

Simon Tye

PhD Student, Siepielski Lab, University of Arkansas

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Education

<i>University of Arkansas</i> , PhD - Biology	2018 - Present
<i>University of Nebraska at Kearney</i> , B.S. - Biology (Wildlife)	2014 - 2017
<i>Creighton University</i>	2008 - 2010

Teaching Experience

<i>Teaching assistant - General Ecology Lab</i>	2019 - Present
<ul style="list-style-type: none">Instructed two lab sections for upper-level undergraduates.	
<i>Teaching assistant - Human Anatomy Lab</i>	2019
<ul style="list-style-type: none">Instructed two lab sections for upper-level undergraduates.	
<i>Teaching assistant - Principles of Biology Lab</i>	2018
<ul style="list-style-type: none">Instructed two lab sections for lower-level undergraduates.	

Research Experience

<i>Graphic designer</i>	2019 - Present
<ul style="list-style-type: none">Alverson Lab, University of Arkansas<ul style="list-style-type: none">Created figures for a publication.Created instructional videos for <i>myDiatoms</i>.	
<i>Graduate assistant</i>	2018 - Present
<ul style="list-style-type: none">Siepielski Lab, University of Arkansas<ul style="list-style-type: none">Constructed mesocosms to compare mass mortality events to a trophic cascade and resource pulse.Compared digestive physiology components of different species and populations of damselfly larvae (<i>Enallagma</i>).	
<i>Undergraduate researcher</i>	2015 - 2017
<ul style="list-style-type: none">Witnessing Watersheds Lab, University Nebraska at Kearney<ul style="list-style-type: none">Examined decadal changes to channel morphology and floodplain habitats of the upper Gila River, New Mexico (1935-2016).Used time-lapse photography to document biodiversity associated with an American beaver lodge.	
<i>Undergraduate researcher</i>	2015 - 2017
<ul style="list-style-type: none">Geluso Lab, University Nebraska at Kearney<ul style="list-style-type: none">Used camera traps to document night-roosting behaviors of the northern long-eared myotis (<i>Myotis septentrionalis</i>).	

- Used radiotransmitters to locate day roosts of 4 bat species in New Mexico.

Research technician

2016

- Geluso Lab, University Nebraska at Kearney
 - Used radiotransmitters to locate day roosts of 4 bat species in Nebraska.

Research technician

2015

- Center for Global Soundscapes, Purdue University
 - Setup and maintained bioacoustic recorders at relict and restored grasslands.

Journal Articles

Published

- Tye, SP**, BK Blaske, and AM Siepielski. 2020. Population-level variation of digestive physiology costs of mounting an immune response in damselflies. *Ecological Entomology*. In press.
- Tye, SP**, and K Geluso. 2019. Day roosts of *Myotis* (Mammalia: Chiroptera) in an arid riparian corridor in southwestern New Mexico. *Western North American Naturalist* 79(4):515-522.
- Tye, SP**, and K Geluso. 2019. Natural history: *Thamnophis radix*. *Herpetological Review* 50(3):603.
- Tye, SP**, IR Gomez, EM Brinley Buckley, and MJ Harner. 2019. Natural history: *Phrynosoma hernandesi*. *Herpetological Review* 50(1):143-144.
- Geluso, K, EC Keele, IR Gomez, NM Pauley, and **SP Tye**. 2018. Night-roosting behaviors for the northern long-eared myotis (*Myotis septentrionalis*) under a bridge revealed by time-lapse photography. *American Midland Naturalist* 179(2):287-293.
- Tye, SP**, and K Geluso. 2017. Geographic distribution: *Tropidoclonion lineatum*. *Herpetological Review* 48(4):187.
- Tye, SP**, K Geluso, and MJ Harner. 2017. Geographic distribution: *Hyla chrysocelis*. *Herpetological Review* 48(2):382-383.
- Tye, SP**, K Geluso, and MJ Harner. 2017. Early emergence and seasonality of the red-bellied snake (*Storeria occipitomaculata*) along the Platte River in south-central Nebraska, USA. *Transactions of the Nebraska Academy of Sciences and Affiliated Societies* 37:11-17.
- Tye, SP**, K Geluso, and MR Fugagli. 2016. Merriam's shrew (*Sorex merriami*) in the diet of a Mexican spotted owl (*Strix occidentalis lucida*) from Grant County, New Mexico. *Museum of Texas Tech Occasional Papers* 341:1-5.

Submitted

- Siepielski, AM, AZ Hasik, T Ping, M Serrano, K Strayhorn, and **SP Tye**. 2019. Predators weaken prey intraspecific competition through natural selection. *Ecology Letters*. In review.

Contributor

- Robinson, CR, and CB Yoakum. 2019. Variation in accessory mental foramen frequency and number in extant hominoids. In press. (Contribution: created figures).

- Lindblom, RA, LM Reichart, BA Mandernack, M Solensky, CW Shoenebeck, and PT Redig. 2017. Influence of snowfall on blood lead levels of free-flying bald eagles (*Haliaeetus leucocephalus*) in the upper Mississippi River Valley. *Journal of Wildlife Diseases* 53(4):816-823. (Contribution: created figures).
- Hongsermeier, A, NF Grandgenett, and DM Simon. 2017. Modeling evolution in the classroom: an interactive LEGO® simulation. *The American Biology Teacher* 79(2):128-134. (Contribution: compiled data).
- Andersen, BR, and K Geluso. 2018. Roost characteristics and clustering behavior of western red bats (*Lasiurus blossevillii*) in southwestern New Mexico. *Western North American Naturalist* 78(2):174-183. (Contribution: collected data).

