

AARON N. SEXTON

French Foundation for Biodiversity Research (FRB)
Centre for the Synthesis & Analysis of Biodiversity (CESAB)
aaron.niles.sexton@gmail.com • aaronsexton.com • (he/him)

EDUCATION

- Aug.2017 - Jan.2022 **Ph.D. University of Louisville**, United States, Biology.
Dissertation: “*Plant-pollinator communities responsive to local and landscape level factors in grassland restorations*”
Advisor: Sarah Emery
- Aug.2013 - Jun.2017 **B.A. University of Denver**, United States, Ecology & Biodiversity,
Advisor: Robin Tinghitella.

PROFESSIONAL POSITIONS

- Mar.2022 – pres. **Postdoc**, Fondation pour la recherche sur la biodiversité
Project: NAVIDIV – *Inland navigation infrastructures and biodiversity: impacts and opportunities for management*.
Advisor: Alienor Jeliaskov
- Aug.2022 - May2024 **Adjunct Faculty**, University of Strasbourg
- Jan.2020 - Jan.2021 **Adjunct Faculty**, Spalding University
- Jan.2018 - Jan.2022 **Instructor**, Idlewild Insectarium
- Jan.2013 - May2017 **Research Technician**, University of Denver
- May2016 - Aug.2016 **Research Technician**, Alaska Long-Term Ecological Research Station

PEER-REVIEW PUBLICATIONS

Aaron N. Sexton, Jean-Nicolas Beisel, Cybill Staentzel, Christian Wolter, Evelyne Tales, Jérôme Belliard, Anthonie D.Buijse, Vanesa Martínez Fernández, Karl M. Wantzen, Sonja C. Jähnig, Carlos Garcia de Leaniz, Astrid Schmidt-Kloiber, Peter Haase, Marie Anne Eurie Forio, Gait Archambaud, Jean-François Fruget, Alain Dohet, Vesela Evtimova, Zoltán Csabai, Mathieu Floury, Peter Goethals, Várbiró Gábor, Miguel Cañedo-Argüelles, Aitor Larrañaga, Anthony Maire, Ralf B. Schäfer, James S. Sinclair, Rudy Vannevel, Ellen Welti & Alienor Jeliaskov. (2024) Inland navigation is a driver of freshwater biodiversity declines in Europe. In press at *Nature Ecology & Evolution*
<https://www.researchsquare.com/article/rs-3316255/v1>

Aurore Receveur†, Jonathan Bonfanti†, Stephanie D’Agata†, Andrew J. Helmstetter†, Nikki A. Moore†, Brunno F. Oliveira†, Cathleen Petit-Cailleux†, Erica Rievers Borges†, Marieke Schultz†, **Aaron N. Sexton**†, Devi Veytia†. (2024) David vs Goliath: Early career researchers in an unethical publishing system. *Ecology Letters*.
<https://doi.org/10.1111/ele.14395>

† indicates co-authors contributed equally to this work.

- Sexton, A. N.**, Benton S. F.*, and Emery, S. M. (2023) Urbanization and plant diversity influence different parameters of floral phenology. *Urban Ecosystems*. <https://doi.org/10.1007/s11252-022-01326-4>
- Sexton, A.N.**, Garces, K. R., Huber, M.R.*, and Emery, S.M. (2023) Urban grassland restorations have reduced plant fitness but not pollinator limitation. *Acta Oecologica*. <https://doi.org/10.1016/j.actao.2023.103898>
- Sexton, A. N.**, Benton S. F.*, Browning, A. B. *, and Emery S. M. (2021) Reproductive patterns of solitary cavity-nesting bees responsive to both local and landscape factors. *Urban Ecosystems*. <https://doi.org/10.1007/s11252-021-01116-4>
- Sexton, A. N.** and Emery S. M. (2020) Grassland restorations improve pollinator communities: a meta-analysis. *Journal of Insect Conservation*. <https://doi.org/10.1007/s10841-020-00247-x>
- Jenck, C. S., Lehto W. R., Ketterman B. T., Sloan L. F.*, **Sexton A. N.***, and R. M. Tinghitella. (2019) Phenotypic divergence among threespine stickleback that differ in nuptial coloration. *Ecology & Evolution*. <https://doi.org/10.1002/ece3.6105>

* Donates an undergraduate researcher at time of publication

PUBLICATIONS CURRENTLY IN PEER-REVIEW

Talmot, Victor; Hardion, Laurent; **Sexton, Aaron N.**; Jumeau, Jonathan; Jugieau, Enzo; Staentzel, Cybill. *Allelopathic potential: a trait genetically and environmentally based for invasive alien plants*.

