showcase, Nacogdoches, TX.
2019. B.K. Smith\*, T. Massey\*, S. Harbuck\*, M. Woodin\*, **C.M. Schalk**, D. Saenz. Comparative calling phenology of anurans across ecosystems. Arthur Temple College of Forestry and Agriculture Undergraduate Research Showcase, Nacogdoches, TX.
2019. J.M. Arnett\*, C.S. Adams<sup>^</sup>, C.G. Montaña, **C.M. Schalk**. Mediterranean House Geckos exploit novel resources in a recipient lizard assemblage. Arthur Temple College of Forestry and Agriculture Undergraduate Research Showcase, Nacogdoches, TX.  
**Awarded Seventh Place Poster Presentation.**
2019. D.W. Thompson\*, C.S. Adams<sup>^</sup>, D. Saenz, **C.M. Schalk**. Increased management frequency decreases lizard abundance in forest ecosystems. Arthur Temple College of Forestry and Agriculture Undergraduate Research Showcase, Nacogdoches, TX.  
**Awarded Fifth Place Poster Presentation.**
2019. K. J. Ward\*, N.C. Schiwitz\*, K.L. Jobe\*, D. Saenz, **C.M. Schalk**. Does installation method affect snake entanglement in erosion control blankets? Arthur Temple College of Forestry and Agriculture Undergraduate Research Showcase, Nacogdoches, TX.  
**Awarded First Place Poster Presentation.**
2019. K.L. Jobe\*, K.J. Ward\*, N.C. Schiwitz\*, D. Saenz, **C.M. Schalk**. On the diversity of erosion control products: Implications for snake entanglement. Arthur Temple College of Forestry and Agriculture Undergraduate Research Showcase, Nacogdoches, TX.  
**Awarded Sixth Place Poster Presentation.**
2019. R. Viegut\*, D.L. Kulhavy, **C.M. Schalk**, D. Unger, I. Hung, Y. Zhang. Spatial analysis of roadkills of Texas using iNaturalist. Arthur Temple College of Forestry and Agriculture Undergraduate Research Showcase, Nacogdoches, Texas.
2019. R. Viegut\*. D. Kulhavy, **C.M. Schalk**, D. Unger, I. Hung, Y. Zhang, Y. iNaturalist project: Drones and biodiversity. Arthur Temple College of Forestry and Agriculture Undergraduate Research Showcase, Nacogdoches, Texas.
2019. D.L. Kulhavy, **C.M. Schalk**, R. Viegut\*, D. Unger, I. Hung, Y. Zhang. iNaturalist project: Drones and biodiversity. Society of American Foresters National Convention, Louisville, KY.
2019. R. Viegut\*, D.L. Kulhavy, **C.M. Schalk**, D. Unger, I. Hung, Y. Zhang. Spatial analysis of roadkill using iNaturalist. Society of American Foresters National Convention, Louisville, KY.
2019. D.W. Thompson\*, C.S. Adams, D. Saenz, **C.M. Schalk**. Assessing the functional role of skinks (*Scincella lateralis*) in forest food webs. Southwestern Partners in Amphibian and Reptile Conservation. Rodeo, NM.
2019. C.G. Montaña, D. Peterson, **C.M. Schalk**. Historical and contemporary assessment of urban stream fish assemblages: taxonomic and functional perspectives. Joint Meeting of Ichthyologists and Herpetologists Snowbird, UT.
2019. N.C. Schiwitz\*, K.L. Jobe\*, K.J. Ward\*, D. Saenz, **C.M. Schalk**. Does installation method affect snake entanglement in erosion control blankets? Joint Meeting of

