

TEXAS STATE VITA**I. Academic/Professional Background**

A. Name: Sarah Fritts

Title: Assistant Professor

B. Educational Background

<i>Degree</i>	<i>Year</i>	<i>University</i>	<i>Major</i>	<i>Thesis/Dissertation</i>
PHD	2014	North Carolina State University	Fisheries, Wildlife, and Conservation Biology	Implementing biomass harvesting guidelines to sustain reptile, amphibian, and small mammal populations
MS	2008	Univ of Illinois Urbana-Champaign	Natural Resources Management and Policy	Fish community response to agricultural ditch maintenance
BSFR	2003	University of Georgia	Wildlife Biology	Plant and animal use by traditional healers in Limpopo Province, South Africa

C. University Experience

<i>Position</i>	<i>University</i>	<i>Dates</i>
Assistant Professor, Biology	Texas State University. San Marcos, TX, United States	September 1, 2017 - Present
Research Assistant Professor, Natural Resources Management	Texas Tech University. Lubbock, TX, United States	January 2016 - August 2017
Invited Lecturer, Department of Natural Resources	Texas Tech University	2015
Instructor of Record, Department of Forestry and Environmental Resources	North Carolina State University	2013
Invited Lecturer, Department of Forestry and Environmental Resources	North Carolina State University	2011 - 2012
Invited Lecturer, Department of Forestry and Environmental Resources	North Carolina State University	2011
Invited Lecturer, Warnell School of Forestry and Natural Resources	University of Georgia	2003 - 2004

D. Relevant Professional Experience

<i>Position</i>	<i>Entity</i>	<i>Dates</i>
Post-Doctoral Research Associate	Texas Tech University, Lubbock, TX	January 2015 - December 2015
Post-Doctoral Research Associate	North Carolina State University, Raleigh, NC	July 2014 - December 2014
Desert Tortoise Technician	Great Basin Institute, Las Vegas, NV	March 2010 - May 2010
Seasonal Small Mammal Technician	Oregon State University, Shady Cove, OR	April 2004 - July 2004
Temporary Game Bird Laboratory Intern	Tall Timbers Research Station, Tallahassee, FL	January 2004 - April 2004

E. Other Professional Credentials (licensure, certification, etc.)

Associate Wildlife Biologist, The Wildlife Society. (2004 - Present).

Preparing Future Leaders, North Carolina State University. (2013).

Preparing the Professoriate, North Carolina State University. (2013).

Conservation Leaders for Tomorrow. (2012).

II. TEACHING**A. Teaching Honors and Awards:**

Award / Honor Recipient: Teaching Award of Honor, Texas State University.
May 2020

B. Courses Taught:

2017-present

Undergraduate: BIO 4420 Natural History of Vertebrates (2018-2021)
BIO 4299 Undergraduate Research

2014-2016

NRM 4408 Population Dynamics and Analysis; Texas Tech
FW 353 Wildlife Management; North Carolina State University

Graduate:

BIO 7361E Applied Analyses of Populations (2020)
BIO 7102 Seminar in Aquatic Resources
BIO 7314 Research Experience
BIO 7303 Research
BIO 7203 Problems in Aquatic Resources
BIO 7360 Special Topics in Biology/Aquatic Resources

C. Directed Student Learning (i.e., theses, dissertations, exit committees, etc.):

Ph.D. STUDENTS SUPERVISED:

M.S. STUDENTS SUPERVISED: Current: 3 (Chair)

1. Kimes, Houston. Assessing movement of bats using stable isotopes to examine threat of white-nose syndrome. 2020 – current.
2. Tyler, Rob. Comparing thermal imaging and acoustic detections of bats with implications for wind energy. 2020 – current.
3. Ember Bower. Summer distribution and activity of bats in Texas. 2022 – current.

Current Committee Member: 5 Total

1. Harding, Stephen. Investigating host-pathogen dynamics of *Ophidiomyces ophiodiicola* in Texas. Ph.D. Texas State University. 2018 r current.
2. Stukenholz, Erin. Urban gradients in avian communities throughout Lubbock, Texas. Texas Tech University. 2016 – current.
3. Neuharth, Dalton. Lizard community composition shifts following wildfire in Bastrop County. M.S. Texas State University. 2018 – current.
4. Dawn Houston. Analysis of upland and riparian habitats as stopover sites for migratory songbirds in Central Texas. Ph.D. Texas State University. 2021 – current.
5. Nikola Rodriguez. How will mass bleaching events affect the prevalence of *Ciguatera* on Hawaiian reefs? M.S. University of Hawaii at Hilo. 2021 – current.

Graduates Ph.D. Chair: 1

1. Rylander, Rebekah. Comparison of black-crested titmouse family function, reproductive success, and territory size between urban and rural populations. Ph.D. Advisor. 2017-current. Freeman Fellowship Research Grant, Texas State University, 2019. San Marcos Greenbelt Alliance Research Grant 2019. WiSE Graduate Scholarship 2018. Texas Ornithological Scholarship 2018. Banding Station Research Scholarship, Biology Department, 2016. Environmental Services Award, Texas State University, 2016 and 2019.

Graduates MS Chair: 6

1. Guest, Emma. Evaluating deterrent stimuli for increasing species-specific effectiveness of an advanced ultrasonic deterrent during Spring migration. M.S. Advisor. 2020-current.
2. Stamps, Brittany. Evaluating deterrent stimuli for increasing species-specific effectiveness of an advanced ultrasonic deterrent during Fall migration. M.S. Advisor. 2019-current. Thesis Research Support Fellowship, Texas State University, 2018. Dorothy Coker Research Fellowship, Texas State University, 2019. 2018-current.
3. Wilson, Charlotte. Influence of woody vegetation patterns on Scaled Quail demographics and reproduction. M.S. Advisor. 2018-2021
4. Tleimat, Jackie. Monitoring dispersal and habitat associations of two threatened primates along a conservation corridor in western Ecuador. M.S. Advisor. 2018-2021. The Explorers Club Marmont Scholars grants
5. Parker, Matt. Drivers of multi-species occupancy of bats on the Texas Coast. M.S. Advisor. Thesis Research Support Fellowship, Texas State University. Fall 2020.

6. Rogers, Jacob. Roost and foraging ecology of bats on the Texas coast. M.S. Advisor. Environmental Services Award, Texas State University, Spring 2020.

