### **Katie Scranton**

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# Experience

Lead Data Scientist, Elsevier  Health Markets Platform	2020 - present
Senior Data Scientist, Elsevier Advanced Clinical Decision Support	2018 - 2020
Lecturer, University of California, Los Angeles  Life Sciences	2018
Postdoctoral Fellow, University of California, Los Angeles  Department of Ecology and Evolutionary Biology	2016 - 2018
Postdoctoral Fellow, Yale University  Department of Ecology and Evolutionary Biology	2012 - 2015
Education	
Ph.D., University of California, Berkeley  Department of Environmental Science, Policy, and Management	2006 - 2012
B.Sc., McGill University  Major in Biology. Minor in Mathematics and Statistics	2000 - 2005

### **Publications**

- A. Morozov, K. Abbott, K. Cuddington, T. Francis, G. Gellner, A. Hastings, Y.C. Lai, , S. Petrovskii,
   K. Scranton, M.L. Zeeman, 2020. Long transients in ecology: Theory and applications. *Physics of Life Reviews*. doi: 10.1016/j.plrev.2019.09.004
- A. Hastings, K. Abbott, K. Cuddington, T. Francis, G. Gellner, Y.C. Lai, A. Morozov, S. Petrovskii, K. Scranton, M.L. Zeeman, 2018. Transient phenomena in ecology. *Science*. doi: 10.1126/science.aat6412
- Littrell, K.A., S.R. Gephard, A.D. MacDonald, E.P. Palkovacs, K. Scranton, and D.M. Post, 2018.
   Pre-zygotic isolation and potential for pre-zygotic isolation and hybridization between landlocked and anadromous alewife (Alosa pseudoharengus) following secondary contact. Evolutionary Applications. DOI: 10.1111/eva.12645
- 4. **Scranton, K.**, P. Amarasekare, 2017. Predicting phenological shifts in a changing climate. PNAS. doi: 10.1073/pnas.1711221114
- 5. **Scranton, K.**, V. Lummaa, S.C. Stearns, 2016. The importance of the timescale of the fitness metric for estimates of selection on phenotypic traits during a period of demographic change. *Ecology Letters.* **19**: 854-861.
- 6. **Scranton, K.**, D.A. Vasseur, 2016. Coexistence and emergent neutrality generate synchrony among competitors in fluctuating environments. *Theoretical Ecology.* **9(3)**:353-363.

- 7. de Valpine P., K. Scranton, J. Knape, K. Ram, and N.J. Mills, 2014. The importance of individual developmental variation in stage-structured population modeling. *Ecology Letters*. 17(8):1026-1038
- 8. **Scranton, K.**, J. Knape, and P. de Valpine, 2014. An approximate Bayesian computation approach to parameter estimation in a stochastic stage-structured population model. *Ecology.* **95(5)**:1418-1428
- 9. **Scranton, K.**, M. Stavrinides, N. J. Mills, and P. de Valpine, 2013. Small-scale intraspecific life history variation in herbivorous spider mites (*Tetranychus pacificus*) is associated with host plant cultivar. *PLoS ONE* 8:e72980.
- 10. de Valpine, P., **K. Scranton**, and C. P. Ohmart, 2010. Synchrony of population dynamics of two vineyard arthropods occurs at multiple spatial and temporal scales. *Ecological Applications*. **20**:1926–1935.

#### Invited Talks

Women in Statistics and Data Science Conference, American Statistical Association October 2017 WSDS R-Ladies Panel: Improving Gender Diversity in a Male Dominated Community

Louisiana State University

May 2017

 $Department\ of\ Oceanography\ and\ Coastal\ Sciences$ 

Rutgers, the State University of New Jersey

April 2017

Department of Ecology, Evolution, and Natural Resources

University of California, Riverside October 2016

 $Department\ of\ Biology$ 

University of Sheffield, United Kingdom

April 2015

Department of Animal and Plant Sciences

Haverford College, Pennsylvania

Department of Mathematics and Statistics

November 2014

## Teaching

Lecturer, University of California, Los Angeles
Introduction to Collaborative Learning Theory & Practice

Spring Quarter 2018

Lecturer, University of California, Los Angeles

Mathematics for Life Scientists

Winter Quarter 2018