- Ichthyologists and Herpetologists Snowbird, UT.
2019. K.L. Jobe\*, N.C. Schiwitz\*, K.J. Ward\*, D. Saenz, **C.M. Schalk**. On the diversity of erosion control products: Implications for snake entanglement. Joint Meeting of Ichthyologists and Herpetologists Snowbird, UT.
2019. **C.M. Schalk**, W. I. Lutterschmidt, J.M. Weidler. Hot moments and hot spots in the bayou: Patterns of road occurrence in a Louisiana snake assemblage. Joint Meeting of Ichthyologists and Herpetologists Snowbird, UT.
2019. C. Veloso\*, C.G. Montaña, **C.M. Schalk**. Niche segregation among sunfishes (*Lepomis* spp.) in an East Texas Urban Stream Sam Houston State University's Undergraduate Research Symposium, Huntsville, TX. **Awarded Best Poster.**
2019. E. Morag\*, C.G. Montaña, **C.M. Schalk**. Assessing historical fish community structure using taxonomic, functional, and historical-contemporary data. Sam Houston State University's Undergraduate Research Symposium, Huntsville, TX.
2019. J. Estrada\*, **C.M. Schalk**, C.G. Montaña. Does urbanization influence the life history parameters of the Western Mosquito Fish (*Gambusia affinis*)? Sam Houston State University's Undergraduate Research Symposium, Huntsville, TX.
2019. D.W. Thompson\*, C.S. Adams, D. Saenz, **C.M. Schalk**. Assessing the functional role of skinks (*Scincella lateralis*) in forest food webs. Ecological Integration Symposium. College Station, TX.
2019. H.A. Hester\*, **C.M. Schalk**, D. Saenz. Advertisement calls of eleven anuran species from the Bolivian Gran Chaco. Ecological Integration Symposium. College Station, TX. **Tied second place - best undergraduate poster presentation.**
2019. K.L. Jobe\*, C.G. Montaña, **C.M. Schalk**. Caudates as prey: Predator diversity and size-relationship patterns. Ecological Integration Symposium. College Station, TX.
2019. C. Veloso\*, C.G. Montaña, **C.M. Schalk**. Niche segregation among sunfishes (*Lepomis* spp.) in an East Texas urban stream. Ecological Integration Symposium. College Station, TX.
2019. E. Morag\*, **C.M. Schalk**, C.G. Montaña. Fish taxonomic and functional diversity in an East Texas urban stream. Ecological Integration Symposium. College Station, TX.
2019. E. Morag\*, C.G. Montaña, **C.M. Schalk**. Assessing historical fish community structure using taxonomic, functional, and historical-contemporary data. Association for the Sciences of Limnology and Oceanography. San Juan, Puerto Rico.
2019. R. Viegut\*, **C.M. Schalk**, D.L. Kulhavy, I. Hung, D. Unger, S. Shockley\*. Using Unmanned Aircraft Systems (UAS) to quantify mistletoe in urban environments. Stephen F. Austin State University's Undergraduate Research Conference, Nacogdoches, TX.
2019. K.L. Jobe\*, C.G. Montaña, **C.M. Schalk**. Caudates as prey: Predator diversity and size-relationship patterns. Texas Academy of Science, Brownwood, TX. **Best undergraduate poster, Terrestrial Ecology and Management section.**
2019. H.A. Hester\*, **C.M. Schalk**, D. Saenz. Advertisement calls of eleven anuran species from the Bolivian Gran Chaco. Texas Chapter of the Wildlife Society. Montgomery, TX.
2019. K.L. Jobe\*, C.G. Montaña, **C.M. Schalk**. Caudates as prey: Predator diversity and size-relationship patterns. Texas Chapter of the Wildlife Society. Montgomery, TX.
2019. C.G. Montaña, E. Morag\*, D. Peterson, **C.M. Schalk**. Long-term changes in a fish community from an East Texas urban stream: A 28-year perspective. Texas Chapter of the American Fisheries Society. Galveston, TX.
2019. C. Velsoso\*, C.G. Montaña, **C.M. Schalk**. Niche segregation among sunfishes (*Lepomis*



