Julia Pilowsky

Education

- 2018- **PhD Ecology**, *University of Copenhagen, University of Adelaide*, Copenhagen, DK; Adelaide, AU.
- Thesis Process-Explicit Models of Large Herbivore Range Dynamics in North America
- 2013–2017 MS Biology, Tufts University, Medford, MA, USA.
 - Thesis The Behavioral Ecology of a Wasp Invasion
- 2008–2012 **BA Ecology**, *Columbia University*, New York, NY, USA.
 - Thesis Social Context and Song Ornamentation in an Avian Cooperative Breeder

Publications

- J. A. Pilowsky and P. T. Starks. Displacement and replacement in real time: Polistes dominulaâĂŹs impact on P. fuscatus in the northeastern U.S. *Biological Invasions*, 20(5):1161–1169, May 2018.
- S. Keen, C. D. Meliza, J. Pilowsky, and D. R. Rubenstein. Song in a social and sexual context: vocalizations signal identity and rank in both sexes of a cooperative breeder. *Frontiers in Ecology and Evolution*, 4:46, 2016.
- N. Wilson-Rich, J. A. Pilowsky, B. Foo, T. Tien, F. Hester, and P. T. Starks. A test of the haploid susceptibility hypothesis using a species with naturally occurring variation in ploidy. *Insectes sociaux*, 61(2):163–169, 2014.
- J. A. Pilowsky and D. R. Rubenstein. Social context and the lack of sexual dimorphism in song in an avian cooperative breeder. *Animal behaviour*, 85(4):709–714, 2013.

Research Experience

- 2017–2018 **EDSD Fellow**, *Johan Dahlgren*, *Southern Denmark University*, Odense, Denmark. Developing the colorednoise package for simulating populations with temporal autocorrelation
- 2013–2017 **Master's Thesis Research**, *Philip Starks, Tufts University*, Medford, MA. Studies on the biogeography, demography, and behavior of the European paper wasp and its native competitors.
 - 2016 **Research Technician**, *Avery Cohn, Tufts University*, Medford, MA. Collected, processed, and visualized data on coffee production and climate in the Neotropics.
 - 2012 **Research Intern**, *Reed Bowman*, *Archbold Biological Station*, Lake Placid, FL. Study on the effect of habitat fragmentation on spatial kin structure in the Florida scrub jay.

2010–2012 **Undergraduate Thesis Research**, *Dustin Rubenstein, Columbia University*, New York, NY.

Study on social selection and song structure in the cooperatively breeding superb starling.

Awards

- 2017 Tufts Graduate Research Symposium, Second place winner.
- 2014 Insectes Sociaux, Paper of the Year Award.
- 2014 Tufts Graduate Research Competition, Winner.
- 2013 National Science Foundations, Graduate Research Fellowship.
- 2012 Animal Behavior Society, Charles H. Turner Award.

Computer skills

Languages R, Python, C++

Technologies ArcGIS, LATEX, Git

Web Ruby, HTML, CSS

Teaching Experience

2016 **Study Group Leader**, *Osher Institute, Tufts University*, Medford, MA.

Created curricula with lectures, discussion, and activities for two classes on evolution for senior citizens. Taught curricula as month long courses for 30 senior students each year.

2014–2015 **Graduate Instructor**, *Tufts University*, Medford, MA.

Developed a new lab curriculum to complement a lecture course on biostatistics. Taught the lab course I developed for a class of 25 graduate and undergraduate students.

Presentations

2017 Ecological Society of America, Portland, OR.

15 minute presentation. "The ecology of cooperation in Polistes wasps."

2013 Integrated Behavioral Research Group, Princeton, NJ.

30 minute presentation. "Spectral analysis of song in a cooperatively breeding starling."

Languages

English Native fluency

Spanish Native fluency

French Proficient