

# Welcome!

Summer 2021 Newsletter Series

## Upcoming Events:

Stay tuned as Fall 2021 events start to get scheduled and announced!

Outreach GroupMe



# ZoGSS Newsletter

## Summer 2021

We hope you all had a productive and relaxing summer! Stay cool (as best as you can) in this heat, especially those of you with long days in the field!



The Fall 2021 GSSI Tuition Waiver is available now for you to fill out. It is due by Friday, August 20<sup>th</sup>!

<https://grad.okstate.edu/register/tuitionwaiver>



## Caps are still on sale for \$20 each!

Contact Shauni ([shauni.dna.windle@okstate.edu](mailto:shauni.dna.windle@okstate.edu)) for purchase.



Shauni Windle

*Merchandise links will be up on the departmental website for purchase in the future.*

## Expanding Your Horizons STEM Conference

Victoria Roper– along with many other graduate students and faculty at OSU – is involved in planning a conference focused on maintaining STEM interest in middle school girls. This conference already exists in 11 other states, and now they are working to bring it to Oklahoma! Click this [link](#) to learn more.

Reach out to Victoria ([victoria.roper@okstate.edu](mailto:victoria.roper@okstate.edu)) if you are interested in getting involved in a leadership position or as part of a subcommittee.





## Graduate Student Spotlight:

### Emily Geest – Katherine S. McCarter Graduate Student Policy Award Recipient

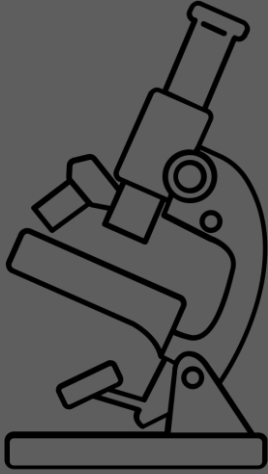


*Provided by the Ecological Society of America (ESA), the Graduate Student Policy Award provides students with opportunities to interact with policymakers, learn from ecologists working in policy, and receive policy and communications training. Award recipients also get to visit Capitol Hill (remotely this year, due to the pandemic) and be involved in discussions about federal support of biological research and education.*



**"It was a great experience that helped me learn the role federal funding has in science and taught me how to communicate my research with non-scientists. If you are interested in science policy at all, I fully recommend applying for this award, because it not only gives you a crash course in science policy but also provides amazing networking opportunities"**





## ZoGSS 2020-2021 Research Awards Recipients *What are they up to now?*

**Ryan Koch**



I work with a group of turtle parasites called acanthocephalans, or thorny-headed worms. They live in the intestines of turtles as adults and are often present in large numbers (e.g. one red-eared slider I dissected had over 4,500 worms). One of my research goals is to conduct histological analyses to determine whether these parasites are causing any pathology to turtles. I acquire turtles as roadkill, and the ZoGSS research award has greatly assisted me with the cost of travel along roadways in Oklahoma.

Also, check out Ryan's recent blog on parasite conservation:  
<https://integrativeandcomparativebiology.wordpress.com/2021/06/22/conservation-in-the-21st-century-why-parasites-matter/>



## Teri Cocke



I am using the research money to fund travel to roadside habitats throughout Payne County, OK. I am collecting bumblebees in roadsides habitats and collecting their pollen to test and see what resources they are utilizing. I want to better understand how roadsides can be managed and restored to help with pollinator declines.

**“So far I have learned that roadsides are loud. Bees are great escape artists. And roadkill is very smelly.”**



## Bailee Augustino



My research focuses on amphibian disease ecology, and more specifically on the effects of emerging pathogens on local frog species. Chytridiomycosis is responsible for amphibian population declines around the world, and so much is left to be discovered about it. By understanding the sublethal effects of this pathogen, we hope to know more about how diseases affect life history traits of amphibians. American toads (*Anaxyrus americanus*) are very common around central Stillwater and allow us to closely study how chytrid infections affect their mating behaviors, specifically male calling structure. With this award, I was able to travel to multiple field sites around Stillwater and study these amazing creatures!



## Summer Defenses

### Brian Eachus – M.S. defense

Comparison of zooplankton communities in Oklahoma: Implications for Paddlefish management and restoration

### Sarah Elzay – Ph.D. defense

A mass flowering crop supports native bees and fosters bee-plant mutualisms in the southern Great Plains.

### Justin Agan – Ph.D. defense

Precocial sexual selection in *Crotaphytus collaris*: A field study

### Jack Spicer – M.S. defense

The effects of body size on frog swimming

## April, May, & June Publications

**Austin Leone** – Leone, E.A. (2021). Using equitable teaching practices in a general genetics course. *Cimarron Review MLK Celebration Anthology*. Spring 2021 issue. 104-106. ISSN: 0009-6849.