Graduates Committee Member: 13

1. Casteneda, Melissa. Environmental influence on the composition of the gut microbiome in two species of anuran tadpoles. M.S. Committee Member. Texas State University. 2018-2021
 2. Watson, Katheryn. Migration characteristics, habitat associations, and risk of wind turbine encounters of adult and juvenile Swainson's Hawks. Ph.D. Committee Member. Texas Tech University. 2018-2021.
 3. Silva, Manny. Influence of woody vegetation patterns on overwintering Scaled Quail demographics. M.S. Committee Member. Texas Tech University. 2018-2021.
 4. Gulah, Jonah. Measuring wetland connectivity in western Zambia using juvenile Saddlebills *Ephippiorhynchus senegalensis*. M.S. Committee Member. Texas State University. 2018-2021.
 5. Tabandera, Ricky. Comparison of fish assemblage and habitat use of native and introduced estuarine species in pond complex in Hilo, Hawai'i. M.S. Committee Member. University of Hawai'i at Hilo. 2017-2019.
 6. Bohannon, Austin. The reproductive ecology of the Rio Grande cooter (*Pseudomys gorzugi*) in Texas. M.S. Committee Member. Texas State University. 2018-2019.
 7. Haney, Jared. Observing the dynamics of range contraction by combining crowd sourced data and road surveys: A study on the Texas horned lizard (*Phrynosoma cornutum*). M.S. Committee Member. Texas State University. 2018-2019.
 8. Torres, Madison. Assessment of Invasive Mongoose (*Herpestes auro-punctatus*) in Sustaining Cattle Fever Tick Populations in Puerto Rico. M.S. Committee Member. Texas State University. 2018-2018.
 9. Flaska, Skyler. Impact of red imported _re ants (*Solenopsis invicta*) on harvester ant (*Pogonomyrmex barbatus*) colony spacing along an invasion gradient in Texas. M.S. Committee Member. Texas State University. 2017-2018.
 10. McCrary, Taylor. Non-thesis M.S. Committee Member. Texas State University. 2017-2018.
 11. Bell, Coby. Non-thesis M.S. Committee Member. Texas State University. 2017-2018.
 12. Godar, A. An assessment of landscape and environmental change on lesser prairie chicken populations in Colorado and Kansas. M.S. Student Mentor, Texas Tech University. 2015-2016.
 13. Griffin, C. An assessment of landscape and environmental change on lesser prairie chicken populations in New Mexico and Texas. M.S. Student Mentor, Texas Tech University. 2015-2016.
- D. Courses Prepared and Curriculum Development:
 BIO 4420 Natural History of Vertebrates
 BIO 7361E Applied Analyses of Populations

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

1. Books:

d. Chapters in Books:

2019

Grodsky, S. **Fritts, S.**, Hernandez, R. 2019. Future directions of renewable energy and wildlife conservation. *Renewable Energy and Wildlife Conservation* (book; S. Grodsky and C. Moorman, editors). Johns Hopkins University Press. Refereed.

2. Articles:

a. Refereed Journal Articles:

2022

Haney, J., J. Veech, I. Castro-Arellano, **S. Fritts**. 2020. Using museum specimens and citizen-science data to examine the range contraction of a threatened lizard species. *Biological Conservation*. Accepted January 2022.

Vasquez, M.*, R. Rylander, J. Tleimat, **S. Fritts**. A comparison of nest materials used by black-crested titmice along an urban gradient. *Journal of Fish and Wildlife Management*. Accepted December 2021.

2021

Cove, M., R. Kays, etc., **S. Fritts**, J. Tleimat, M. Gay. 2021. SNAPSHOT USA 2019: a coordinated national camera trap survey of the United States. *Ecology*. <https://doi.org/10.1002/ecy.3353>

Bohlender, E., T. Haulu, S. Childers, C. Leatherwood, L. Evans, D. Townsley, M. Treider, R. Platt II, **S. Fritts**, D. Ray, J. Zak, R. Stevens. A pigeon's eye view of a university campus. *Southwestern Naturalist*. In Press.

2020

Miyazono, S., A. Pease, T. Grabowski, **S. Fritts**. 2020. Ontogenetic shifts in mesohabitat use of young-of-year Rio Grande blue sucker in the big bend region of the Rio Grande. *Environmental Biology of Fishes* 103:471148

Rylander, R., **S. Fritts**, A. Asbury. 2020. Limited dispersal by large juvenile males leads to kin-structured neighborhoods in the black-crested titmouse (*Baeolophus atricatricristatus*). *Behavioral Ecology and Sociobiology* 74: <https://doi.org/10.1007/s00265-020-02844-x>.

2019

Grodsky, S, R. Hernandez, J. Campbell, K. Hinson, O. Keller, **S. Fritts**, J. Homyack, C. Moorman. 2019. Ground beetle (Carabidae: Coleoptera) response to harvest residue removal: Implications for sustainable forest bioenergy production. *Forests* 11:48.

Dittmer, D., **S. Fritts**, T. Hibbitts. 2019. New locality records for *Cemophora coccinea copei* in Texas. *Herpetological Review* 50: 104-105.

2018

Fritts, S., B. Grisham, R. Cox, D. Haukos, P. McDaniel, Green, D. 2018. Interactive effects of severe drought and grazing on the life history cycle of a bioindicator species. *Ecology and Evolution* 8: 9550-9562.

- Grodsky, S. J. Campbell, **S. Fritts**, T. Wigley, C. Moorman. 2018. Variable responses of non-native and native ants to manipulated coarse woody debris following forest bioenergy harvests in young forests. *Forest Ecology and Management*. DOI: 10.1016/j.foreco.2018.02.010.
- 2017**
- Grodsky, S., C. Moorman, **S. Fritts**, J. Campbell, C. Sorenson, M. Bertone, S. Castleberry, T. Wigley. 2017. Invertebrate community response to coarse woody debris removal for bioenergy production from intensively managed forests. *Ecological Applications*. DOI: 10.1002/eap.1634
- Fritts, S.**, C. Moorman, D. Hazel, J. Homyack, S. Castleberry, C. Farrell, S. Grodsky, E. Evans. 2017. Rodent response to harvesting woody biomass for bioenergy production. *Journal of Wildlife Management* 81: 1170-1178.
- Jo, Y., C. Won, **S. Fritts**, M. Wallace, J. Baccus. 2017. Distribution and habitat models of the Eurasian otter, *Lutra lutra*, in South Korea. *Journal of Mammalogy*. gyx037.
- 2016**
- Grodsky, S., C. Moorman, **S. Fritts**, S. Castleberry, T. Wigley. 2016. Winter bird use of downed wood and implications of forest bioenergy harvest. *Forest Ecology and Management* 379: 91-101.
- Grodsky, S., C. Moorman, **S. Fritts**, S. Castleberry, T. Wigley. 2016. Breeding, early-successional bird response to forest harvests for renewable energy. *PLOS ONE* 11: e0165070.
- Schlichting, P., **S. Fritts**, J. Mayer, P. Gipson, C. Dabbert. 2016. Determinants of variation in wild pig (*Sus scrofa*) home range and its management implications. *Wildlife Society Bulletin* 40: 487-493.
- Fritts, S.**, B. Grisham, D. Haukos, C. Boal, M. Patten, D. Wolfe, C. Dixon, R. Cox, W. Heck. 2016. Long-term evaluation of lesser prairie-chicken nest ecology in response to grassland restoration at two spatial scales. *Journal of Wildlife Management* 80: 527-539.
- Fritts, S, C. Moorman, D. Hazel, J. Homyack, S. Castleberry, K. Pollock, C. Farrell, S. Grodsky. 2016. Do biomass harvesting guidelines sustain herpetofauna following harvests of logging residues for renewable energy? *Ecological Applications* 24: 926-939.
- 2015**
- Fritts, S.**, S. Grodsky, C. Moorman, D. Hazel, J. Homyack, S. Castleberry. 2015. Shrew response to varying woody debris retention: Implications for sustainable forest bioenergy. *Forest Ecology and Management* 336: 35-43.
- Fritts, S.**, S. Grodsky, C. Moorman, D. Hazel, J. Homyack, S. Castleberry. 2015. Quantifying multi-scale habitat use of woody biomass by southern toads using two approaches. *Forest Ecology and Management* 346: 81-88.
- Raybuck, A, C. Moorman, **S. Fritts**, C. Greenberg, C. DePerno, D. Simon, G. Warburton. 2015. Response of Plethodon salamanders to oak regeneration treatments in the southern Appalachians. *Wildlife Biology* 20: 186-194.
- Fritts, S.**, C. Moorman, D. Hazel, B. Jackson. 2014. Biomass harvesting guidelines affect downed woody debris retention. *Biomass and Bioenergy* 70: 382-391.