- spp.) in an East Texas urban stream. Texas Chapter of the American Fisheries Society. Galveston, TX.
- 2018.** R.A. Viegut\*, D. Kulhavy, **C.M. Schalk**, I. Hung, D. Unger, S. Shockley. Spatial Analysis of Mistletoe Plants Using a DJI Phantom 4 sUAS for iNaturalist and Safety in Nacogdoches, Texas. Society of American Foresters National Conference, Portland, OR.
- 2018.** D.L. Kulhavy, **C.M. Schalk**, D. Unger, I. Hung, R. Viegut\*, S. Shockley\*. Development of an iNaturalist project, Mistletoes of Nacogdoches, Texas, using a DJI Phantom 4 Pro Unmanned Aerial System. Society of American Foresters National Convention, Portland, OR.
- 2018.** R.A. Viegut\*, D. Kulhavy, **C.M. Schalk**, I. Hung, S. Shockley. Using a Phantom 4 sUAS and iNaturalist for Safety and Spatial Analysis of Mistletoe Plants in Nacogdoches, Texas. Texas International Society of Arboriculture, Waco, TX.
- 2018.** **C.M. Schalk**, N.C. Schiwitz\*, D. Saenz. Activity level in a tadpole guild: Implications for their distribution along the hydroperiod gradient. Joint Meeting of Ichthyologists and Herpetologists, Rochester, NY.
- 2018.** C.S. Adams^, **C.M. Schalk**, D. Saenz. Food-web and functional trait community structure along a land-use gradient in pine forests. SFASU Graduate Research Conference, Nacogdoches, TX
- 2018.** N.C. Schiwitz\*, **C.M. Schalk**, D. Saenz. Interspecific variation in activity level of larval anurans: Implications for their distribution along the hydroperiod gradient. TAMU Ecological Integration Symposium, College Station, TX.
- 2018.** C.S. Adams^, **C.M. Schalk**, D. Saenz. Food-web and functional trait community structure along a land-use gradient in pine forests. TAMU Ecological Integration Symposium, College Station, TX.
- 2018.** S. Ebert\*, **C.M. Schalk**, D. Saenz, C. E. Comer. Experimental assessments on wildlife entanglement in erosion control products. TAMU Ecological Integration Symposium, College Station, TX.
- 2018.** W. Alvarado\*, C.P. Laughrey\*, C.G. Montaña, **C.M. Schalk**, J. Daza. Tail pigmentation in *Acris blanchardi* tadpoles along an environmental pond gradient. TAMU Ecological Integration Symposium, College Station, TX.
- 2018.** K. Kralman\*, C.P. Laughrey\*, C.G. Montaña, **C.M. Schalk**. Temporal variation in population structure of Western Mosquito Fish (*Gambusia affinis*) in an East Texas wetland. TAMU Ecological Integration Symposium, College Station, TX.
- 2018.** **C.M. Schalk**, C.G. Montaña, K. Kralman\*, D.J. Leavitt. Functional distance and establishment of non-native species with complex life cycles. SFASU's Symposium on Arts and Research. Nacogdoches, TX.
- 2018.** **C.M. Schalk**, D. Kulhavy, D. Unger, I. Hung. At the road's edge: A citizen science project documenting Texas roadkills. SFASU's Symposium on Arts and Research. Nacogdoches, TX.
- 2018.** **C.M. Schalk**. Using iNaturalist to learn about vertebrates. Biennial Conference on University Education in Natural Resources. Nacogdoches, TX.
- 2017.** C.P. Laughrey\*, C.G. Montaña, **C.M. Schalk**, K. Kralman\*. Distribution of larval amphibians along environmental gradients in pond microhabitats. Joint Meeting of Ichthyologists and Herpetologists. Austin, TX.
- 2017.** C.P. Laughrey\*, C.G. Montaña, **C.M. Schalk**, K. Kralman\*. Species co-occurrence patterns along environmental gradients in pond microhabitats. SHSU's Undergraduate