Aaron N. Sexton.; Kane Lawhorn. *Designing ecologically resilient urban ecosystems*.

Jeliazkov, Alienor; Martínez-Fernández, Vanesa; Altanov, Vassil; Beisel, Jean-Nicolas; Buijse, Anthonie; Consuegra del Olmo, Sofia ; Felin, Swann; Garcia de Leaniz, Carlos; Graf, Wolfram; He, Fengzhi; Jähmig, Sonja; Leitner, Patrick; Schmidt-Kloiber, Astrid; **Sexton N. Aaron**; Staentzel, Cybill; Tales, Evelyne; Wantzen, Karl; Wolter, Christian. *A global knowledge map of inland commercial navigation effects on freshwater ecosystems*.

Kylea R. Garces, **Aaron N. Sexton**, Abigail Hazelwood*, Nate Steffens, Linda Fuselier, Natalie Christian. *It takes two: Online and in-person discussions offer complementary learning opportunities for students*.

PUBLIC OPINION PUBLICATIONS

Bernheim forest and Bell Bowl Prairie are warnings of increasing seizure of wild lands.

Aaron Sexton. *Courier Journal*, March 2023

Why historically redlined South and West Louisville need more green space.

Aaron Sexton. *Courier Journal*, October 2021.

GRANTS AND AWARDS

2023-24 SYNERGY Extension – (Co-PI with Alienor Jeliazkov) –

€30,000

	<i>10-month extension of working group & Establish collaboration with a partner working group.</i>	
2022	National Science Foundation Postdoc Fellowship (PI) – “Highly Meritorious”, but not funded	
2021	Cornett Entomological Research Grant (PI).	\$500
2021	Furnish Teaching Award – <i>Top Graduate Student Teacher in Univ. Louisville Biology Department</i>	
2020	Joan Ehrenfeld Award – <i>Top Student Presentation in Urban Ecology at the Ecological Society of America</i>	
2020	Kentucky Native Plant Society Research Grant (PI)	\$500
2020	Beechmont Garden Club Research Grant (PI)	\$1,000
2018 & 19	Univ. Louisville Graduate School Research Grant (PI)	\$500
2019	National Science Foundation, Graduate Research Fellowship (PI) – <i>Honorable Mention</i>	
2018	Kentucky Academy of Sciences, Marcia Botany Research Fund (PI)	\$1,565
2018	Kentucky Natural History Society Research Grant (PI)	\$800
2018	Univ. Louisville College of Arts & Sciences Research Grant (PI)	\$500
2018	Univ. Louisville Biology Graduate Student Association Research Grant (PI)	\$175
2017-21	Univ. Louisville, Graduate Student Research Fellowship	\$44,000
2016	Univ. Denver, Dean’s Scholarship	\$500
2015 & 16	Univ. Denver, H&B Agnew Scholarship	\$500

TEACHING ROLES

Instructor-of-Record

2022-24	<i>Scientific English</i> , University of Strasbourg (40 students – 4 semesters)
2019-20	<i>Environmental Biology</i> (BIOL 263), University of Louisville (24 Students – 2 semesters)
2020-21	<i>Environmental Science</i> (ENVS-101), Spalding University (22 students – 3 semesters)

Teaching Assistant

2021	<i>Diversity of Life</i> (BIOL 242), University of Louisville (40 students)
2020-21	<i>Quantitative Biology</i> (BIOL 244), University of Louisville (60 students)
2017-18	<i>Laboratory for Biology: Current Issues and Applications</i> (BIOL 104), University of Louisville. (80 students/semester)

MSc/BSc Research Mentoring

2023-pres.	Naomi Fournier – <i>Quantifying river restoration strategies</i>
2023-2024	Victor Gabor – <i>Modeling plant responses to climate & land use</i>

- 2020-21 Ally Michels – *Effects of soil microbes on above and belowground biomass on Chamaecrista fasciculata*
- 2020-21 Marissa Huber – *Effects of urbanization and pollinator limitation on Chamaecrista fasciculata*
- 2019-20 Adam Browning – *Can bee pollen usage protect solitary bees against parasitism?*
Awarded two research grants during my mentorship totaling \$3,500
- 2018-22 Lisa Heng – *How does land management affect urban tick abundances?*
- 2018-19 Sarah Fosnight – *Reproductive patterns of solitary cavity-nesting bees responsive to both local and landscape factors*
Awarded Summer Research Opportunity grant \$3,000
- 2018-19 Heather Griffith – Guided on field work, soil processing and experimental design
- 2018 Kristen Ehringer – Guided on pollen storage and identification
- 2016-17 Tutor, University of Denver (Ecology courses)