b. Non-refereed Articles:

- Grisham, B., **S. Fritts**, M. Silva, C. Wilson, R. White, J. McLaughlin, C. Dabbert. 2021. Influence of Woody Vegetation Patterns on Habitat Selection Survival and Reproduction of Scaled Quail in the Texas Rolling Plains. *Texas Tech University Wildlife Research News*. Department of Natural Resources Management. Texas Tech University, Lubbock, Texas, USA.

- Fritts, S.**, T. Lane, J. Zavaleta, B. Grisham, D. Haukos, C. Boal. 2015. Conserving lesser prairie-chicken in sand shinnery oak prairies while maintaining economic viability of grazing. Rangeland Issues. Extension publication for the National Ranching Heritage Center. Lubbock, Texas, USA.
- Fritts, S.**, S. Grodsky. 2013. Downed wood and wildlife. Southern Regional Extension Forestry. Athens, Georgia, USA.

B. Works Not in Print:

1. Papers Presented at Professional Meetings:

- Guest, E. E., B. F. Stamps, S. P. Weaver, A. M. Hale, C. D. Hein, M. Chaffee, J. O. Uglund, B. Morton, J. Crane, **S. R. Fritts**. 2021. Species-specific Echolocation Behavior of Bats in the Presence of an Ultrasonic Acoustic Deterrent. Wind Wildlife Research Institute. Oral Presentation. Virtual.
- Weaver, S., R. Tyler, N. Durish, B. Morton, **S. Fritts**. 2021. Using acoustics and thermal imaging to during preconstruction monitoring to estimate bat activity. Wind Energy Meeting. Poster Presentation. Salt Lake City.
- Tyler, R., S. Weaver, N. Durish, B. Morton, **S. Fritts**. 2021. Combining acoustic and thermal monitoring to estimate bat activity before wind turbine construction. Wind Wildlife Research Institute. Poster Presentation. Virtual.
- Rylander R.J., **S.R. Fritts**, A.S. Aspbury, F.W. Weckerly, T.R. Simpson, and M.A. Patten. 2021. Welcome to suburbia: the effects of urbanization on a kin-structured songbird. Oral presentation. Annual Meeting of Texas Chapter of The Wildlife Society, Virtual.
- Guest, E. E., B. F. Stamps, S. P. Weaver, A. M. Hale, C. D. Hein, M. Chaffee, J. O. Uglund, B. Morton, J. Crane, **S. R. Fritts**. 2021. Analysis of Eastern Red Bat Echolocation Behavior in the Presence of an Ultrasonic Acoustic Deterrent. Virtual Poster. Annual Meeting of Texas Chapter of the Wildlife Society. Virtual.
- Stamps, B., E. Guest, S. P. Weaver, A. M. Hale, C. D. Hein, M. Chaffee, J. O. Uglund, B. Morton, J. Crane, **S. R. Fritts**. 2021. Tracking Eastern Red Bat Movement Response to an Ultrasonic Acoustic Deterrent in Flight Cage Trials. Virtual Poster. Annual Meeting of Texas Chapter of the Wildlife Society. Virtual.
- Tleimat, J., **S. Fritts**, R. Lynch, S. F. McCracken. 2021. Monitoring dispersal and habitat associations of two threatened primates along a conservation corridor in western Ecuador. Texas Chapter of the Wildlife Society. Poster presentation. Virtual. 1st Place.
- Wilson, C. D., M. Silva, B. A. Grisham, C. B. Dabbert, J. W. McLaughlin, S. R. Fritts. 2021. Temperature Impacts on Nest Site Selection of Scaled Quail (*Callipepla squamata*) Hens in the Southern High Plains of Texas. Oral presentation presented at the Annual Texas Chapter of the Wildlife Society Meeting. Virtual.
- Silva, M. C. Wilson, B. A. Grisham, C. B. Dabbert, J. W. McLaughlin, **S. R. Fritts**. 2021. Winter Ecology of the Scaled Quail. Oral presentation presented at the Annual Texas Chapter of the Wildlife Society Meeting. Virtual.
- Stamps, B., E. Guest, S. Weaver, A. Hale, C. Hein, B. Morton, J. Crane, M. Chaffee, J. Uglund, **S. Fritts**. 2020. Preliminary results of effectiveness of an ultrasonic deterrent on eastern red bats from flight cage trials. Oral Presentation. Wind Wildlife Research Meeting. Virtual.
- Villatoro Castenada, M., Z. Forsburg, **S. Fritts**, C. Gabor, C. Carlos-Shanley. 2020. Glyphosate and antibiotics reduce activity and affect growth in Rio Grande leopard frog (*Rana berlandieri*) tadpoles. Oral Presentation. American Society of Microbiology - Texas Branch. Virtual.