- Research Symposium, Huntsville, TX. **Awarded best poster.**
2017. K. Kralman\*, C.G. Montaña, **C.M. Schalk**, D.J. Leavitt. Functional distance and establishment of non-native species with complex life cycles. SHSU's Undergraduate Research Symposium, Huntsville, TX.
2017. C.P. Laughrey\*, C.G. Montaña, **C.M. Schalk**, K. Kralman\*. Species co-occurrence patterns along environmental gradients in pond microhabitats. TAMU Ecological Integration Symposium, College Station, TX.
2017. K. Kralman\*, C.G. Montaña, **C.M. Schalk**, D.J. Leavitt. Functional distance and establishment of non-native species with complex life cycles. TAMU Ecological Integration Symposium, College Station, TX.
2016. **C.M. Schalk**, M.V. Cove. Emergent patterns between squamate prey and their predators. Joint Meeting of Ichthyologists and Herpetologists. New Orleans, LA.
2016. K. Kralman\*, C.G. Montaña, **C.M. Schalk**, D.J. Leavitt. Non-native species and novel niches: Using morphology to understand ecological invasions. SHSU's Undergraduate Research Symposium, Huntsville, TX.
2016. C.G. Montaña, C.A. Layman, **C.M. Schalk**. Interspecific and intraspecific variation in stoichiometry of four central North Carolina stream fishes. Joint Meeting of Ichthyologists and Herpetologists. New Orleans, LA.
2016. **C.M. Schalk**, D. Saenz. Inter-annual and intra-annual dynamics in anuran calling phenology: implications for surveys and monitoring programs. Southeastern Partners in Amphibian and Reptile Conservation. Nauvoo, AL.
2014. **C.M. Schalk**, C.G. Montaña, N. Smolensky. Intercontinental convergence of arid-adapted anurans. Joint Meeting of Ichthyologists and Herpetologists. Chattanooga, TN.
2014. **C.M. Schalk**, C.G. Montaña. Community assembly of anurans in the Bolivian Gran Chaco: A morphological approach. The Statistics and Zoology Graduate Student Research Symposium, North Carolina State University, Raleigh, NC.
2013. **C.M. Schalk**, C.G. Montaña. Community assembly of anurans in the Bolivian Gran Chaco: A morphological approach. Joint Meeting of Ichthyologists and Herpetologists. Albuquerque, NM.
2013. L. Springer\*, **C.M. Schalk**, C.G. Montaña, A. Fields\*. Morphological diversity of Chihuahuan Desert anurans. Ecological Integration Symposium, College Station, TX. **Awarded 2<sup>nd</sup> place, Best Undergraduate Poster.**
2012. **C.M. Schalk**. Tadpole community structure along environmental gradients in the Bolivian Gran Chaco. World Congress of Herpetology, Vancouver, British Columbia, Canada.
2012. M. Libson\*, C.G. Montaña, **C.M. Schalk**. Reproductive biology of two annual killifishes in the Bolivian Gran Chaco. TAMU Ecological Integration Symposium, College Station, TX. **Awarded 1<sup>st</sup> place, Undergraduate Poster.**
2011. **C.M. Schalk**, C.G. Montaña. Community structure of ponds along environmental gradients in the Bolivian Gran Chaco. TAMU Ecological Integration Symposium, College Station, TX.
2009. **C.M. Schalk**, L.A. Fitzgerald. Scaling of ecological communities in altered and conserved landscapes. NSF-IGERT Principle Investigator's Annual Meeting, Alexandria, VA and Texas Herpetological Society's Fall Meeting, College Station, TX.
2008. **C.M. Schalk**, T.M. Luhring. Dispersal capabilities of permanently aquatic salamanders; implications for wetland connectivity. SUNY-ESF Spotlight on Student Research. **Awarded best poster.**

## **SERVICE TO PROFESSION**

**2016 – Present. Associate Editor**, *Herpetological Review*.

**Peer Reviewer:** Acta Oecologica (2016), American Midland Naturalist (2014, 2015), Amphibian and Reptile Conservation (2020), Austral Ecology (2017), Biological Journal of Linnean Society (2016), Biotropica (2015), Conservation Biology (2014), Copeia (2020), Diversity (2019), Diversity and Distributions (2018), Ecology (2019), Food Webs (2017, 2018), Forest Ecology and Management (2019), Freshwater Biology (2020), Freshwater Science (2018), Global Ecology and Conservation (2019), Herpetological Conservation and Biology (2011, 2018), Herpetological Review (2014, 2017), Integrative Zoology (2016), Herpetologica (2016, 2019), Journal of the Arkansas Academy of Science (2010), Journal of Herpetology (2011, 2013, 2015, 2017), Journal of Natural History (2016), Journal of Tropical Ecology (2013), Oecologia (2014), North-Western Journal of Zoology (2020), PeerJ (2015, 2016, 2018), Phyllomedusa (2015), Revista de Biología Tropical (2013), Scientific Reports (2017), South American Journal of Herpetology (2017, 2018, 2019), Southwestern Naturalist (2018), Studies on Neotropical Fauna and Environment (2020), The Herpetological Journal (2014), Tropical Conservation Science (2015, 2018, 2019).