PROFESSIONAL PRESENTATIONS

Invited Talks

- 2024 University of Washington, *Seattle, US*
- 2024 Technical University of Munich, *Munich, Germany*
- 2023 Institut national de la recherche Agronomique (INRAE), *Antony, France*
- 2022 University of Strasbourg, *Strasbourg, France*
- 2018-20 Kentucky Science Center STEMinar Series, *Louisville, US*

Conference Presentations

- 2023 *Inland navigation is a driver of freshwater biodiversity declines in Europe.*
British Ecological Society Annual Meeting
- 2022 *Impact of freshwater shipping on biodiversity is context-dependent.*
SFE-GFO-EEF Joint International Conference on Ecological Sciences
- 2021 *Urbanization and plant diversity influence different aspects of floral phenology.*
Ecological Society of America Annual Meeting
- 2020 *Urbanization and native plants: How local and landscape level factors influence solitary bee communities.*
Ecological Society of America Annual Meeting
- 2020 *Urbanization influences floral reproductive output but not floral phenology.*
Louisville Graduate Network of Arts & Sciences Symposium
- 2019 *Floral phenology influenced by soil moisture, not urbanization.*
Kentucky Academy of Sciences Annual Meeting
- 2019 *Floral phenology influenced by soil moisture, not urbanization.*
Ecological Society of America Annual Meeting
- 2018 *Can urban prairie restorations support stable solitary bee communities?*
Louisville Graduate Network of Arts & Sciences Symposium

COMMUNITY ENGAGEMENT

- 2023 **Biologist** – Lycée Jean Rostand, presentation on endangered species

- 2023 **Ecologist** – “*LG&E vs. Berheim*” a documentary discussing a land dispute between a power company and forest reserve that I have previously written about
- 2021 **Invited speaker** – Yew Dell Botanical Gardens “*Botany of Christmas*”
- 2021 **Invited speaker** – Yew Dell Botanical Gardens “*Other Pollinators*”
- 2021 **Ecologist** – FirstBuild Video Series, “*Prototyping A Solitary Bee Bath House For Home Conservation, Gardening, And Pollination*”
- 2021 **Radio interview** – Kentucky Conservations Conversations
- 2021 **Invited speaker** – Jefferson County Master Gardener Conference, “*Whats the buzz? Natural history, ecology and maintenance of solitary bees*”
- 2020 **Radio interview** – Forward Radio
- 2020 **Invited speaker** – Kentucky Master Gardener Conference, “*Whats the buzz? Natural history, ecology and maintenance of solitary bees*”
- 2020 **Lead organizer & Speaker** – Beer with a Scientist, *Urbanization and native plants: impacts on solitary bee communities*
- 2019-20 **Panelist** – TriBeta Association, Entering Graduate School Panel
- 2018-20 **Judge** – Manual High School Science Fair
- 2019 **Radio Interview** – WCHQ Community Spotlight
- 2019 **Educator** – Louisville Metro Parks Department, Outdoor Education Day, event teaching students about plants and insects in the parks
- 2019 **Invited speaker** – Chance Elementary, Earth Day Event, discussing pollinators
- 2019 **Mentor** – Manual High School, for STEM research and careers
- 2018-19 **Mentor** – Central High School, for science fair projects
- 2018-20 **Educator** – Moore Middle School, Day of Science. Students visiting the University of Louisville, engaging them in the scientific process, and experimentation

ACADEMIC SERVICE

- 2022 **Organizer**, Functional Traits in Ecology Conference, Montpellier France
- 2020 **Lead organizer**, University of Louisville Biology Dept. Fall Seminar Series
- 2020-21 **President**, University of Louisville Biology Dept. Graduate Student Association
- Peer review Multiple journals including (Urban Ecosystems, Scientific Reports, Environmental Science and Pollution Research, PeerJ, etc.).

MEMBERSHIPS

- British Ecological Society (2023-pres)
- Société Française d'Écologie et d'Évolution (2022-pres)
- Ecological Society of America (2019-2023)
- University of Louisville Biology Graduate Student Association (2018-2022)
President 2020-2021 – Outreach Chair 2019-2020