

Lei Zhao

Assistant Researcher Senior in University of Kansas

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Education

- 2016-present* **Assistant Researcher Senior in Quantitative Ecology**
University of Kansas
- 2009-present* **Ph.D. Aquatic Ecology Research**
North China Electric Power University
- 2013-2014* **Associate Ph.D. Student in Life Sciences Research**
Imperial College London
- 2012-2013* **Associate Ph.D. Student in Biological Sciences**
Queen Mary University of London
- 2007-2009* **MSc Aquatic Ecology Research**
North China Electric Power University (in a successive postgraduate-doctoral program)
- 2003 -2007* **BSc Applied Physics**
Shandong University

Research Interests

My current research interests are focused on detecting the spatial synchrony of population dynamics and uncovering the underlying mechanisms of the synchrony, mainly using wavelet analysis method. I also interested in the effects of species loss on community stability, and the impacts of stressors (e.g. climate change) on the structure and functioning of food webs.

Publications

Journal papers:

- **Lei Zhao**, Huayong Zhang, Eoin J. O’Gorman, Wang Tian, Athen Ma, John C. Moore, Stuart Borrett, and Guy Woodward, 2016. Weighting and indirect effects identify keystone species in food webs, *Ecology Letters*, Volume 19: 1032-1040 (DOI: 10.1111/ele.12638).
- Huayong Zhang, **Lei Zhao**, Wang Tian, and Hai Huang, 2016. Stability of food webs to biodiversity loss: Comparing the roles of biomass and node degree, *Ecological Indicators*, Volume 67: 723-729 (DOI: 10.1016/j.ecolind.2016.03.045).
- Anthony I Dell, **Lei Zhao**, Richard G. Pearson, and Ross A. Alford, 2015. Population and community body size structure across a complex environmental gradient, *Advances in Ecological Research*, Volume 52: 115-167 (DOI: 10.1016/bs.aecr.2015.02.002).
- Eoin J. O’Gorman, **Lei Zhao**, Doris E. Pichler, Nikolai Friberg, Björn C. Rall, Daniel C. Reuman, Alex Seeney, Huayong Zhang, and Guy Woodward, Bending the general rules of ecology in a naturally warmed ecosystem (co-first author, manuscript in preparation for *Nature Climate Change*)

Conference papers:

- **Lei Zhao**, Huayong Zhang, Tousheng Huang, Xinqiang Zhu, Lu Han, 2010. Fragility of Chaos in Multispecies Competition Influenced by Predation, ASME 2010 International Mechanical Engineering Congress & Exposition (Vancouver, Canada)

Presentations

- *Compartments in Ecological Networks and Their Roles in Stabilizing Food* (The 20th CLSS-UK Annual Meeting, Queen Mary University of London, 30th August, 2014)
- *Detecting Compartments in Food Webs— A new method based on energy distribution* (BES Group Meeting: Aquatic Group Reboot and Detrital Dynamics in Aquatic Systems, Charles Darwin House, London, 21st -25th July, 2014)

Membership

Freshwater Biological Association, London, UK