- Gulah, J., C. Green, **S. Fritts**. 2020. Environmental niche distribution models of the endemic Afrotropical storks. Oral Presentation. American Waterbird Society. Virtual.
- Parker, M., **S. Fritts**, S. Weaver, M. B. Meierhofer, and J. Dutton. 2020. Intra- and interspecific variability in mercury concentrations in Texas bats. Poster Presentation. Texas Chapter of the Wildlife Society, Corpus Christi, TX.
- Wilson, C., M. Silva, B. Grisham, B. Dabbert, J. McLaughlin, **S. Fritts**. 2020. Nest site characteristics of scaled quail hens on a ranch in Potter County, Texas. Poster Presentation. Texas Chapter of the Wildlife Society, Corpus Christi, TX.
- Rylander, R., **S. Fritts**. 2020. Documentation of alternate reproductive strategies and rare behaviors in the black-crested titmouse. Poster Presentation. Texas Chapter of The Wildlife Society, Corpus Christi, TX.
- Tleimat, J., **S. Fritts**, S. McCracken. 2020. Monitoring dispersal and habitat associations of two threatened primates along a conservation corridor in western Ecuador. Poster Presentation. Texas State Women in Science and Engineering Symposium. San Marcos, TX.
- Tleimat, J., **S. Fritts**, S. McCracken. 2020. Monitoring dispersal and habitat associations of two threatened primates along a conservation corridor in western Ecuador. Poster Presentation. Texas State Biology Department Colloquium. San Marcos, TX.
- Parker, M. C., **S. Fritts**, S. Weaver, M. B. Meierhofer, and J. Dutton. 2020. Mercury Concentrations in Texas Bats. Poster Presentation. Biology Student Colloquium at Texas State University. San Marcos, TX.
- Commiskey, A., **S. Fritts**. 2019. Activity patterns of bats on the Texas Coast. Poster Presentation. Texas State University SURE Program Symposium. San Marcos, TX.
- Castleberry, S., C. Moorman, **S. Fritts**, S. Grodsky, D. Hazel, J. Homyack. 2019. Wildlife occurrence data for risk-based assessment. Oral Presentation. International Workshop on Adequacy of Spatial Databases for Conducting Risk Assessments of Sustainable Wood Sourcing Practices of the U.S. Industrial Wood Pellet Industry Supplying European Energy Demand, Athens, GA.
- Neuharth, D., S. Drukker, **S. Fritts**, M. Forstner. 2019. In primary succession: the response of a lizard assemblage eight years after catastrophic wildfire. Oral Presentation. Texas Herpetological Society Annual Symposium. Alpine, TX.
- Neuharth, D., **S. Fritts**, M. Forstner. 2019. Response of a lizard assemblage following a catastrophic wildfire. Oral Presentation. Joint Meeting of Ichthyologists and Herpetologists. Snow Bird, UT.
- Parker, M., J. Rogers, **S. Fritts**. 2019. Drivers of occupancy for bats on the Gulf Coast of Texas. Poster Presentation. North American Society for Bat Research. Kalamazoo, MI.
- Rogers, J., Parker, M., **S. Fritts**. 2019. Summer roost ecology of evening bats on the Gulf Coast of Texas. Poster Presentation. North American Society for Bat Research. Kalamazoo, MI.
- Commiskey, A., **S. Fritts**. 2019. Activity patterns of bats on the Texas Coast. Poster Presentation. North American Society for Bat Research. Kalamazoo, MI.
- Tleimat, J., A. Adam, I. Azhar, A. Mahyudin, **S. Fritts**. 2019. Winners and losers: Small mammal responses to tropical land use change. Poster Presentation. Texas Chapter of the Wildlife Society. Montgomery, TX.
- Parker, M., J. Rogers, **S. Fritts**. 2019. Assessing occupancy of bats on the Gulf Coast of Texas. Poster Presentation. Texas Chapter of the Wildlife Society Annual Conference. Montgomery, TX.
- Rogers, J., Parker, M., **S. Fritts**. 2019. Summer roost ecology of evening bats on the Gulf Coast of Texas. Poster Presentation. Texas Chapter of the Wildlife Society Annual Conference. Montgomery, TX.

- Tleimat, J., A. Adam, I. Azhar, A. Mahyudin, **S. Fritts**. 2019. Winners and losers: Small mammal responses to tropical land use change. Poster Presentation. Texas Society of Mammalogists. Junction, TX.
- Parker, M., J. Rogers, **S. Fritts**. 2019. Assessing Occupancy of Bats on the Gulf Coast of Texas. Poster Presentation. Texas Chapter of Mammalogists. Junction, TX.
- Rogers, J., M. Parker, **S. Fritts**. 2019. Urban tree roost use by evening bats in Texas. Poster Presentation. Texas Chapter of Mammalogists. Junction, TX.
- Griffin, C., B. Grisham, D. Greene, **S. Fritts**. 2018. Identifying thermal landscapes for lesser prairie-chicken conservation. Poster Presentation. The Wildlife Society Annual Conference. Cleveland, OH.
- Rogers, J., M. Parker, **S. Fritts**. 2018. Summer roosting ecology of *Nycticeius humeralis* on the Gulf Coast of Texas. Poster Presentation. North American Symposium for Bat Research. Puerto Vallarta, Mexico.
- Parker, M., J. Rogers, **S. Fritts**. 2018. Drivers of bat activity and occupancy on the Gulf Coast of Texas. Poster Presentation. North American Symposium for Bat Research. Puerto Vallarta, Mexico.
- Tyler, R., J. Rogers, **S. Fritts**. 2018. Effects of vertical differences in detector location on bat occupancy estimation using acoustics. Poster Presentation. Undergraduate Research Conference. Texas State University, San Marcos, TX.
- Fritts, S.**, B. Grisham, C. Boal, D. Haukos, R. Cox, P. McDaniel, D. Greene. 2018. Interactive effects of grazing and severe drought on a bioindicator species. Texas Chapter of The Wildlife Society Meeting. Annual Conference. Dallas, TX.
- Miyazono, S., A. Pease, **S. Fritts**, B. Grisham, K. Mayes, S. Magnelia, P. Bean. 2018. Habitat associations of young-or-the-year Rio Grande Blue Sucker in the Trans-Pecos region of the Rio Grande. Oral Presentation. The Texas Chapter of the American Fisheries Society Annual Conference. College Station, TX.
- Fritts, S.**, C. Moorman, D. Hazel, J. Homyack, S. Castleberry, C. Farrell, S. Grodsky, E. Evans. 2017. Rodent response to harvesting woody biomass for bioenergy production. The Wildlife Society. Albuquerque, NM.
- Greene, D., B. Grisham, **Fritts, S.**, C. Boal, D. Haukos, R. Cox, W. Heck. 2017. Lesser prairie-chicken brood ecology in response to land management in the sand shinnery oak prairie ecoregion. The Wildlife Society. Albuquerque, NM.
- Fritts, S.R.**, B.A. Grisham, R.D. Cox, C.W. Boal, D.A. Haukos, and P. McDaniel. 2016. Assessing potential interactions between drought and grazing on lesser prairie-chicken demographics. The Wildlife Society. Raleigh, NC.
- Fritts, S.**, B. Grisham, C. Boal, D. Haukos, R. Cox, P. McDaniel. 2016. Influence of vegetation on lesser prairie-chicken abundance, survival, and recruitment following an intense drought. Texas Chapter of The Wildlife Society Meeting Annual Conference. San Antonio, TX.
- Godar, A., B. Grisham, B. Ross, C. Boal, **S. Fritts**, C. Griffin, C. Hagen, D. Haukos, and M. Patten. 2016. Incorporating contemporary statistical methods into long-term ecological data: A case study using lesser prairie-chickens. Kansas Natural Resource Conference. Wichita, KS.
- Godar, A., B. Grisham, C. Griffin, **S. Fritts**, C. Boal, D. Haukos, J. Pitman, C. Hagen, and M. Patten. 2016. Influence of weather parameters on Lesser Prairie-Chicken rangewide nest survival. Texas Chapter of the Wildlife Society. Cottam Awards. San Antonio, TX.

