

# J. ALEX BAECHER



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## EDUCATION

*MAY 2024 (expected)*

INTERDISCIPLINARY ECOLOGY, PhD | UNIVERSITY OF FLORIDA

*DECEMBER 2017*

BIOLOGICAL SCIENCES, MSc | EASTERN KENTUCKY UNIVERSITY

*MAY 2014*

BIOLOGICAL SCIENCES, BSc | UNIVERSITY OF ARKANSAS

## EXPERIENCE

*AUGUST 2019 – ...*

GRADUATE ASSISTANT | UNIVERSITY OF FLORIDA

*JANUARY 2018 – JULY 2019*

CONSERVATION AND RESEARCH TECHNICIAN | MEMPHIS ZOO

*MAY – AUGUST 2017*

NSF REU RESEARCH COORDINATOR | EASTERN KENTUCKY UNIVERSITY

*MAY 2015 – AUGUST 2017*

GRADUATE ASSISTANT | EASTERN KENTUCKY UNIVERSITY

*JANUARY 2014 – MARCH 2015*

RESEARCH ASSISTANT | UNIVERSITY OF ARKANSAS

*AUGUST 2012 – JANUARY 2014*

RESEARCH TECHNICIAN | UNIVERSITY OF ARKANSAS

## FUNDING

AMOUNT	ORGANIZATION	AWARD NAME	YEAR
\$4,000	University of Florida	Robin Nadeau Graduate Research Award	2019
\$195k	University of Florida	Graduate School Preeminence Award	2019
\$500	Soc. Study Ampib. and Rep.	Grant-in-Aid of Herpetological Research	2016
\$500	Eastern Kentucky University	Dep. Biological Sciences Travel Stipend	2016
\$500	Eastern Kentucky University	Div. Natural Areas Research Grant	2016
\$1,100	Eastern Kentucky University	Marcia Athey Research Grant	2016
\$700 (x2)	Soc. Freshwater Science	Instars Fellowship	2013-'14
\$5,000 (x2)	University of Arkansas	NSF REU Fellowship	2012-'13

## PEER REVIEW

*JOURNAL (REVIEWED/REQUESTED):*

BIOLOGICAL CONSERVATION (1/1); CONSERVATION SCIENCE AND PRACTICE (1/2); ECOGRAPHY (1/1); ECOLOGY AND EVOLUTION (4/5); HERPETOLOGICAL CONSERVATION BIOLOGY (3/5); HERPETOLOGICAL REVIEW (4/5); HYDROBIOLOGIA (1/1); NATURAL AREAS JOURNAL (2/2); OECOLOGIA (1/2); SCIENTIFIC REPORTS (1/1); WILDLIFE SOCIETY BULLETIN (2/2)

## PUBLICATIONS

### FORTHCOMING:

- 8) **Baecher, JA**, D Klinges, L Evans, BR Scheffers. *In prep.* Informing species range shifts with global connectivity layers.
- 7) Evans, L, **JA Baecher**, J Cullen, C Romagosa, BR Scheffers. *In prep.* An expert elicitation tool for mapping the spatial prevalence and habitat suitability of invasive species.
- 6) **Baecher, JA**. *In review.* The environmental filtering paradigm and non-filtering community assembly processes. **Journal of Biogeography**
- 5) **Baecher, JA**, D Klinges, L Evans, C Romagosa, R Fletcher, BR Scheffers. *In review.* Simulating what limits the spread of a high-profile invasive predator. **Ecography** | [CODE](#)
- 4) DH Klinges, **JA Baecher**, ... BR Scheffers. *In review.* Proximal microclimate: moving beyond spatiotemporal scale to improve predicted biological responses. **Global Ecology and Biogeography**
- 3) Evans, L, **JA Baecher**, BR Scheffers. *In revision.* Invasion risk posed by the pet trade. **Frontiers in Ecology and the Environment**
- 2) Comte, L, ... **JA Baecher**, ... J Lenoir. *In press.* Bringing traits back in the equation: A roadmap to understand species redistribution. **Global Change Biology** | [PREPRINT](#)
- 1) Lawlor, JA, ... **JA Baecher**, ... J Sunday. *In press.* Mechanisms, detections, and impacts of species redistributions under climate change. *Nature Reviews Earth and Environment* | [PREPRINT](#)

