# J. ALEX **BAECHER**



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# **EDUCATION**

MAY 2024 (expected)

INTERDISCIPLINARY ECOLOGY, PHD | UNIVERSITY OF FLORIDA

**DECEMBER 2017** 

**BIOLOGICAL SCIENCES, MS | EASTERN KENTUCKY UNIVERSITY** 

**MAY 2014** 

**BIOLOGICAL SCIENCES, BS | UNIVERSITY OF ARKANSAS** 

# **EXPERIENCE**

AUGUST 2019 - ...

# **GRADUATE ASSISTANT | UNIVERSITY OF FLORIDA**

- Teaching: Instructor of record for Environmental Science Laboratory (EVS 3000L)
- Research: Predicting the effects of climate and land use change on invasive and priority native reptiles and amphibians in the southeastern USA

### **JANUARY 2018 – JULY 2019**

# CONSERVATION AND RESEARCH TECHNICIAN | MEMPHIS ZOOLOGICAL SOCIETY

- Research: Modeled the efficacy of various sperm collection and cryopreservation protocols to develop better amphibian reproductive technologies
- Herpetoculture: Managed animal care for repatriation project for endangered dusky gopher frogs and Louisiana pine snakes using in-vitro fertilization and captive rearing

## MAY - AUGUST 2017

# NSF REU RESEARCH COORDINATOR | EASTERN KENTUCKY UNIVERSITY

• *Teaching:* Coordinated study design, data collection, analysis, and manuscript development for seven students

### **MAY 2015 - AUGUST 2017**

# **GRADUATE ASSISTANT** | EASTERN KENTUCKY UNIVERSITY

- Teaching: 2 3 sections per week Human Anatomy Lab
- Research: Investigated the population dynamics of woodland salamanders in old growth Appalachian Forest
- Service: Herpetocultural manager of live outreach animals, including venomous reptiles; led specimen preparation and accessioning; curated digitization of collections

# **JANUARY 2014 - MARCH 2015**

# **RESEARCH ASSISTANT | UNIVERSITY OF ARKANSAS**

• Research: Managed field data collection for project investigating the effects of ecological restoration of Tallgrass Prairie of grassland herpetofauna

# **AUGUST 2012 – JANUARY 2014**

# **RESEARCH TECHNICIAN** | UNIVERSITY OF ARKANSAS

 Research: Assisted in research projects, including field and laboratory data collection, database management and analysis, and community outreach

# **INVITED PEER REVIEWER**

# JOURNAL | QTY

BIOLOGICAL CONSERVATION | 1 HERPETOLOGICAL REVIEW | 4 HYDROBIOLOGIA | 1

ECOLOGY AND EVOLUTION | 2 JOURNAL OF NATURAL AREAS | 2

HERPETOLOGICAL CON. BIO. | 3 WILDLIFE SOCIETY BULLETIN | 2

# **AWARDS**

# **RESEARCH GRANTS, FELLOWSHIPS, OR TRAVEL AWARDS**

\$4,000	University of Florida, Robin E Nadeau Graduate Research Award (2019)
\$195,000	University of Florida, Graduate School Preeminence Award (2019)
\$500	Society for the Study of Amphibians and Reptiles Research Grant (2016)
\$500	Eastern Kentucky University, Department of Biological Sciences Travel Stipend (2016)
\$500	Eastern Kentucky University, Division of Natural Areas Research Grant (2016)
\$1,100	Kentucky Academy of Science, Marcia Athey Research Grant (2016)
\$700	Society for Freshwater Science, Instars Fellowship (2013)
\$700	Society for Freshwater Science, Instars Fellowship (2014)
\$5,000	University of Arkansas, NSF REU Fellowship (2012)
\$5,000	University of Arkansas, NSF REU Fellowship (2013)

# **PUBLICATIONS**

- JA Baecher, [...], BR Scheffers. *In prep*. A framework for modeling connectivity of populations incorporating propagule pressure: a case study with invasive Burmese pythons. *Ecography*
- JA Baecher, [...], BR Scheffers. *In revision*. Experimental evaluation of how invasions and climate change interact to alter the vertical assembly of an amphibian community. *Journal of Animal Ecology*
- Basham, EW, JA Baecher, D Klinges, BR Scheffers. *In Press*. Vertical stratification patterns of tropical forest vertebrates: A meta-analysis. *Biological Reviews* HTML (IF 14.4)
- Basham, EW, [...], JA Baecher, BR Scheffers. 2022. Large, old trees define the vertical, horizontal, and seasonal distributions of a poison frog. *Oecologia* HTML (IF 5.6)
- Swartwout, M, PN Vogrinc, JA Baecher, [...], JD Willson. **2020**. Prey Size and Growth Rate do not Influence Trophic Morphology of Juvenile Water Snakes (*Nerodia sipedon*). *Herpetologica* HTML (IF 2.7)
- **Baecher**, JA, E Jones, SC Richter. **2020.** Tail bifurcation in two species of *Desmognathus* salamander (Caudata: Plethodontidae) in southeastern Kentucky, USA. *Herpetological Bulletin* HTML (IF 0.4)
- Hinkson, KM, JA Baecher, S Poo. **2019**. Cryopreservation and hormonal induction of spermic urine in the smooth-sided toad (*Rhaebo guttatus*). **Cryobiology HTML** (IF 2.7)
- Baecher, JA, SC Richter. 2018. Environmental gradients in an old-growth Appalachian Forest predict finescale distribution, co-occurrence, and abundance of woodland salamanders. Ecology and Evolution HTML (IF 2.9)
- Baecher, JA, JD Willson, PN Vongric, JC Guzy, CS Kross. 2018. Herpetofaunal Communities in Restored and Unrestored Remnant Tallgrass Prairie and Associated Wetlands in Northwest Arkansas, USA. Wetlands HTML (IF 2.1)
- Baecher, JA, PN Vogrinc, JC Guzy, JC Neal, JD Willson. **2014**. *Lithobates areolatus* (Crawfish Frog). Predation. *Herpetological Reviews* HTML (IF 0.2)