- Godar, A. B. Grisham, B. Ross, C. Boal, **S. Fritts**, C. W. Boal, D. A. Haukos, J. C. Pitman, G. M. Beauprez, M. A. Patten, and C. A. Hagen. 2016. A Range-Wide assessment of the influence of anthropogenic structures on Lesser Prairie-Chicken lek attendance. Texas Chapter of The Wildlife Society Meeting Annual Conference. San Antonio, Texas, TX.
- Godar, A., B. Grisham, C. Griffin, **S. Fritts**, C. Boal, D. Haukos, J. Pitman, C. Hagen, and M. Patten. 2016. Influence of weather parameters on lesser prairie-chicken rangewide nest survival. Texas Tech Annual Biological Sciences Symposium. Lubbock, TX.
- Fritts, S.**, B. Grisham, C. Boal, D. Haukos, R. Cox, P. McDaniel. 2016. Hierarchical modeling of lesser prairie-chicken demographic response to grazing and weather. Society of Range Management Annual Conference. Society of Range Management Annual Conference. Corpus Christi, TX.
- Griffin, C., A. Godar, **S. Fritts**, D. Greene, B. Grisham, C. Boal, D. Haukos, J. Pitman, G. Beauprez, M. Patten, C. Hagen. 2016. A range-wide assessment of the influence of anthropogenic structures and land cover patch size on lesser prairie-lek attendance. North America Ornithological Conference, American Ornithological Union, Washington, DC.
- Fritts, S.**, B. Grisham, D. Haukos, C. Boal, M. Patten, D. Wolfe, C. Dixon, R. Cox, W. Heck. 2016. Long-term evaluation of lesser prairie-chicken nest ecology in response to grassland restoration at two spatial scales. Society of Range Management Annual Conference. Corpus Christi, TX.
- Griffin, C., A. Godar, B. Grisham, **S. Fritts**, C. Boal, D. Haukos, J. Pitman, G. Beauprez, M. Patten, C. Hagen. 2016. A range-wide assessment of the influence of anthropogenic structures and land cover patterns on lesser prairie-lek attendance. Texas Chapter of the Wildlife Society, The Wildlife Society, San Antonio, TX.
- Fritts, S.**, B. Grisham, D. Haukos, C. Boal, M. Patten, D. Wolfe, C. Dixon, R. Cox, W. Heck. 2015. Long-term evaluation of lesser prairie-chicken nest ecology in response to grassland restoration at two spatial scales. Prairie Grouse Technical Council. Nevada, MO.
- Godar, A., B. Grisham, C. Griffin, **S. Fritts**, C. Boal, D. Haukos, J. Pitman, C. Hagen. 2015. The influence of weather parameters on lesser prairie-chicken nest survival. Prairie Grouse Technical Council Meeting. Nevada, MO.
- Fritts, S.**, B. Grisham, D. Haukos, C. Boal, M. Patten, D. Wolfe, C. Dixon, R. Cox, W. Heck. 2015. Long-term evaluation of lesser prairie-chicken nest ecology in response to grassland restoration at two spatial scales. The Wildlife Society Annual Conference. Winnipeg, Manitoba, Canada.
- Fritts, S.** 2015. Do Wildlife Matter? Southcentral Climate Science Center. Lubbock, TX.
- Fritts, S.**, C. Moorman, D. Hazel, J. Homyack, C. Farrell, S. Grodsky, K. Pollock, S. Castleberry. 2014. Small mammal, reptile, and amphibian response to woody biomass harvesting. Biomass Harvesting Sustainability Webinar Series. North Carolina State University Forestry and Environmental Outreach Program. Webinar.
- Grodsky, S, C. Moorman, **S. Fritts**, S. Castleberry, D. Hazel, C. Sorenson, T. Wigley. 2014. Bird and invertebrate response to woody biomass harvest: Preliminary Findings and future directions. Biomass Harvesting Sustainability Webinar Series. North Carolina State University Forestry and Environmental Outreach Program. Webinar.
- Fritts, S.**, C. Moorman, D. Hazel, J. Homyack, C. Farrell, S. Grodsky, K. Pollock, S. Castleberry. 2014. Amphibian response to woody biomass harvesting. Texas Chapter of the Wildlife Society Annual Conference. Austin, TX.
- Fritts, S.**, C. Moorman, D. Hazel. 2013. Implementation and sustainability of biomass harvesting guidelines. Catchlight Energy Symposium. Weyerhaeuser Sustainability Research Meeting. New Bern, NC.

- Fritts, S.** 2013. Climate change and amphibians. North Carolina State University Herpetology Club. Raleigh, NC.
- Fritts, S.** 2013. Climate science and the environment. Southeast Climate Science Center. Raleigh, NC.
- Fritts, S.** 2008. The effects of agricultural channel maintenance on fish populations in Champaign County, Illinois. University of Illinois at Urbana-Champaign. Department of Natural Resources and Environmental Sciences Seminar. Champaign, IL.
- Fritts, S.** 2003. An inventory and assessment of medicinal ora and fauna used by a traditional healer in Limpopo Province, South Africa. Center for Undergraduate Research Opportunities Symposium. University of Georgia. Athens, GA.

