

## Shannon LJ Bayliss

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### EDUCATION

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2021 <i>expected</i>	Ph.D. Ecology & Evolutionary Biology	University of Tennessee, Knoxville (UTK)
2021 <i>expected</i>	M.S. Journalism & Electronic Media	University of Tennessee, Knoxville (UTK)
2016	M.S. Biology	Cal. State University, Northridge (CSUN)
2012	B.S. Environmental Sciences	University of Virginia (UVA)

### PUBLICATIONS

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1. **Bayliss, SLJ**, JA Schweitzer, M Papeş, JK Bailey. Species-only and climate-only distribution models vastly over-predict suitable habitat for riparian forest tree. (*Submitted*)
2. **Bayliss, SLJ**, LO Mueller, IM Ware, JA Schweitzer, JK Bailey. (2020). Plant genetic variation drives geographic differences in atmosphere-plant-ecosystem feedbacks. *Plant-Environment Interactions* 00:1-15.
3. Beals, KK, JA Moore, SN Kivlin, **SLJ Bayliss**, CY Lumibao, LC Moorhead, M Patel, JL Summers, IM Ware, JK Bailey, JA Schweitzer. (2020). Predicting plant-soil feedback in the field: meta-analysis reveals that competition and environmental stress differentially influence PSF. *Frontiers in Ecology and Evolution* 8:191.
4. Van Nuland, ME, J Vincent, IM Ware, LO Mueller, **SLJ Bayliss**, KK Beals, JA Schweitzer, JK Bailey. (2020). Interspecific trait variation across elevation predicts a widespread tree species' climate niche and range limits. *Ecology & Evolution* 00:1-12.
5. **Bayliss, SLJ**, ZR Scott, MA Coffroth, CP terHorst. (2019). Genetic variation in *Breviolum antillogorgium*, a coral reef symbiont, in response to temperature and nutrients. *Ecology & Evolution* 9(5): 2803-13.
6. Ware IM, Fitzpatrick C, Senthilnathan A, **Bayliss SLJ**, Beals KK, Mueller LO, Summers JL, Wooliver RC, Van Nuland ME, et al. (2019). Feedbacks link ecosystem ecology and evolution across spatial and temporal scales: Empirical evidence and future directions. *Functional Ecology* 33:31-42.
7. **Bayliss, SLJ**, CP terHorst, JA Lau. (2017). Testing genotypic variation of an invasive plant species in response to soil disturbance and herbivory. *Oecologia* 183:1135.

#### *In preparation*

8. \*Hollabaugh, K, **Bayliss SLJ**, Mueller LO, Ware, IM, Bailey J.K., Schweitzer JA. Tree-conditioned microbial communities exhibit different rates of decomposition. *\*undergraduate first author*

### PRESENTATIONS

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(\*presenter, #poster)

1. \*# **Bayliss, SL**, JA Schweitzer, JK Bailey. Better Range Predictions Using Appropriate Genetic Niche Models. Ecological Society of America, New Orleans, LA. August 2018
2. \***Bayliss, SL**, JA Schweitzer, JK Bailey. Energy and Water limits drive dominant tree population differentiation. Ecological Society of America, Portland, OR. August 2017
3. \***Bayliss, SL**, CP terHorst. Genetic Diversity and Nutrients affect the ecology of *Symbiodinium*. Western Society of Naturalists, Sacramento, CA. November 2015  
Ecological Society of America, Baltimore MD. August 2015
4. terHorst, CP, JA Lau, \***SL Bayliss**. Context-dependent effects of herbivory on biotic resistance to plant invasion. Western Society of Naturalists, Tacoma, WA. November 2014.

5. terHorst, CP, JA Lau, \*SL Bayliss. Selection for size, phenology, and resistance drives invasion success in a non-native legume. Ecological Society of America, Sacramento, CA. August 2014.

## FUNDING & AWARDS

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*total to date: \$31,950*

- 2020 Yates Dissertation Fellowship 2020-2021; UTK; \$10,000  
 2019 Student-Faculty Research Award awarded to Bayliss/Bailey, UTK; \$4,303  
 2017 EEB Department Research Funds, UTK; \$1,100  
 2017 Penley Graduate Fellowship, UTK; \$5,000  
 2017 Sponsored Attendee of *National ComSciCon* Annual Meeting 2017; Harvard University  
 2017 J. Paul Blakely Award of Merit in Science Writing, STC-ETC  
 2016 Student-Faculty Research Award awarded to Bayliss/Bailey, UTK; \$3,684  
 2016 Bianchi Award: Outstanding Graduate Student, CSUN; \$400  
 2015 Sponsored Attendee of California STEM Symposium, Anaheim Convention Center, CA  
 2014/15 EcoArt Award, Ecological Society of America, Sacramento, CA (14)/ Baltimore, MD (15)  
 2014 The Scifund Challenge with Experiment.com, crowdfunding; \$1,463  
 2014 Grad Fellowship for Outstanding Promise in Research in Science and Mathematics, CSUN; \$5,000  
 2014 Thesis Support Grant, CSUN; \$1,000

## TEACHING EXPERIENCE

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### ***Teaching Assistant Positions:***

Graduate-level Science Writing Seminar (F20, UTK); Ecosystems Ecology (S20, UTK); Head TA Skills of Biological Literacy (S18 - F19, UTK); Skills of Biological Literacy (F16-S17, UTK); Introductory Biology Lab (F13, S14/15, CSUN); Biology Lab Field Trip Leader (F15, CSUN); Principles of Ecology (F14, CSUN)

### ***Guest Lectures:***

EEB Theory & Methods: *A leaf by any other name* (S20, UTK); Ecosystems Ecology: *Nutrient Cycling* (S20, UTK); Career and Professional Development: *Science Communication* (S18/19, UTK); Ecology: *Invasion Biology* (F17, UTK)

## LEADERSHIP, OUTREACH, & SERVICE

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*Referee* for *Oecologia*, *Global Change Biology*, *Molecular Ecology*, *Zoology*.

*Panelist*, Undergraduate Brownbag Workshop: *Do I need to go to grad school and how do I apply?* F19

*Undergraduate Research Coordinator* 2017-2020, Bailey-Schweitzer Lab Group; UTK

- Management, recruitment, and training of between 5-8 undergraduate researchers who assist in lab projects and graduate student research, and conduct independent research

*Mentor*, EEB Undergraduate Mentor Program 2017-present; UTK

Graduate Student Seminar Committee 2017-2019; UTK

- Soliciting nominations for, choosing, and hosting invited speakers for weekly EEB seminar series

Regular contributor to Eco-Evo Lab Blog ([www.ecoevolab.com/news](http://www.ecoevolab.com/news)); CSUN

Women in Science Club (WinS) 2013-2016; CSUN

- *President*, 2014-2015: Organized skill workshops, lunches with female faculty, outreach at *The Science Academy STEM Magnet*

Alternative Spring Break Club 2010-2012; UVA

- *Student Leader*, 2012: Conservation projects in Drake Bay, Costa Rica
- 2010 Urban clean-up, invasive eradication, ecological awareness with children in Rio de Janeiro, BR

## **ADDITIONAL SKILLS & TRAINING**

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- Graduate Seminars/Labs in Bayesian statistics, multivariate statistics, spatial patterns of biodiversity, molecular markers, phycology, community evolution.
- Proficient at R, ArcMap, Maxent, ImageJ, GeneMarker, LICOR, Adobe Photoshop and Premiere.
- Field plant and soil sampling, greenhouse maintenance, media preparation, culture management, DNA extraction, PCR, curriculum development, French language, content analysis, darkroom photography.