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

D. A. Fordham, S. T. Jackson, S. C. Brown, B. Huntley, B. W. Brook, D. Dahl-Jensen, M. T. P. Gilbert, B. L. Otto-Bliesner, A. Svensson, S. Theodoridis, J. M. Wilmshurst, J. C. Buettel, E. Canteri, M. McDowell, L. Orlando, J. Pilowsky, C. Rahbek, and D. Nogues-Bravo. Using paleo-archives to safeguard biodiversity under climate change. *Science*, 369(6507), Aug. 2020.

J. A. Pilowsky and J. P. Dahlgren. Incorporating the temporal autocorrelation of demographic rates into structured population models. *Oikos*, 129(2):238–248, Nov. 2019.

J. A. Pilowsky and P. T. Starks. Displacement and replacement in real time: Polistes dominula's 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