



Seewiesen Colloquia

Speaker invited by Research Group Hau:

Thursday, 04 February , 2016, 13:00 h, in House 4, Lecture Room

Coping with change: The evolutionary ecology of stress

Prof. Maren Vitousek
Cornell University, USA

Why are some individuals, and some species, better able to cope with stress than others? When faced with an acute challenge – the attack of a predator, a severe storm, a major injury – hormones mediate changes in an enormous diversity of behavioral and physiological traits. Variation in these key mechanisms of phenotype can influence the ability to survive and reproduce. In this talk I will discuss how integrative research in free-living birds is providing fundamental insight into the capacity of individuals, populations, and species to persist in changing environments, and how selection shapes endocrine mediators of phenotype.

Who is Maren Vitousek?

- 2008 PhD Princeton University, USA
- 2009 International postdoctoral fellow, Max Planck Institute for Ornithology, DE
- 2010 Chancellor's postdoctoral fellow, University of Colorado, USA
- 2012 Senior Research Associate, Neurobiology and Behavior, Cornell University, USA
- 2016 Assistant Professor, Ecology and Evolutionary Biology, Cornell University, USA

Selected publications:

- Vitousek MN**, Jenkins BR, and Safran RJ. 2014. Stress and success: individual differences in the glucocorticoid stress response predict behavior and reproductive success under high predation risk. **Hormones and Behavior** 66: 812-819.
- Jenkins BR, **Vitousek MN**, Hubbard JK, and Safran RJ. 2014. An experimental analysis of the heritability of variation in glucocorticoid concentrations in a wild avian population. **Proceedings of the Royal Society of London B** 281: 20141302.
- Vitousek MN**, Zonana D, and Safran RJ. 2014. An integrative view of the signaling phenotype: dynamic links among signals, physiology, behavior, and social context. **Current Zoology** 60(6): 739-754.
- Vitousek MN**, Stewart RA, and Safran RJ. 2013. Female plumage color influences seasonal oxidative damage and testosterone profiles in a songbird. **Biology Letters** 9: 20130539.
- Vitousek MN** and Romero LM. 2013. Stress responsiveness predicts individual variation in mate selectivity. **General and Comparative Endocrinology** 187: 32-38.
- Vitousek MN**, Dor R, and Safran RJ. 2012. Sexual selection: Climatic carry-over. **Current Biology** 22(2): R61-63.