# Kathleen C. Arrowsmith (Tom)

Contact
Information

University of Texas at Austin Department of Integrative Biology Austin, TX 78712

kcarrows@utexas.edu https://kcarrowsmith.github.io

# RESEARCH INTERESTS

# How do environmental conditions influence the spatiotemporal distribution of plant-pollinator interactions?

Biodiversity change, biogeography, community ecology, global change ecology, plant-pollinator interactions, conservation biology.

# ACADEMIC APPOINTMENTS

Postdoctoral Fellow – University of Texas at Austin, Department of Integrative Biology (2023 – present)

#### **EDUCATION**

 ${\bf Doctor\ of\ Philosophy-University\ of\ Washington,\ Department\ of\ Biology\ (2023)}$ 

Biotic and Abiotic Drivers of Plant-Pollinator Interaction Rewiring.

Advisor: Dr. Berry Brosi.

Master of Public Administration – Columbia University (2014) Bachelor of Science – University of California, Berkeley (2013) Quantifying Hedgerow Effects on Native Bee Movement.

Advisor: Dr. Claire Kremen.

# PEER REVIEWED PUBLICATIONS

- Arrowsmith, K.C., V.A. Reynolds, H.M. Briggs, & B.J. Brosi. 2023. Community context mediates effects of pollinator loss on seed production. *Ecosphere* 14(6):e4569. http://doi.org/10.1002/ecs2.4569
- [1] Sardiñas, H., **K.C. Tom**, L. Ponisio, A. Rominger, & C. Kremen. 2016. Sunflower (*Helianthus annuus*) pollination in California's Central Valley is limited by native bee nest site location. *Ecological Applications* 26(2):438-447. http://doi.org/10.1890/15-0033.

### Papers In Review

[1] **Arrowsmith, K.C.**, M.D. Strait, A. Schiffer, M. Chandar, & B.J. Brosi. Temperature shapes plant-pollinator interaction patterns independently of community composition. *Ecology* 

# Papers In Preparation

[1] Arrowsmith, K.C., V.A. Reynolds, M.D. Strait, M. Chandar, A. Schiffer, & B.J. Brosi. Environmental variation drives patterns of plant-pollinator interaction rewiring.

#### Presentations

Invited Talks

• Arrowsmith, K.C.. 2023. Examining drivers of plant-pollinator interaction rewiring. Western Forest Insect Working Conference. Seattle, WA.

Contributed Talks (selected)

- Arrowsmith, K.C. & B.J. Brosi. 2022. Temperature drives patterns of plant-pollinator interaction occurrence. Ecological Society of America. Montreal, QC.
- Arrowsmith, K.C. & B.J. Brosi. 2022. Temperature drives spatial patterns of plant-pollinator interaction rewiring. International Biogeography Society. Vancouver, BC.
- Arrowsmith, K.C. & B.J. Brosi. 2021. Environmental and biological drivers of plant-pollinator interaction rewiring. Ecological Society of America. Virtual.
- Arrowsmith, K.C. & B.J. Brosi. 2021. *Identifying drivers of plant-pollinator interaction rewiring*. Entomological Society of America, Pacific Branch Meeting. Virtual.

# Fellowships & Grants

NSF Postdoctoral Research Fellowship in Biology (2023), \$240,000

Northwest Climate Adaptation Science Center Research Fellowship (2022), \$32,000

NSF Graduate Research Fellowship (2018), \$138,000 Emory University Woodruff Fellowship (2018), \$25,000

North American Pollinator Protection Campaign Imperiled Bombus Grant (2024), \$5,000

Hoag Award (2023), \$3,400

Robin M. Harris Award (2022), \$3,715

Colorado Mountain Club Foundation (2021), \$1,000 AMNH Theodore Roosevelt Memorial Fund (2020), \$1,700

Emory Office of Sustainability Initiatives General Incentives Fund (2019), \$1,035 Berkeley Center for Diversified Farming Systems Small Grant (2012), \$1,500

UC Berkeley SPUR Grant (2012), \$2,000

#### Teaching

#### University of Washington – Graduate Teaching Assistant

BIOL 472A: Community Ecology (2021, 2022) BIOL 200: Introductory Cell Biology (2022) Emory University - Graduate Teaching Assistant

ENVS 260: Quantitative Methods in Environmental Science (2019)

### Undergraduate Willa Pabst (University of Texas, Hook Fellow)

Mentorship (SELECTED)

Outcomes: fellowship \$7,233.05 to fund summer research project (2024)

Manogya Chandar (Northeastern University, Cooperative Education)

Outcomes: senior thesis, presentation at National Council for Undergraduate Research

(2022), co-authored manuscript in review (2024)

**Daniel Lahn** (University of Washington, research for credit)

Outcomes: poster at UW Undergraduate Research Symposium (2022)

#### OUTREACH

Lady Bird Johnson Wildflower Center – Jean Andrews Science Fair (Austin, TX; 2024) Gabriel E. Gallardo Research Symposium – Grad Student Panel (Seattle, WA; 2023)

Bryant Elementary School – Science Fair Mentor (Seattle, WA; 2023) Sias International School – Skype a Scientist (Zhengzhou, China; 2023)

Pinhead Institute – Punk Science (Telluride, CO; 2022)

Atlanta Science Festival – Imagine a Scientist (Decatur, GA; 2019) Fernbank Museum – Adventures in Science (Decatur, GA; 2018 & 2019)

# EQUITY ACTIVITIES

## Rocky Mountain Biological Laboratory

- Co-created and led a workshop about identity-based field safety (2022, 2023, 2024).
- Coordinated a seminar to amplify the work of BIPOC and LGBT+ researchers (2023).
- Facilitated a weekly safe space meeting for BIPOC undergraduates (2022).

#### University of Washington:

- Collaborated in the evaluation and improvement of graduate admissions framework to increase transparency and accessibility for diverse applicants (2022).
- Co-developed a planning framework to increase equity in fieldwork (2021).

# Emory University

- Co-founded a DEI committee for our graduate program to address hostility from department faculty and staff toward BIPOC and disabled students (2019).
- Co-facilitated a DEI ethics workshop to raise student concerns and open dialogue regarding hostilities and microaggressions (2020).

Academic SERVICE

Reviewer for Urban Ecosystems (2024), Ecology and Evolution (2023), Journal of Animal

Ecology (2021, 2022), The American Naturalist (2020).

Ecological Society of America (ESA) Annual Meeting Abstract Review Committee (2024)

UT Community, Accessibility, and Wellbeing Committee (2024)

RMBL Community Diversity Committee (2021 – 2024)

UW Graduate and Postdoctoral Program Committee (2021 - 2023)

UW Biology Equity in Field Research Task Force (2021) Emory University PBEE Seminar Committee (2019 - 2020) Emory University 1915 Scholars Program (2019 – 2020) Emory University PBEE Diversity Committee (2019 - 2020) Emory University PBEE Recruitment Committee (2018 – 2019)

Professional Memberships

Ecological Society of America (2020, 2022 - 2024) Entomological Society of America (2020, 2023)

International Biogeography Society (2022)

**EDUCATION** 

COMPLEMENTARY 2019, Mentor Training Certificate, Atlanta Society of Mentors. Atlanta, GA 2017, The Bee Course, American Museum of Natural History. Portal, AZ

2016, Software Carpentry Workshop, Berkeley Institute for Data Science. Berkeley, CA

SOFTWARE SKILLS

Proficient: R, Office Package, TEX (LATEX, BIBTEX).

Familiar: ArcGIS

Operating Systems: Microsoft Windows, Mac OS.