**BENJAMIN BAISER**

**Assistant Professor**

**Department of Wildlife Ecology and Conservation**

**University of Florida**

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**Education**

**2003 –** B.A. (Environmental Studies and Biology) University of California Santa Cruz

**2009 –** Ph.D. (Ecology and Evolution) Rutgers University

Ph.D. Dissertation – Biodiversity in a rapidly changing world: From local interactions to large-

scale patterns. (Adviser: Julie L. Lockwood)

**Employment History**

**2013- Current –** Assistant Professor, Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL

**2009-2013 –** Post-doctoral Researcher, Harvard University, Harvard Forest, Petersham, MA

**2011** **–** Adjunct Instructor, Emerson College, Boston, MA

**2006-2009 –** Graduate Teaching Assistant, Rutgers University, New Brunswick, NJ

**2004-2006 –** Graduate Research Associate, Rutgers University, New Brunswick, NJ

**Publications (Peer Reviewed)**

1. Bovendorp, R. S., Brum, F. T, **Baiser. B,** McCleery, R. A., Loyola, R, Cianciaruso, M. V., Galetti, M. (in review). Defaunation and forest fragmentation drives functional and phylogenetic diversity of small mammal. *Diversity and Distributions*
2. Lau, M. K., Borrett, S. R., **Baiser, B,** Gotelli, N. J., Ellison, A. M. (accepted).Ecological Network Metrics: Opportunities for Synthesis. *Ecosphere.*
3. **Baiser, B**., Valle, D., Zelazny, Z., & Burleigh, J. G. (2017). Non‐random Patterns of Invasion and Extinction Reduce Phylogenetic Diversity in Island Bird Assemblages. *Ecography*. doi:10.1111/ecog.02738
4. Zarnetske, P. L., **Baiser, B**., Strecker, A., Record, S., Belmaker, J., & Tuanmu, M. N. (2017). The Interplay Between Landscape Structure and Biotic Interactions. *Current Landscape Ecology Reports*, *2*(1), 12-29.
5. Elhesha, R., Kahveci, T., & **Baiser, B**. (2017) Motif centrality in food web networks. *Journal of Complex Networks*. doi: 10.1093/comnet/cnw032
6. **Baiser, B**., Elhesha, R., & Kahveci, T. (2016). Motifs in the assembly of food web networks. *Oikos,* 125: 480-491.
7. Poisot, T., Gravel, D., Leroux, S., Wood, S. A., Fortin, M. J., **Baiser, B**., Cirtwill, A., Araujo, M. B., & Stouffer, D. B. (2016). Synthetic datasets and community tools for the rapid testing of ecological hypotheses. *Ecography*, 39: 402-408.
8. Poisot, T. E., **Baiser, B**., Dunne, J. A., Kéfi, S., Massol, F., Mouquet, N. and Gravel, D. (*2015*). mangal-making complex ecological network analysis simpler. *Ecography*, 38: 001–007, 2015
9. Valle, D. R., **Baiser, B**., Woodall, C. W., Chazdon, R (2014). Decomposing biodiversity data using the Latent Dirichlet Allocation model, a probabilistic multivariate statistical method. *Ecology Letters*,17(12), 1591-1601.
10. Ellison, A. M. and **Baiser, B**. (2014). Hemlock as a foundation species. Hemlock: A Forest Giant’s Life in the Shade and on the Edge (ed D.R. Foster). Yale University Press, New Haven, CT.
11. **Baiser, B**., Whittaker, N., and Ellison, A. M. (2013). Modeling foundation species in ecological networks. *Ecosphere* 4(12):146. http://dx.doi.org/10.1890/ES13-00265.1
12. \*Sirota, J., **Baiser, B.**, Gotelli, N. J., and Ellison, A. M. (2013). Organic-matter loading determines regime shifts and alternative states in an aquatic ecosystem. *Proceedings of the National Academy of Sciences, USA*, 110(19):7742–7747.
13. **†Baiser, B**., Buckley, H. L., Gotelli, N. J., and Ellison, A. M. (2013). Predicting food web structure with metacommunity models. *Oikos*, 122:492–506.