### PUBLISHED:

- 9) **Baecher, JA**, SA Johnson, EA Roznik, BR Scheffers. **2023.** Experimental evaluation of how invasions and climate change interact to alter the vertical assembly of an amphibian community. **Journal of Animal Ecology** | [HTML](#) | [CODE](#) | [Nature Climate Change](#) | [PRESS: Florida Today](#), [USGS](#)
- 8) Basham, EW, **JA Baecher**, DH Klinges, BR Scheffers. **2022.** Vertical stratification patterns of tropical forest vertebrates: A meta-analysis. **Biological Reviews** | [HTML](#) | [CODE](#)
- 7) Basham, EW, M Gonzalez-Pinzon, A Romero-Marcucci, N Carl, **JA Baecher**, BR Scheffers. **2022.** Large, old trees define the vertical, horizontal, and seasonal distributions of a poison frog. **Oecologia** | [HTML](#) | [CODE](#)
- 6) Swartwout, M, PN Vogrinc, **JA Baecher**, CS Kross, JD Willson. **2020.** Prey Size and Growth Rate do not Influence Trophic Morphology of Juvenile Water Snakes *Nerodia sipedon*. **Herpetologica** | [HTML](#)
- 5) **Baecher, JA**, E Jones, SC Richter. **2020.** Tail bifurcation in two species of *Desmognathus* salamander Caudata: Plethodontidae in southeastern Kentucky, USA. **Herpetological Bulletin** | [HTML](#)
- 4) Hinkson, KM, **JA Baecher**, S Poo. **2019.** Cryopreservation and hormonal induction of spermic urine in the smooth-sided toad *Rhaebo guttatus*. **Cryobiology** | [HTML](#) | [PRESS: The Commercial Appeal](#), [USA TODAY](#)
- 3) **Baecher, JA**, SC Richter. **2018.** Environmental gradients in an old-growth Appalachian Forest predict fine-scale distribution, co-occurrence, and abundance of woodland salamanders. **Ecology and Evolution** | [HTML](#) | [CODE](#)
- 2) **Baecher, JA**, PH Vogrinc, JC Guzy, CS Kross, JD Willson. **2018.** Herpetofaunal Communities in Restored and Unrestored Remnant Tallgrass Prairie and Associated Wetlands in Northwest Arkansas, USA. **Wetlands** | [HTML](#)
- 1) **Baecher, JA**, PH Vogrinc, JC Guzy, JC Neal, JD Willson. **2014.** *Lithobates areolatus*, Predation. **Herpetological Reviews** | [PDF](#)

## PRESENTATIONS

### SELECTED ONLY EXTERNAL SYMPOSIA: <sup>†</sup>TALK <sup>‡</sup>POSTER

- 30) <sup>†</sup>JA Baecher, D Klinges, L Evans, BR Scheffers. **2023**. Species On The Move. *Ft. Myers, FL* | [SLIDES](#)
- 29) <sup>†</sup>BR Scheffers, JA Baecher, E Basham. **2023**. Species On The Move. *Ft. Myers, FL*
- 28) <sup>†</sup>L Evans, JA Baecher, BR Scheffers. **2023**. Species On The Move. *Ft. Myers, FL*
- 27) <sup>†</sup>D Klinges, ... JA Baecher, ... BR Scheffers. **2023**. Species On The Move. *Ft. Myers, FL*
- 26) <sup>†</sup>L Evans, BR Scheffers, JA Baecher. **2022**. Invasive Species Mgmt Association. *Ft. Myers, FL*
- 25) <sup>†</sup>D Klinges, JA Baecher, ... BR Scheffers. **2022**. Microclimate Ecol. Biogeog. *Antwerp, Belgium*
- 24) <sup>†</sup>JA Baecher, BR Scheffers. **2022**. BIOSHIFTS. *Montpellier, France* | [SLIDES](#)
- 23) <sup>†</sup>JA Baecher, L Evans, ... BR Scheffers. **2022**. SERISCC network. *Virtual* | [SLIDES](#) | [VIDEO](#)
- 22) <sup>†</sup>E Khazan, ... JA Baecher. **2022**. Assoc. for Tropical Biol. and Conserv. *Cartagena, Columbia*
- 21) <sup>†</sup>JA Baecher, ... BR Scheffers. **2022**. Int. Assoc. Landscape Ecol. *Virtual* | [SLIDES](#) | [VIDEO](#)
- 20) <sup>†</sup>L Evans, BR Scheffers, JA Baecher. **2022**. Collab. Combat the Illegal Trade in Turtles. *Virtual*
- 19) <sup>†</sup>Basham, EW, JA Baecher, ... BR Scheffers. **2021**. Internat. Canopy Science Conference. *Virtual*
- 18) <sup>†</sup>Basham, EW, JA Baecher, ... BR Scheffers. **2021**. Ecological Society of America. *Virtual*
- 17) <sup>†</sup>Basham, EW, JA Baecher, ... BR Scheffers. **2021**. European Meet. Students Evol. Biol. *Virtual*
- 16) <sup>†</sup>Jones, E, JA Baecher, ... SC Richter. **2019**. Assoc. of Southeastern Biologists. *Memphis, TN*
- 15) <sup>†</sup>Hinkson, KM, JA Baecher, S Poo. **2019**. Association of Southeastern Biologists. *Memphis, TN*
- 14) <sup>†</sup>Baecher, JA, SB Reichling. **2018**. USFWS Working Group Meeting. *Shreveport, LA*
- 13) <sup>†</sup>Jones, E, JA Baecher, ... SC Richter. **2018**. Kentucky Academy of Science. *Bowling Green, KY*
- 12) <sup>†</sup>Gross, BA, Z Patton, JA Baecher. **2018**. 25<sup>th</sup> Crocodile Specialist Group. *Sante Fe, Argentina*
- 11) <sup>†</sup>Baecher, JA, SC Richter. **2018**. Joint Meeting of Ichth's and Herp's. *Rochester, NY*
- 10) <sup>†</sup>Grap, P, S Harrel, ... JA Baecher. **2018**. Assoc. of Southeastern Biologists. *Myrtle Beach, SC*
- 9) <sup>†</sup>Peters, J, J Koslow, JA Baecher. **2018**. Assoc. of Southeastern Biologists. *Myrtle Beach, SC*
- 8) <sup>†</sup>Baecher, JA, SC Richter. **2017**. Center for Ecology, Evolution and Behavior. *Lexington, KY*
- 7) <sup>†</sup>Grap, P, S Harrel, ... JA Baecher. **2017**. Southeastern Fisheries Council. *Chattanooga, TN*
- 6) <sup>‡</sup>Baecher, JA, SC Richter. **2017**. SE Partners in Amphibian & Reptile Conserv. *Little Rock, AR*
- 5) <sup>‡</sup>Swartwout, M, P Vogrinc, JA Baecher. **2016**. Ichth's and Herp's. *New Orleans, LA*
- 4) <sup>†</sup>Baecher, JA, P Vongrinc, JD Willson. **2016**. Ichth's and Herp's. *New Orleans, LA USA*
- 3) <sup>‡</sup>Baecher, JA, DR Leasure, ... DD Magoulick. **2014**. Jt. Meeting Aquatic Sciences. *Portland, OR*
- 2) <sup>‡</sup>Baecher, JA, DR Leasure, ... DD Magoulick. **2013**. American Fisheries Society. *Little Rock, AR*
- 1) <sup>‡</sup>Baecher, JA, J Ortega, SJ Beaupré. **2013**. Society for Freshwater Science. *Jacksonville, FL*