2. Invited Talks, Lectures, and Presentations:

- Fritts, S.,** T. Graves. 2016. Models that work: taking charge of change. Women of Wildlife Symposium. The Wildlife Society Annual Conference, Raleigh, NC.
- Fritts, S.,** C.E. Moorman, S.M. Grodsky, D.W. Hazel, J.A. Homyack, C.B. Farrell, S.B. Castleberry. 2016. Herpetofauna response to woody biomass harvesting. Response of Amphibians and Reptiles to Anthropogenic Disturbance Symposium. The Wildlife Society Annual Conference, Raleigh, NC.
- Moorman, C. E., S. Grodsky, **S. Fritts,** J. Campbell, C. Sorenson, M. Bertone, S. Castleberry, and T. B. Wigley. 2016. Multi-scale invertebrate response to harvest residue removal. The Wildlife Society Annual Conference, Raleigh, NC.
- Fritts, S.** Wildlife and woody biomass. 2014. Utilizing Woody Biomass for Energy: Policy, Perspective and Practice (Workshop) Statesville, NC.
- Grodsky, S., **S. Fritts,** T. Wigley, C. Moorman. 2014. A multi-pronged approach to measuring effects of private lands management on biodiversity: conservation and forest bioenergy. North American Congress for Conservation Biology. Symposium on Applications of Biodiversity Metrics on Private Lands for Conservation Outcomes. Missoula, MT.
- Fritts, S.,** C. Moorman, D. Hazel, J. Homyack, S. Castleberry, C. Farrell, S. Grodsky. 2013. Reptile and amphibian response to biomass harvesting guidelines in intensively managed pine plantations. Wildlife response to intensive management of eastern forests symposium. The Wildlife Society Annual Conference. Milwaukee, WI.
- Grodsky, S, C. Moorman, **S. Fritts, S.** Castleberry, and T. Wigley. 2013. Effects of biomass harvesting guidelines on avian habitat use. The Wildlife Society Annual Conference. Wildlife Response to Intensive Management of Eastern Forests Symposium. Milwaukee, WI.
- Fritts, S.,** C. Moorman, D. Hazel, J. Homyack, C. Farrell, S. Grodsky, K. Pollock, S. Grodsky. 2013. Reptile, amphibian, and small mammal response to woody biomass harvesting. North Carolina Association of Environmental Professional. Raleigh, NC.
- Fritts, S.,** C. Moorman, D. Hazel, J. Homyack, C. Farrell, S. Grodsky, K. Pollock, S. Castleberry. 2012. Amphibian response to woody biomass harvesting. North Carolina Association of Environmental Professionals. Raleigh, North Carolina.

3. Consultancies:

N/A

4. Workshops:

Integrated Population Modeling. 2016. USGS Patuxent Wildlife Research Station. Laurel, Maryland.

Introduction to Bayesian Statistics. 2016. Texas State University. San Marcos, Texas.

Geospatial Analysis in R. 2015. University of Texas Summer Statistics Institute. Austin, Texas.

Linear Mixed Effects Modeling. 2015. University of Texas Summer Statistics Institute, Austin, Texas.

Climate Science and Downscaling. 2015. Texas Tech University. Lubbock, Texas.

Analyses of Wildlife Spatial Behaviors and Habitat Use with Adehabitat R Packages. 2013. The Wildlife Society Meeting. Milwaukee, Wisconsin.

Climate Science Boot Camp. 2013. United States Geological Survey Northeast Climate Science Center. McCall, Idaho.

Hierarchical Models for Abundance, Distribution, and Species Richness in Structured Populations using Unmarked/R and WinBUGS. 2013. USGS Patuxent Wildlife Research Center, Maryland.

University Global Partnership Network Doctoral Climate Change Seminar Participant. 2013. Raleigh, North Carolina; Outer Banks, North Carolina; and Washington D.C.

Spatial Statistics in R. 2012. The Wildlife Society Meeting, Portland, Oregon.

5. Other Works not in Print:

a. Works "submitted" or "under review":

Kays, R., M. Cove, ..., **S. Fritts**, W. McShae. SNAPSHOT USA 2020: A second coordinated national camera trap survey of the United States during the COVID-19 Pandemic. Ecology.

Guest, E., B. Stamps, S. Weaver, C. Hein, C. A., **S. Fritts**. Hypotheses regarding the attraction of bats to wind turbines. Invited for Special Issues in Bat Biology in Relation to Wind Energy Development. Animals.

Gula, J., S. Fritts, M. Green. Range-wide distributions of African storks and relationships with protected areas. Ibis.

Casteneda, M., Z. Forsberg, S. Fritts, C. Gabor, C. Carlos-Shanley. Exposure to glyphosate and antibiotics alters gut microbial communities, growth, and behavior in *Rana berlandieri*. Biology.

Allen, M., C. Rega-Brodsky, K. Weiss, A. Green, F. Iannarilli, J. Tleimat, **S. Fritts**, D. Herrera. Human intensity and climate drive functional differentiation of mammal communities at varying spatial scales across the USA. Global Change Biology.

Rogers, J., M. Parker, S. Fritts. Urban roosting of evening bats on the Texas Gulf Coast. Journal of Fish and Wildlife Management.

White, R. M., Silva, C. Wilson, B. Buckely, J. McLaughlin, **S. Fritts**, B. Grisham. A comparison of VHF and GPS survival estimates for two quail species in Texas. Wildlife Society Bulletin.

Greene, D., B. Grisham, **S. Fritts**, C. Boal, D. Haukos, R. Cox, W. Heck. 2020. Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) brood ecology in response to various levels of land management in the Sand Shinnery Oak Prairie Ecoregion. Wildlife Society Bulletin.

b. Works "in progress":

- Rylander R., S. Fritts. Documentation of alternative reproductive strategies of the black-crested titmouse (*Baeolophus atricristatus*). Southwestern Naturalist.
- Rylander R., S. Fritts, A. Aspbury, T. R. Simpson, F. Weckerly, M. Patten. Welcome to suburbia: the effects of urbanization on a kin-structured songbird. Auk.
- Rylander R., S. Fritts, A. Aspbury, T. R. Simpson, F. Weckerly, M. Patten. Assessing population demographics of a social-structured songbird in rural and urban landscapes. Urban Ecosystems.
- Rylander R., S. Fritts, A. Aspbury, T. R. Simpson, F. Weckerly, M. Patten. Whether city-slicker or country-bumpkin, black-crested titmice adapt to urbanization regarding nesting success and productivity. Condor.
- Rylander R., S. Fritts, A. Aspbury, T. R. Simpson, F. Weckerly, M. Patten. Assessing inclusive fitness benefits associated with resource sharing in a familial flocking songbird. Behavioral Ecology and Sociobiology.
- Grisham, B., M. Silva, S. Harryman, C. Griffin, S. Fritts, D. Green. The role of agricultural land maintenance on microclimate in sand shinnery oak prairie ecosystems.
- Kimes, H., S. Weaver, E. Baerwald, W. Nowlin, **S. Fritts**. Landscape characteristics influence bat fatalities at wind farms at multiple spatial scales.
- Tyler, R., S. Weaver, B. Morton, N. Durish, **S. Fritts**. Comparing thermal imaging cameras to acoustic detectors for pre-construction bat risk assessments.
- Tleimat, J., S. Fritts, S. McCracken. Using sound loggers to detect increased illegal logging in an Ecuadorian forest during the COVID-19 pandemic.
- Bohannon, A., L Bassett, S. Sirsi, A. MacLaren, D. Foley, S. Fritts, L. Pharr, M. Forstner. Reproductive biology of Rio Grande Cooters (*Pseudemys gorzugi*) in western Texas. Journal of Herpetology.
- Stamps, B., Guest, E., Weaver, S., Hein, C., Hale, A., & Fritts, S. R. Bat flight and echolocation responses to varying ultrasonic acoustic deterrent emissions.
- Watson, K., Boal, C., Bibles, B., **Fritts, S. R.**, & Ray, J. Risk of Swainson's Hawks encountering wind turbines across their range.
- Tleimat, J. M., McCracken, S. F., & Fritts, S. R. Habitat use of two threatened primate species in coastal Ecuador.
- Silva, M., Wilson, C., Fritts, S. R., & Grisham, B. Year-round demographics of Scaled Quail in Texas.
- Wilson, C., Silva, M., Grisham, B., & Fritts, S. R. Year-round habitat use of Scaled Quail in Texas.
- Parker, M., S. Fritts, S. Weaver, M. Meierhofer, and J. Dutton. 2020. Mercury concentrations in Texas bats.
- Tabandera, R., T. Grobowski, S. Colbert, **S. Fritts**. Comparison of fish assemblages and habitat use of native and non-native estuarine species in fishpond complex in Hilo, Hawai'i. Marine Fisheries.
- Flaska, S., J. Veech, **S. Fritts**, T. Swannack. Interspecific Spacing between Harvester ant (*Pogonomyrmex barbatus*) and red imported fire ant (*Solenopsis invicta*) colonies along the invasion gradient in Texas, USA. Ecological Entomology.

