

AARON N. SEXTON CV

139 Life Sciences Building
Department of Biology
University of Louisville
Louisville, KY, 40292

Email: ansex01@louisville.edu
Website: aaronsexton.com

EDUCATION

Ph.D. Ecology, University of Louisville, University Fellow, 3.84 GPA 2017-Present
Advisor: Dr. Sarah Emery
B.A. Ecology & Biodiversity, University of Denver, 3.65 GPA 2013-2017
Advisor: Dr. Robin Tinghitella

PROFESSIONAL EXPERIENCE

Research Technician, University of Denver, 2013-2017
Responsible for data collection, insect rearing, manuscript and proposal writing.
Research Technician, Bonanza Creek LTER Alaska 2016
Part of a team working with the LTER, USFS and Alaska DNR to collect data in the field and implementing a large-scale field study.

GRANTS AND AWARDS

Research Grant, Kentucky Native Plant Society—2020 \$500
*Investigating the effects of urbanization and pollinator limitation on the native grassland species, *Chamaecrista fasciculata**
Research Grant, Graduate School of Arts & Sciences—2019 \$248
Directly testing the influence soil microbes have on floral phenology
Beechmont Garden Club award—2019 \$1,000
Awarded to a graduate student for excellent research in the field of Horticulture, Floraculture, or Conservation of plant and/or wildlife
Graduate Research Fellowship Program, National Science Foundation—2019
Honorable Mention
University Fellowship, University of Louisville—2017-2021 \$44,000
PhD students conducting research with “exceptional credentials”
Marcia Botany Fund, Kentucky Academy of Science—2018 \$1,565
How are prairie restorations impacting the life histories of solitary bees?
Kentucky Natural History Society Fund, KNHS—2018 \$800
How are prairie restorations impacting the life histories of solitary bees?
Graduate Student Council Grant, University of Louisville—2018 \$500
Does removal of an invasive plant promote solitary bee pollination services in a Great Lakes Dune restoration?
Biology Graduate Student Association Grant, University of Louisville—2018 \$175

Does removal of an invasive plant promote solitary bee pollination services in a Great Lakes Dune restoration?

Travel Grant, Graduate Student Council (University of Louisville)—2018 \$250
Travel to present research at a local symposium.

Research Grant, Graduate School of Arts & Sciences—2018 \$238
How are prairie restorations impacting the life histories of solitary bees?

Dean's Scholarship, University of Denver—2016
Recognition of stellar academic record and past achievements

H&B Agnew Scholarship, University of Denver—2015, 2016 (Two-time recipient)
Recognition of high GPA and strong work within the Ecology & Biodiversity research.

PUBLICATIONS

***Sexton, A.N.**, Benton S.F., Browning, A.B, Emery, S.M., 2020: Urbanization increases survivorship, but not fecundity of solitary cavity-nesting bees.

* *Submitted to Urban Ecosystems, in review*

Sexton, A.N., Emery, S.M., 2020: Grassland restorations improve pollinator communities: a meta-analysis. *Journal of Insect Conservation*, DOI: 10.1007/s10841-020-00247-x.

Jenck, C.S., Lehto, W.R., Ketterman, B.T., Sloan, L.F., **Sexton, A.N.**, Tinghitella, R.M., 2019: Phenotypic divergence among threespine stickleback that differ in nuptial coloration. *Ecology & Evolution*, DOI: 10.1002/ece3.6105.

TEACHING EXPERIENCE

Instructor, Environmental Biology (BIOL 263) 2019-2020

Instructor of record for Environmental Biology. Co-taught with another graduate student and built the course from scratch. Course included both lecture and lab. (24 students/section) (In person in 2019, hybrid model in 2020 due to COVID-19)

Instructor, Environmental Science (ENVS-101) 2020

Instructor of record for Environmental Science. Taught at Spalding University as an Adjunct Faculty, taught online because of COVID-19. Course built from scratch (12 students).