**Austin Leone** – Jenkins, K., Mead, L., Baum, D., Daniel, K.L., Bucklin, C.J., **Leone, E.A.**, Gibson, J.P., & Naegle, E. (2021). BETTSI – Basic Evolutionary Tree-Thinking Skills Instrument. QUBES Educational Resources. doi: [10.25334/ZQY1-W289](https://doi.org/10.25334/ZQY1-W289)

**Dani Kirsch** – Templon, A.R., **Kirsch, D.R.**, & Towner, M.C. (2021). Contributions of evolutionary anthropology to understanding climate-induced human migration. *American Journal of Human Biology* <https://doi.org/10.1002/ajhb.23635>



## April, May, & June Presentations

### Central Ecology & Evolution Conference (CEEC):

**Teri Cocke** – The Roadsides are Buzzin' : Native Bee Presence in Roadside Habitats.

**Eric Duell** – Exploring coexistence dynamics between sympatric milkweed species.

**James Erdmann** – Parameterizing frog calls for comparative studies.

**Emily Geest** – The impact of patch-burning on nectar quality.

**Scott Goepfner** – How does body condition affect predator induced within and trans-generational plasticity in *Physa* snails?

**Yetkin Ipek** – Growth and ionome-wide responses of a diazotrophic freshwater cyanobacterium to relative supplies of nitrogen, phosphorus and iron.

**Ryan Koch** – Unraveling the role of ostracod and snail hosts in turtle acanthocephalan life cycles.

**Angela Riley** – Paternal removal leads to changes in sociality in zebra finch offspring.

**Jay Walton** – The effects of personality on behavior during agonistic encounters in the brown anole (*Norops sagrei*).

### Other Conferences:

**Md Ibrahim** – Effects of Environmental Chloride Concentration on Copper and Silver Bio-availability and Bio-reactivity in Bluegill (*Lepomis macrochirus*) Fish. Annual Interdisciplinary Toxicology Symposium.

**Md Ibrahim** – Measurements of labile zinc ( $Zn^{2+}$ ) in the rainbow trout gut cell line (RTgutGC) using a fluorescent dye, FluoZin-3AM. Annual Interdisciplinary Toxicology Symposium.