C. Scholarly / Creative Grants and Contracts:

1. Funded External Grants and Contracts:

Wind Wildlife Research Fund. Weaver, S., A. Hale, D. Nelson, **S. Fritts**, T. Katzner. Apr 2021 – Dec 2022. Understanding interspecific differences between male and female bat collision risk to inform minimization strategies. \$149,875.

Duke Energy. Weaver, S. **S. Fritts**, B. Morton, N. Durish. Jan 2021 – Dec 2023. Comparing thermal imaging cameras to acoustic detectors for pre-construction bat risk assessments. \$69,913.

Ecolab. Rylander, R. **S. Fritts**. Jan 2020 - Dec 2020. Comparison of black-crested titmouse family function, reproductive success, and territory size between urban and rural populations. \$5,967.

Texas Parks and Wildlife Department. Rodriguez, D., **S. Fritts**. Jan 2020 – Aug 2022. Population monitoring and assessing disease risk in Concho and Brazos water snakes. \$196,620.

Department of Energy and National Renewable Energy Lab. Straw, B., **S. Fritts**, S. Weaver, C. Hein, T. Norstrand. Oct 2019 – Jan 2022. Evaluating deterrent stimuli for increasing species-specific effectiveness of an advanced ultrasonic acoustic deterrent. \$498,238.

NextEra Energy and Texas Christian University. **Fritts, S.**, A. Hale, S. Weaver. Aug 2019 – Apr 2020. Evaluating deterrent stimuli for increasing species-specific effectiveness of an advanced ultrasonic acoustic deterrent. \$179,470.

Texas Parks and Wildlife Department. **Fritts, S.**, S. Weaver. Nov 2019 - Aug 2024. Activity and distribution of summer bats in Texas. \$499,988.

Ecolab. Rylander, R. **S. Fritts**. Jan – Dec 2019. Comparison of black-crested titmouse family function, reproductive success, and territory size between urban and rural populations. \$8,618.

Texas Parks and Wildlife Department. Dabbert, B., B. Grisham, **S. Fritts**. Sep 2018 – Sept 2021. Influence of woody vegetation patterns on scaled quail demographics. \$536,890.

U.S. Fish and Wildlife Service. **Fritts, S.** May 2018 – Aug 2019. Ecology of bats on the Texas coast. \$24,116.

EcoLab. Rylander, R. **S. Fritts**. Jan 2018 – Dec 2018. Comparison of black-crested titmouse family function, reproductive success, and territory size between urban and rural populations. \$9,667.

Texas Military Department. Stevens, R., **S. Fritts**. 2017. Camp Maxey herpetofauna surveys. \$56,398.

National Science Foundation, International Research Experiences for Students (IRES). Farmer, M., R. Verble, **S. Fritts**, T. Kingston, D. Weindorf. 2016 – 2020. An international field research experience for students to establish long term ecological monitoring of a tropical agroforestry program in the rural Borneo Highlands. \$249,883.

Texas Military Department. **Fritts, S.**, R. Stevens. Jan 2016 - Dec 2018. Fort Wolters bat surveys. \$29,945.

Pheasants Forever. Grisham, B., **S. Fritts**, D. Green. 2016. Identification of current conservation actions needed to preserve lesser prairie-chicken populations in the context of land management practices and environmental variation. \$100,000.

Texas Parks and Wildlife Department. **Fritts, S.**, T., Grabowski, B. Grisham, K. Mayes, P. Bean. 2015. Recruitment dynamics and reproductive ecology of blue sucker in Texas, with a focus on the Big Bend region of the Rio Grande. \$276,850.

North Carolina Department of Agriculture and Consumer Science. Moorman, C., Hazel, D., **Fritts, S.** 2015. Directing wildlife-friendly forest bioenergy development in North Carolina. \$157,559.

Biofuels Center of North Carolina Research Grant. **Fritts, S.**, S. Grodsky. 2012. Evaluating biomass harvesting practices with respect to wildlife sustainability. PIs: Dr. C. Moorman and Dr. D. Hazel. Three years. \$100,000.

Southeast Climate Science Center Global Change Fellowship. 2011-2013. \$60,000.

The Wildlife Society. Student Travel Grant. **Fritts, S.**, C. Moorman, D. Hazel, J. Homyack, S. Castleberry, K. Pollock, C. Farrell, S. Grodsky. 2013. Amphibian response to experimental biomass harvesting guidelines. \$500.

North Carolina Fish and Wildlife Federation Grant. **Fritts, S.** Assessment of southern toad habitat selection at multiple spatial scales. 2011. \$1,000.

7. Submitted, but not Funded, External Grants and Contracts:

U.S. Fish and Wildlife Service. **Fritts, S.**, C. Carlos-Shanley, S. Weaver, D. Nelson. 2021. Linking population connectivity and skin microbiomes to variations in white-nose syndrome related fatalities in *Myotis velifer*. \$248,185.

Texas Parks and Wildlife Department. **S. Fritts**, S. Weaver, C. Carlos-Shanley, D. Nelson, Morton, Brogan, N. Fuller. 2021. Using innovative approaches to assess movement and population connectivity of *Myotis velifer*, \$299,997.

Wind Wildlife Research Fund. Katzner, T., D. Nelson, S. Weaver, A. Hale, **S. Fritts**, T. Katzner, T. Conkling, J. Diffendorfer. 2020. Defining acceptable levels of collision risk for bats. \$165,000.

Wind and Wildlife Research Fund. **S. Fritts**, S. Weaver, C. Hein, T. Norstrand. 2019. Evaluating deterrent stimuli for increasing species-specific effectiveness of an advanced ultrasonic acoustic deterrent. \$175,850.

US Fish and Wildlife Service-Asian Elephant Conservation Fund. Serenari, C. F. Othman, B. Goossens, **S. Fritts**. 2019. Assessing village and institutional capacity to reduce human-Bornean elephant conflict in Sabah, Malaysia, \$73,137.