Presentations

- Harner, MJ, EM Brinley Buckley, ES Soles, D Whited, **SP Tye**, and MS Cooper. 2020. Shifting channels of the Gila: historical analysis of land-cover change along the Cliff-Gila Valley floodplain from 1935 to 2016. *Natural History of the Gila Symposium*, Silver City, NM.
- Tye, SP**, BK Blaske, and AM Siepielski. 2019. Population density influences the digestive physiology costs of mounting an immune response in damselflies. *Ecological Society of America*, Louisville, Kentucky. Poster.
- Tye, SP**, MJ Harner, ML Forsberg, EM Brinley Buckley, and JS Dale. 2018. Biodiversity and animal activity associated with a beaver lodge near the Platte River. *Platte River Basin Ecosystem Symposium*, Wood River, Nebraska. Oral.
- Tye, SP**, and K Geluso. 2017. Day roosts of *Myotis* (Mammalia: Chiroptera) in an arid riparian corridor in southwestern New Mexico. *Central Plains Society of Mammalogists*, Dubuque, Iowa. Poster.
- Geluso, K, EC Keele, IR Gomez, NM Pauley, and **SP Tye**. 2017. Night-roosting behaviors for the northern long-eared myotis (*Myotis septentrionalis*) under a bridge revealed by time-lapse photography. *Central Plains Society of Mammalogists*, Dubuque, Iowa. Poster.
- Harner, MJ, EM Brinley Buckley, and **SP Tye**. 2017. The art and science of the Platte River wetlands. *Museum of Nebraska Art Showcase*, Kearney, Nebraska. Oral.
- Tye, SP**, ML Forsberg, EM Brinley Buckley, K Geluso, JS Dale, and MJ Harner. 2017. Phenology of a North American beaver (*Castor canadensis*) lodge near the Platte River, Nebraska, unveiled by time-lapse photography. *Society for Freshwater Science*, Raleigh, North Carolina. Oral.
- Harner MJ, EM Brinley Buckley, B Gottesman, **SP Tye**, M Farrell, ML Forsberg, and B Pijanowski. 2017. Sights and sounds of the spring sandhill crane migration on the Platte River. *North American Crane Workshop*, Chattanooga, Tennessee.

Awards and Fellowships

David Causey Prize for Graduate Study	2019
• Department of Biological Sciences, University of Arkansas	
Graduate Student Council	2019 - 2022
• American Society of Naturalists	
Doctoral Academy Fellowship	2018 - 2022
• Department of Biological Sciences, University of Arkansas	
Outstanding Undergraduate Student	2017
• University of Nebraska at Kearney	

Grants

Funded

Tye, SP. 2019. Doctoral Student Travel Grant. University of Arkansas. \$1,100.

Tye, SP. 2017. Biology Department Research Award. University of Nebraska at Kearney. \$500.

Tye, SP. 2017. Undergraduate Research and Creative Activity Award. University of Nebraska at Kearney. \$400.

Submitted

Tye, SP. 2019. Potential coevolutionary dynamics after mass mortality events. American Philosophical Society. \$5,000.

Tye, SP. 2019. Role of adaptation in generating community responses to mass mortality events. National Science Foundation Graduate Research Fellowship Program. \$138,000.

Not funded

Tye, SP. 2018. Ecological and evolutionary implications of mass mortality events. National Academy of Sciences, Engineering, and Medicine. \$72,000.

Tye, SP. 2017. Macroinvertebrate communities of the upper Gila River. National Science Foundation Graduate Research Fellowship Program. \$138,000.

Tye, SP, and K Geluso. 2017. Day roosts of bats in an arid riparian corridor in southwestern New Mexico. Holohil. Not funded. \$2,500.

Reviewer

The Prairie Naturalist (1)

Outreach

Lehmberg, ES, **SP Tye**, and CR Chappell. 2020. Command-line programming and bioinformatics for beginners. Evolution, Cleveland, OH. Workshop.

Tye, SP. 2019. Enhancing figures: from ggplot2 to Adobe Illustrator. American Society of Naturalists Graduate Student Council. Blog.

Tye, SP. 2017. Sights and sounds of spring. Platte Basin Timelapse Project. Blog.

Memberships

American Society of Naturalists	2019 - Present
Ecological Society of America	2019 - Present
Society for Freshwater Science	2017 - 2018
Central Plains Society of Mammalogists	2017 - 2018

Software Experience

Multimedia

Adobe Creative Cloud (After Effects, Illustrator, Photoshop, Premiere Pro)

Geographic Information Systems

ERDAS Imagine, ESRI ArcGIS

Coding

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References

Dr. Adam Siepielski

Assistant Professor

Department of Biological Sciences

University of Arkansas

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Dr. Keith Geluso

Professor

Department of Biology

University of Nebraska at Kearney

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Dr. Mary Harner

Associate Professor

Departments of Biology and Communication

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