**2019. Judge**, Victor Hutchison Graduate Student Poster Award Committee. Society for the Study of Amphibians and Reptiles.

**2019. Judge**, Ecological Integration Symposium Oral Presentation Award Committee. Texas A&M University.

**2019. Judge**, Texas Chapter of The Wildlife Society's Student Poster Award Committee. Texas Chapter of The Wildlife Society

**2018. Judge**, Henri Seibert Award Committee. Society for the Study of Amphibians and Reptiles.

**2018. Judge**, Ecological Integration Symposium Poster Presentation Award Committee. Texas A&M University.

**2018-Present. Administrator and Manager**, Roadkills of Texas iNaturalist Citizen Scientist Project.

## **COLLEGE AND UNIVERSITY SERVICE**

**2020-Present. Chair**, University IACUC Committee, SFASU.

**2020. Thesis Defense Graduate School Representative**, Division of Environmental Science, ATCOFA, SFASU

**2020. Dinner with a Professor**, ATCOFA, SFASU

**2020. Graduate Council Proxy**, SFASU.

**2019. Assistant Professor of Human Dimensions of Natural Resources Search Committee**, ATCOFA, SFASU.

**2019. Dinner with a Professor**, ATCOFA, SFASU

**2019. Resume Workshop Faculty Panel**, ATCOFA, SFASU.

**2018-2020. University IACUC Committee**, SFASU.

**2018-2019. Texas Envirothon Organizing Committee**, ATCOFA, SFASU.

**2019. Leaders of Tomorrow Speaker**, ATCOFA, SFASU.

**2018. Professional Development Workshop Speaker**, Introduction to NSF's Graduate Research and Fellowship Program, SFASU.

**2018. Dinner with a Professor**, ATCOFA, SFASU  
**2018. Assistant Professor of Forest Wildlife Management Search Committee**, ATCOFA SFASU.  
**2018-Present. Undergraduate Research/Creative Discovery Advisory Committee**, SFASU  
**2018-Present. Scoring Team Committee**, SFASU.  
**2018. Leaders of Tomorrow Speaker**, ATCOFA, SFASU.  
**2017-Present. Faculty Co-Advisor, The Wildlife Society Student Chapter**, ATCOFA, SFASU.  
**2017-2018. Agricultural Pond Signage Committee**. SFASU  
**2017. Resume Workshop Faculty Panel**, ATCOFA, SFASU.  
**2017. Dinner with a Professor**, ATCOFA, SFASU  
**2017. Root Camp**, ATCOFA, SFASU.  
**2017. Professional Development Workshop Speaker**, Introduction to NSF's Graduate Research and Fellowship Program, SFASU.  
**2016. Professional Development Workshop Speaker**, Introduction to NSF's Graduate Research and Fellowship Program, SHSU.  
**2012-2013. Secretary**, Ecology & Evolutionary Biology Student Organization, TAMU.  
**2012-2013. Awards Committee Student Representative**, Department of Wildlife and Fisheries Sciences, TAMU.  
**2010. Co-chair Ecological Integration Symposium Organizing Committee**, TAMU  
**2010. Student Representative, Selection Committee**, Applied Biodiversity Science NSF-IGERT Program, TAMU.

### **FIELD RESEARCH**

**United States:** New Mexico, New York, North Carolina, South Carolina, Texas

**International:** Bolivia, Mexico, Paraguay, Peru, Venezuela

### **LANGUAGES**

**English** (Native)

**Spanish** (Intermediate Proficiency)

### **PROFESSIONAL AFFILIATIONS**

Society for the Study of Amphibians and Reptiles

Herpetologists' League

Southeastern Partners in Amphibian and Reptile Conservation

Texas Chapter of the Wildlife Society