Sea World-Busch Gardens Conservation Fund. Serenari, C.; N. Othman, **S. Fritts**, B. Goossens. 2018. Improving rescue and conservation of Bornean elephants in Sabah, Malaysia. \$24,744.

Texas State University Research Enhancement Program. **Fritts, S.** 2018. Oil palm plantations as habitat fragmentation for small mammals in Borneo. \$15,975.

Texas Comptroller. **Fritts, S.**, I. Castro-Arellano, S. Weaver, D. Brown. 2018. State-wide assessment of tricolored bats. \$806,186.

Texas Parks and Wildlife Department. Veech, J., **S. Fritts**. 2018. Examining the accuracy of distribution models for four reptile species in south Texas. \$188,553.

Texas Parks and Wildlife Department. **Fritts, S.**, D. Rodriguez, M. Forstner. 2017. Post de-listing monitoring of the Concho water snake. \$125,089.

The Franklin Foundation. **Fritts, S.** 2017. Small mammals as bioindicators of sustainable development of an agroforestry program in the rural Borneo Highlands. \$6,000.

Cleveland Zoo Asia Seed Grant. **Fritts, S.** 2017. Small mammals as bioindicators of sustainable development of an agroforestry program in the rural Borneo Highlands. \$3,500.

Texas Parks and Wildlife Conservation License Plate Program. **Fritts, S.**, K. Daniel. 2017. Occupancy modeling of spotted bats in the Big Bend region of Texas. \$25,729.

National Science Foundation. Booker, J., **S. Fritts**, T. McLendon. 2017. INFEWS/T3: Quantifying food, water, and energy yield benefits from woody biomass harvest in shrubland ecosystems. \$2,099,721.

South Central Climate Science Center. **Fritts, S.**, N. McIntyre, K. Griffis-Kyle, S. Swain. 2017. Interactions of weather and land use on population persistence of playa-dependent birds in the South-central Great Plains. \$299,909.

National Science Foundation. Grisham, B., **S. Fritts**, D. Greene. 2017. Evaluating microclimate as a mechanism of population ecology of a threatened species in an imperiled ecosystem. \$1,141,098.

South Central Climate Science Center. Grisham, B., **S. Fritts, S.** Longing, D. Greene. 2017. The impact of weather and land management on diversity, abundance, and density of ground-dwelling and pollinating insects in shinnery oak grasslands in New Mexico and Texas. \$270,000.

U.S. Fish and Wildlife Service. Griffis-Kyle, K., C. Godard, **S. Fritts**. 2017. Enhancement of turtle recruitment in the Kalamazoo River. \$296,335.

3. External Grants and Contracts in Review

National Renewable Energy Lab. 2021. Fritts, S., S. Weaver, S. Anupam, B. Morton. Comparing species-specific flight and acoustic responses from two ultrasonic acoustic deterrents (blade mounted and nacelle mounted) with particular focus on *Lasiurus cinereus* and *Perimyotis subflavus*. \$499,997.

4. Funded Internal Grants and Contracts

Texas State University Research Enhancement Program. **Fritts, S.**, and D. Rodriguez. Jan 2020-Jun 2021. Conservation in the Canopy: informing future corridor placement via non-invasive monitoring of vertebrate movement. \$15,996.

Texas State University International Research Accelerator Program. **Fritts, S.** Jan - Dec 2018. \$5,832.

5. Submitted, but not Funded, Internal Grants and Contracts:

Texas State Research Enhancement Program. Carlos-Shanley, C. **Fritts, S.** 2021. Linking skin microbiomes and roosting environments in bats. \$15,866.

6. Internal Grants and Contracts In Review

D. Scholarly / Creative Fellowships, Awards, Honors:

Award / Honor Recipient: Presidential Seminar Award, Texas State University. August 2021

Award / Honor Recipient: Presidential Distinction Award, College of Science and Engineering. July 2021.

E. Scholarly / Creative Professional Development Activities Attended:

N/A

F. Media Recognition:

2020: Fox News: Conserving Texas Bats

IV. SERVICE

A. Institutional

1. University:

N/A

2. College:

N/A

3. Department/School:

2021

Justice, Equity, Diversity, Inclusion Committee Member, Department of Biology, Texas State University

William E. Norris, Jr. Scholarship, Review Panel, Department of Biology, Texas State University.

John T. Baccus Outstanding Achievement Award, Review Panel, Department of Biology, Texas State University.

2020

Justice, Equity, Diversity, Inclusion Committee Member, Department of Biology, Texas State University

Bat Association at Texas State, Faculty Advisor, Department of Biology, Texas State University.

William E. Norris, Jr. Scholarship, Review Panel, Department of Biology, Texas State University.

John T. Baccus Outstanding Achievement Award, Review Panel, Department of Biology, Texas State University.

2019

Bat Association at Texas State, Faculty Advisor, Department of Biology, Texas State University.

Texas Ornithological Society, Faculty Advisor, Department of Biology, Texas State University.

William E. Norris, Jr. Scholarship, Review Panel, Department of Biology, Texas State University.

Stem Undergraduate Research Experience (SURE), Review Panel, Texas State University.

2018

Bat Association at Texas State, Faculty Advisor, Department of Biology, Texas State University.

Texas Ornithological Society, Faculty Advisor, Department of Biology, Texas State University.

William E. Norris, Jr. Scholarship, Review Panel, Department of Biology, Texas State University.

John T. Baccus Outstanding Achievement Award, Review Panel, Department of Biology, Texas State University.

2017

Texas State Ornithological Society Faculty Advisor, Department of Biology, Texas State University.

The Wildlife Society, Program Committee; Submitted Poster Abstract Subchair, Annual Conference; Albuquerque, New Mexico.

Texas Tech Association of Biological Sciences Oral Presentation Judge, Lubbock, Texas

B. Professional:

2021

Bat Conservation International Scholarship Review Committee

Certification Review Board, Southwest Representative, The Wildlife Society

Certification Representative, Texas Chapter of The Wildlife Society

2020

Certification Review Board, Southwest Representative, The Wildlife Society

Contributed Papers Subcommittee; The Wildlife Society Annual Conference; Raleigh, North Carolina.

The Wildlife Society Annual Conference, Abstract Review Committee.

2019

The Wildlife Society Program Committee, Special Session Chair, Annual Conference, Reno, Nevada.

2018

The Wildlife Society Program Committee; Submitted Poster Abstract Subchair, Annual Conference; Cleveland, Ohio.

2017

The Wildlife Society Leadership Institute Application, Review Committee.

C. Community:

2016-2017

Designer and Coordinator; Science by the Glass; Texas Tech Climate Science Center.

D. Organization Memberships:

The Wildlife Society

Texas Chapter of The Wildlife Society

American Society of Mammalogists