# **PRESENTATIONS**

### **CONTRIBUTIONS TO EXTERNAL SYMPOSIA:**

E Khazan, [...], JA Baecher. 2022. Association for Tropical Biology and Conservation. Cartagena, Columbia JA Baecher, L Evans, [...], BR Scheffers. 2022. International Association of Landscape Ecology. Virtual L Evans, BR Scheffers, JA Baecher. 2022. Collaborative to Combat the Illegal Trade in Turtles. Virtual Basham, EW, JA Baecher, [...], BR Scheffers. 2021. Ecological Society of America. Virtual Jones, E, JA Baecher, [...], SC Richter. 2019. Association of Southeastern Biologists. Memphis, TN Hinkson, KM, JA Baecher, S Poo. 2019. Association of Southeastern Biologists. Memphis, TN Baecher, JA, SB Reichling. 2018. Louisiana Pinesnake Stakeholder Meeting. Shreveport, LA Jones, E, JA Baecher, [...], SC Richter. 2018. Kentucky Academy of Science. Bowling Green, KY Gross, BA, Z Patton, JA Baecher, [...]. 2018. 25th Crocodile Specialist Group. Sante Fe, Argentina Baecher, JA, SC Richter. 2018. Joint Meeting of Ichthyologists and Herpetologists. Rochester, NY Grap, P. S Harrel, [...], JA Baecher. 2018. Association of Southeastern Biologists. Myrtle Beach, SC Peters, J, J Koslow, JA Baecher. 2018. Association of Southeastern Biologists. Myrtle Beach, SC Baecher, JA, SC Richter. 2017. University of Kentucky, Center for Ecology, Evolution and Behavior. Lexington, KY Grap, P, S Harrel, [...], JA Baecher. 2017. Southeastern Fisheries Council Annual Meeting. Chattanooga, TN Baecher, JA, SC Richter. 2017. SE Partners in Amphibian & Reptile Conservation. Little Rock, AR Swartwout, M, PN Vogrinc, JA Baecher, [...]. 2016. Joint Meeting of Ichthyologists and Herpetologists. New Orleans, LA Baecher, JA, PN Vongrinc, JD Willson. 2016. Joint Meeting of Ichthyologists and Herpetologists. New Orleans, LA Baecher, JA, DR Leasure, [...], DD Magoulick. 2014. Joint Meeting of Aquatic Sciences. Portland, OR Baecher, JA, DR Leasure, [...], DD Magoulick. 2013. American Fisheries Society. Little Rock, AR Baecher, JA, J Ortega, SJ Beaupré. 2013. Society for Freshwater Science. Jacksonville, FL

### **HOSTED WORKSHOPS:**

Fletcher, R, JA Baecher, [...], Thomas Smith. 2021. Expanding the scope of connectivity modeling with Markov chains: perspectives and applications in R. International Association of Landscape Ecology. Virtual Baecher, JA, L Evans, BR Scheffers. 2022. Expert elicitation of key invasive species habitat requirements, prevalence, and life history attributes using an Interactive Shiny App. Austin Carey Experimental Forest, Gainesville Florida.

### **CONTRIBUTIONS TO INTERNAL SYMPOSIA:**

**UNIVERSITY OF FLORIDA | 5** 

EASTERN KENTUCKY UNIVERSITY | 5

**UNIVERSITY OF ARKANSAS | 4** 

# **CURRENT PROFESSIONAL SOCIETIES**

JANUARY 2020 - ...

INTERNATIONAL ASSOCIATION OF LANDSCAPE ECOLOGISTS (NORTH AMERICAN CHAPTER)

**ECOLOGICAL SOCIETY OF AMERICA** 

**BRITISH ECOLOGICAL SOCIETY** 

**ECOLOGICAL FORECASTING INITIATIVE** 

JANUARY 2012 – DECEMBER 2019

AMERICAN SOCIETY OF ICHTHYOLOGISTS AND HERPETOLOGISTS

SOUTHEASTERN PARTNERS IN AMPHIBIAN AND REPTILE CONSERVATION

**SOCIETY FOR THE STUDY OF AMPHIBIANS AND REPTILES** 

**SOCIETY FOR FRESHWATER SCIENCE** 

# **MENTORSHIP**

### **EASTERN KENTUCKY UNIVERSITY:**

NATHAN MCGREGOR, ASHLEY ALBINO, EMILY JONES, ALEX GIBSON, MYESHA JAMES & KELLEY HOEFER MEMPHIS ZOO:

**BILL HAUGE, MORGAN MATTINGLY & MADELINE ESTES** 

**UNIVERSITY OF FLORIDA:** 

**SIERRA SCAUZILLO** 

# PROFESSIONAL REFERENCES

<u>www.willsonlab.com</u>

BRETT R SCHEFFERS, PHD   ASSISTANT PROFESSOR, WILDLIFE ECOLOGY AND CONSERVATION,			
UNIVERSITY OF FLORIDA			
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