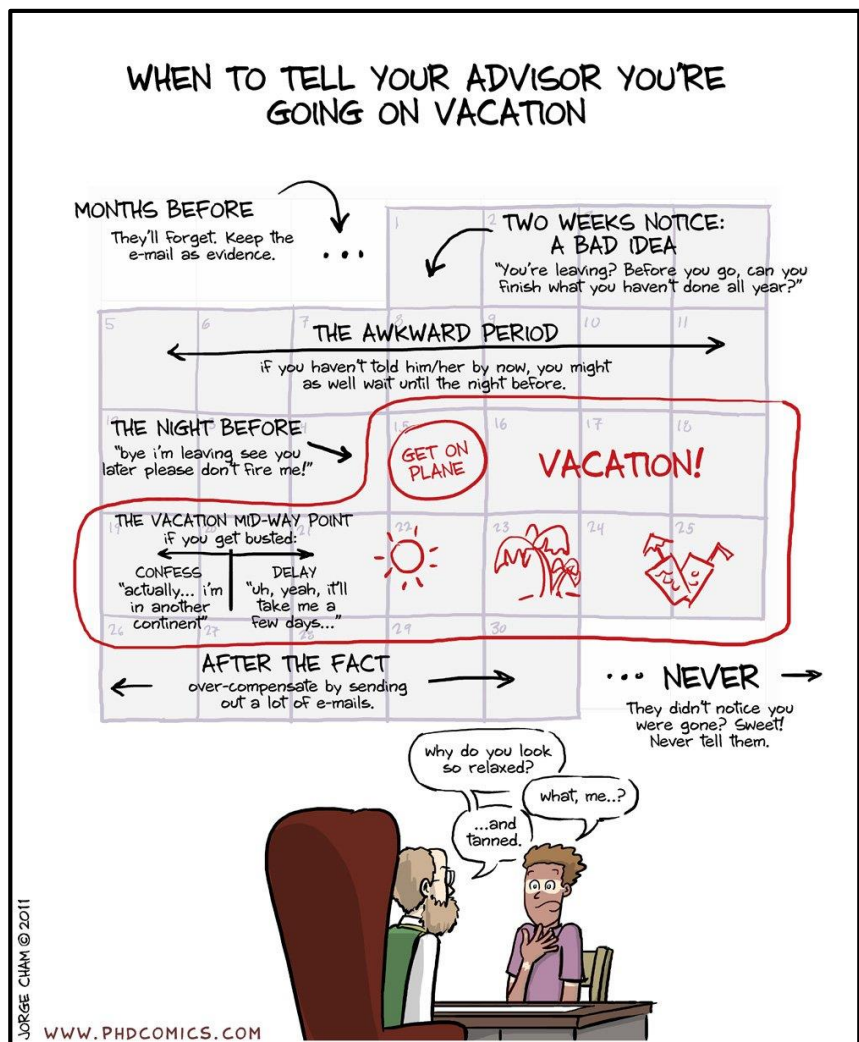


**Sarah Hileman** – Levels of Polycyclic Aromatic Hydrocarbon and Metal Contamination in Urban Playground Soils throughout Oklahoma City Metropolitan. OPSETAC.

**Sarah Hileman** – Levels of Polycyclic Aromatic Hydrocarbon and Metal Contamination in Urban Playground Soils throughout Oklahoma City Metropolitan. ITP Symposium.

**Sarah Hileman** – Toxicology for Museum Application: the Case of the Pink Peromyscus. ITP Symposium.

**Ryan Koch** – Unraveling the role of ostracod and snail hosts in turtle acanthocephalan life cycles. Southwestern Association of Parasitologists.



Don't forget to join our Facebook page "OSU Zoology Graduate Student Society" for more day-to-day updates.

## Contact Us

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### Executive Committee:

James Erdmann – *President*  
 Shauni Windle – *Vice President*  
 Dani Kirsch – *Secretary*  
 Taylor Carlson – *Treasurer*

### Fundraising Committee:

Shauni Windle & Victoria Roper

### Planning Committee:

Ryan Koch

### Seminar Committee:

Taylor Carlson

### Award Committee:

Austin Leone

### Technology Committee:

Emily Geest

### Graduate Committee:

Michael Ellison

### Lunchtime Seminars:

Bailee Augustino

### Faculty Council:

Angela Riley, Taylor Carlson, &  
 Colton Herzog

### GPSGA:

Victoria Roper & Colton Herzog

### Outreach Committee:

Teri Cocke, Michael Ellison, &  
 Victoria Roper

### Workshop Committee:

Victoria Roper

## Meet Your Peers

**Baum lab** – David Berman, Teri Cocke, Eric Duell\*, Emily Geest, Carrie Klase\*, Ashley Knoch, Tyler Spresser\*

**Belden lab** – Sarah Hileman, Carrie Klase\*, Will Mimbs, Adriana Townsend, Ryan Grewe, Shauni Windle\*

**Bolek lab** – Ryan Koch, Ryan Shannon, Allison Bryant

**Bruck lab** – Rachel Hamrock\*, Paige Stevens\*

**Cabrera-Guzmán lab** – Taylor Carlson\*

**Dzialowski lab** – Bobby Bowser, **Samuel Miess**

**Fox lab** – Taylor Carlson\*

**French lab** – Austin Leone, Kyle Moore

**Grindstaff lab** – **Kiley Cox**, Angela Riley, Victoria Roper, Sierra Williams

**Jeyasingh lab** – **Parna Ghosh**, Yetkin Ipek

**Lovern lab** – Brooke Hoover, Jay Walton, Rachel Hamrock\*, Paige Stevens\*

**Luttbeg lab** – Scott Goepfner, Dani Kirsch, Jamie Najar

**McCullagh lab** – **Sabiha Alam**, Racheal Brodsky, Amita Chawla, **Jessica Hurd**, **Luberson Joseph**,

**McMurry lab** – Shauni Windle\*

**Minghetti lab** – MD Ibrahim, Justin Scott

**Moen lab** – **Mitchell Aldridge**

**Reichert lab** – Jonathan Albers, James Erdmann, **Himidu Himansi**, **Alejandro Marcillo**, Jain PK

**Van Den Bussche lab** – Denise Thompson

**Waldman lab** – Bailee Augustino, Michael Ellison, Samantha Garza, **A.J. Hager**, **Ben LaFond**, Sourjya Nath

**Wilder lab** – Jacob Reeves, Tyler Spresser\*, Colton Herzog

**Wogan Lab** – **Sneha Dharwadkar**, **Calvin Schaefer**, **Desi Wilson**

*\*indicates co-advised grad students*

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**ZoGSS serves as the representative organization and voice of the graduate student body of the Department of Integrative Biology at Oklahoma State University. Our mission is to provide professional and social opportunities for the graduate students in our department.**

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