Teaching Assistant, Biology 244 2020

Teaching the lab section of introduction to Biology for Biology major students (30 students/section)

Guest Lecturer, Chemical Ecology 2019

Title: "Solitary bee pollen usage and parasitism" (30 students)

Teaching Assistant, Biology 104 2017-2018

Teaching introductory biology laboratory to undergraduate students (30 students/section)

Guest Lecturer, Biology 102 2017

Title: "Meiosis and Gametogenesis" (300+students)

Mentor , Marissa Huber (Undergraduate)	2020-Current
Guided on field work and data collection.	
Mentor , Adam Browning (Undergraduate)	2019-2020
Guided on lab skills, data processing, experimental design and field work.	
Received two grants during mentorship	
<i>Can bee pollen usage protect solitary bees against parasitism?</i>	
Awarded Summer Research Opportunity grant (\$3,000)	
Mentor , Lisa Heng (High School)	2018-19
Guided on field work, data collection, arthropod ID & classification	
<i>How does land management affect tick abundances in urban parks?</i>	
2 nd place Regional & State Science Fair	
Mentor , Kristen Ehringer (Undergraduate)	2018
Guided on basic lab skills and data processing	
Mentor , Sarah Fosnight (Undergraduate)	2018
Guided on basic lab skills, data processing and method development	
Awarded Summer Research Opportunity grant (\$3,000)	
Mentor , Heather Griffith (Undergraduate)	2019
Guided on field work and experimental design	
<i>Does soil type affect germination rates of prairie plants?</i>	
Tutor , University of Denver Biology Department	2016-2017
Tutor for students enrolled in Ecology courses and labs	

OUTREACH/COMMUNITY SERVICE

Idlewild Insectarium	2018-2020
Courses open to the public covering a range of entomological topics	
<i>Insect taxonomy</i>	
<i>Backyard pollinators: wild bees and others</i>	
<i>How to build a solitary bee nest</i>	
<i>Moth Ball</i>	
Beer with a Scientist	2020
Monnik Brewery. Organizer and Presenter	
Kentucky Science Center “Steminar”	2018-2020
Seminar talk geared towards local High School students on my current research.	
<i>*Held virtually in 2020, due to COVID-19</i>	
WCHQ Community Spotlight	2019
Radio Interview discussing my local research.	
Parks Department Safety	2019
Safety event teaching students about safety in the parks. Focus was on safe plants and insects and how to safely enjoy the outdoors.	
Chance Elementary School—Earth Day Event	2019

Established solitary bee nests on playground and garden and taught students about pollination, insects and conservation.	
Manual High School (Mentor)	2019
Introducing incoming 9 th grade students to STEM research and STEM careers outside of the medical realm.	
Central High School (Mentor)	2018-2019
Providing advice & guidance for students working on their science fair projects.	
Moore Middle School “Day of Science”	2018-2019
Moore Middle students visiting the University of Louisville, engaging them in the scientific process, plants, seed dispersal and experimentation.	
Science Fair Judge, Dupont Manual High School	2018-2020
Judging Plant Sciences	

ACADEMIC PRESENTATIONS

Ecological Society of America (Oral)	2020
<i>Urbanization and native plants: How local and landscape level factors influence solitary bee communities</i>	
Graduate Network of Arts & Sciences Symposium (Oral)	2020
<i>Urbanization influences floral reproductive output but not floral phenology</i>	
Kentucky Academy of Sciences (Oral)	2019
<i>Floral phenology influenced by soil moisture, not urbanization</i>	
Graduate Student Council Conference (3-Minute Thesis)	2019
<i>How urban areas are influencing plant-pollinator interactions</i>	
Ecological Society of America (Poster)	2019
<i>Floral phenology influenced by soil moisture, not urbanization</i>	
Graduate Network of Arts & Sciences Symposium (Oral)	2018
<i>Can urban prairie restorations support stable solitary bee communities?</i>	

MEMBERSHIPS

Ecological Society of America	2018-Current
Sigma Xi	2019-Current
Kentucky Academy of Science	2017-Current
Biology Graduate Student Association	2017-Current
<i>Outreach Chair: Coordinate outreach experiences for graduate students (2019-20)</i>	
<i>President (2020-Current)</i>	
Science Policy and Outreach Group	2017-Current
Kentucky Society of Natural History	2017-Current