### HOSTED WORKSHOPS:

- 3) Fletcher, R, ... JA Baecher. **2023**. Application of connectivity modeling to identify and predict movement and range redistribution. *Species On The Move. Bonita Springs, FL* | [SLIDES](#)
- 2) Baecher, JA, L Evans, BR Scheffers. **2022**. Expert elicitation of key invasive species habitat requirements, prevalence, and life history attributes. *Austin Carey Forest. Gainesville, FL* | [SLIDES](#)
- 1) Fletcher, R, JA Baecher, ... Thomas Smith. **2021**. Expanding the scope of connectivity modeling with Markov chains: perspectives and applications in R. *Int. Assoc. Landscape Ecol. Virtual* | [VIDEO](#)

### GUEST LECTURES AT UNIVERSITY OF FLORIDA:

- 4) JA Baecher. **2021**. Achieving connectivity under rapid change. *Ecology of Climate Change* | [SLIDES](#)
- 3) JA Baecher. **2020**. Restoration ecology of grassland herps. *Amphibians of the Southeast* | [SLIDES](#)
- 2) JA Baecher. **2020**. Amphibian diversity and natural history. *Amphibians of the Southeast* | [SLIDES](#)
- 1) JA Baecher. **2020**. Threats to salamander diversity. *Amphibians of the Southeast* | [SLIDES](#)

## MENTORSHIP

### **EASTERN KENTUCKY UNIVERSITY:**

**NATHAN MCGREGOR**  
**ALEX GIBSON**

**ASHLEY ALBINO**  
**MYESHA JAMES**

**EMILY JONES**  
**KELLEY HOEFER**

### **RHODES COLLEGE:**

**BILL HAUGE**

**MADELINE ESTES**

### **UNIVERSITY OF FLORIDA:**

**SIERRA SCAUZILLO**

**NOAH BOWEN**

## PROFESSIONAL REFERENCES

### **BRETT R SCHEFFERS, PhD** | UNIVERSITY OF FLORIDA

**ASSOCIATE PROFESSOR:** *Wildlife Ecology and Conservation*

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### **ROBERT GURALNICK, PhD** | UNIVERSITY OF FLORIDA

**CURATOR OF BIODIVERSITY INFORMATICS:** *Florida Museum of Natural History*

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### **STEPHEN C RICHTER, PhD** | EASTERN KENTUCKY UNIVERSITY

**DIRECTOR:** *Division of Natural Areas*; **PROFESSOR:** *Department of Biological Sciences*

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### **JOHN D (“JD”) WILLSON, PhD** | UNIVERSITY OF ARKANSAS

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