**Shannon LJ Bayliss**

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EDUCATION

current Ph.D. Ecology & Evolutionary Biology University of Tennessee, Knoxville (UTK)

Advisor: Dr. Joseph K Bailey Anticipated Graduation: 2021

M.S. Communication & Information University of Tennessee, Knoxville

*Concentration*: Journalism & Electronic Media

2016 M.S. Biology Cal. State University, Northridge (CSUN)

Advisor: Dr. Casey P terHorst

2012 B.S. Environmental Sciences University of Virginia (UVA)

Minor: Art History

RESEARCH EXPERIENCE

Dissertation Research UTK

Master’s Thesis CSUN

Research on how genetic variation and diversity affect the ecology of the dinoflagellate *Symbiodinium*, a coral reef symbiont, across a range of nutrient conditions.

Research Assistant CSUN

Data analysis and research on the ecology and evolution of an established invasive species, *Medicago polymorpha*, in response to disturbance and herbivory.

TEACHING EXPERIENCE

Teaching Assistant Positions University of Tennessee, Knoxville

* Organismal & Ecological Bio; Skills of Biological Literacy (BIO150): F 2016-F 2017
* Head TA (BIO150): S 2018 – S 2019

California State University, Northridge

* Introductory Biology Lab (BIOL 100L): F 2013, S 2014/15
* Introductory Biology Lab Field Trips: F 2015
* Principles of Ecology (BIOL 427/L, 492H): F 2014

Guest Talks/Lectures University of Tennessee, Knoxville

* Ecology: *“Invasion Biology”* F 2017, for Dr. K Sheldon
* Prof. Development Seminar: *“Science Communication,”* S 2018, for Dr. J Schweitzer
* UG Seminar Course: F 2019, for Dr. J Bailey

PUBLICATIONS

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 and Evolution.*

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 Ecolog*y 33:31-42.

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.

Bayliss, SL (2016) Genotype-by-environment interactions and diversity-function relationships of the important reef symbiont, *Symbiodinium antillogorgium*, across a range of nutrient environments. CSUN Electronic Theses & Dissertations. http://scholarworks.csun.edu/handle/10211.3/171754

PRESENTATIONS (\*presenter, #poster)

\*# Bayliss, SL, JA Schweitzer, JK Bailey. Better Range Predictions Using Appropriate Genetic Niche Models. Ecological Society of America, New Orleans, LA. August 2018

\*Bayliss, SL, JA Schweitzer, JK Bailey. Energy and Water limits drive dominant tree population differentiation. Ecological Society of America, Portland, OR. August 2017

\*Bayliss, SL, CP terHorst. Genetic Diversity and Nutrients affect the ecology of *Symbiodinium*. Western Society of Naturalists, Sacramento, CA. November 2015

\*Bayliss, SL, CP terHorst. Genetic Diversity and Nutrients affect the ecology of *Symbiodinium*. Ecological Society of America, Baltimore, MD. August 2015

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.

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.

AWARDS, SCHOLARSHIPS, & GRANTS

2017           EEB Department Research Funds, University of Tennessee, Knoxville; $1,100

2017 Penley Graduate Fellowship, University of Tennessee, Knoxville; $5,000

2017 Sponsored Attendee of *National ComSciCon* 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

University of Tennessee, Knoxville; $3,684

2016 Bianchi Award: Outstanding Graduate Student, Cal. St. University Northridge; $400

2015 EcoArt Award Recipient, Ecological Society of America, Baltimore, MD

2014 Scifund Challenge & Experiment.com, crowd-funding; $1,463

2014 Graduate Fellowship for Outstanding Promise in Research in Science and Mathematics, California State University, Northridge; $5,000

2014 Teaching Assistant Fee Waiver

2014 Thesis Support Grant, California State University, Northridge; $1,000

2014 EcoArt Award Recipient, Ecological Society of America, Sacramento, CA

ACADEMIC ACTIVITIES & MEMBERSHIPS

EEB (Ecol. Evol. Biology) Undergraduate Mentor Program, University of Tennessee, Knoxville

Graduate Student Seminar Committee (2017-2019), University of Tennessee, Knoxville

Behavior, Ecology & Evolution Reading Group (BEER), California State University, Northridge

Women in Science Club (WinS), California State University, Northridge

Ecological Society of America

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

LEADERSHIP & MANAGEMENT ROLES

Undergraduate Research Coordinator, Bailey-Schweitzer Lab, Univ. Tennessee

2017-present

Manage between 5-8 undergraduate researchers that assist in lab projects, graduate student research, and independent undergraduate research. Coordinate weekly schedules and administer lab training/orientation for variety of lab and greenhouse techniques

Women in Science Club (WinS), California State University, Northridge

2014-2015 Club President

Alternative Spring Break Club, University of Virginia: 2010-2012

2012 Student Leader

Service trip (conservation and development projects) in Drake Bay, Costa Rica

Virginia Club Tennis, University of Virginia: 2008-2012

2011 Club President: *Tennis on Campus Leadership Award*, 2011-2012 National Finalist

2010 Match Coordinator

ADDITIONAL SKILLS

* Proficiency in R, SAS, Multivariate Statistics, ArcMap, Species Distribution Modeling, Ecological Niche Modeling, ImageJ, GeneMarker, Adobe Photoshop, Darkroom Photography, French.
* Lab Skills include, but are not limited to, DNA extraction, gel electrophoresis, hemacytometer cell counts, light microscopy, fluorometer, media preparation, culture management.