 **† selected as editor’s choice April, 2013 issue**

1. **Baiser, B**., Olden, J. D., Record, S., Lockwood, J. L., McKinney, M. L. (2012). Pattern and process of biotic homogenization in the New Pangaea. *Proceedings of the Royal Society B: Biological Sciences*, 279:4772– 4777.
2. **Baiser, B.**, Gotelli, N. J., Buckley, H. L., Miller, T. E., and Ellison, A. M. (2012). Geographic variation in network structure of a Nearctic aquatic food web. *Global Ecology and Biogeography*, 21:579–591.
3. **Baiser, B.**, \*Ardeshiri, R., and Ellison, A. M. (2011). Species richness and trophic diversity increase decomposition in a co-evolved food web. *PLoS ONE* 6(5): e20672.doi:10.1371/journ al.pone.0020672
4. **Baiser, B.,** and Lockwood, J. L. (2011). The relationship between functional and taxonomic homogenization. *Global Ecology and Biogeography*, 20:134-144.
5. Sackett, T. E., Record, S., Bewick, S., **Baiser, B.**, Sanders, N. J., and Ellison, A. M. (2011). Response of macroarthropod communities to the loss of hemlock (Tsuga canadensis), a foundational species. *Ecosphere* 2:art74. [doi:10.1890/ES11-00155.1]
6. Boulton, R. L., **Baiser, B.**, Davis, M. J., Virzi, T., and Lockwood, J. L. (2011). Variation in laying date and clutch size: The Everglades environment and the Cape Sable seaside sparrow. *The Auk*, 128, (2):374-381.
7. **Baiser, B.**, Russell, G., and Lockwood, J. L. (2010). Connectance determines invasion success via trophic interactions in model food webs. *Oikos*, 119:1970-1976.
8. **Baiser, B.**, Lockwood, J. L., La Puma, D., and Aronson, M. (2008). The perfect storm: two ecosystem engineers interact to degrade deciduous forests of New Jersey. *Biological Invasions*, 10:275-285.
9. **Baiser, B.**, Boulton, R. L., and Lockwood, J. L. (2008). Influence of water depth on nest success of the endangered Cape Sable seaside sparrow in the Florida Everglades. *Animal Conservation*, 11:190-197.

\***indicates undergraduate co-author**

**Publications (Non-peer reviewed)**

1. Lockwood, J.L., **Baiser, B.**, Boulton, R., Davis, M., and La Puma, D.A. (2007) Detailed study of Cape Sable seaside sparrow nest success and causes of nest failure: Recovering small populations of Cape Sable seaside sparrows: 2007 annual reports. US Fish and Wildlife Service, Vero Beach, FL and Everglades National Park, Homestead, FL.
2. Lockwood, J.L., **Baiser, B.**, Boulton, R. and Davis, M. (2006) Detailed study of Cape Sable seaside sparrow nest success and causes of nest failure: 2006 annual report. US Fish and Wildlife Service, Vero Beach, FL.

**Presentations**

**2017 –** University of Florida Biodiversity Institute Symposium, Talk Titled: *“DNA barcoding of plant-herbivore food webs in the sandhill ecosystem to quantify fire-driven changes in feeding interactions”*

**2016 –** The International Tropical Botany and Pine Rockland conference, Fairchild Tropical Botanic, Garden, Talk Titled: “*DNA barcoding of plant-herbivore networks to quantify change in network structure along anthropogenic gradients*”

**2016 –** Ecological Society of America 2016, Talk Titled:  **“***Non‐random Patterns of Invasion and Extinction Reduce Phylogenetic Diversity in Island Bird Assemblages*”

**2015 –** Ecological Society of America, Talk Titled: *Motifs in the Assembly of Food Webs*

**2014 –** Invited Seminar Georgia Southern University, Talk Titled: *Causes and consequences of the network structure of food webs.*

**2014 –** Invited Seminar Florida State University, Talk Titled: *Causes and consequences of the network structure of food webs.*

**2013 –** Ecological Society of America, Talk Titled: *Modeling foundation species in food webs*

**2012 –** Ecological Society of America, Talk Titled: *Predicting food web structure with metacommunity models*

**2011 –** Ecological Society of America, Talk Titled: *Species richness and trophic diversity increase decomposition in a co-evolved food web*

**2010 –** Ecological Society of America, Talk Titled: *The relationship between functional and*

*taxonomic homogenization*

**2009 –** Rutgers-Princeton-Penn Graduate student symposium: Talk Titled: *Food web topology*

*and species richness control invasion success via trophic interactions in model food webs*

**2009 –** Partnership for Regional Invasive Species Management: Talk titled: *The perfect storm:*

*two ecosystem engineers interact to degrade deciduous forests of New Jersey*

**2006 –** North American Ornithological Conference-Vera Cruz Mexico: Poster titled- *The Effect*

*of Water Level on the Nesting Success of the Cape Sable Seaside Sparrow*

**2006 –** Symposium for Conserving Birds in Human-Dominated Landscapes: Poster titled- *The*

*Effect of Water Level on the Nesting Success of the Federally Endangered Cape Sable*

*Seaside Sparrow*

**2005 –** Fire Ecology and Cape Sable Seaside Sparrow Recovery Symposium: Talk titled: *The*

*Effects of Water Level on Cape Sable Seaside Sparrow Breeding Biology*

**2002 –** University of California at Santa Cruz, Senior research symposium poster session: *Time*

*Budget Analysis of Nest Red-Tailed Hawk Behavior*

**Grants and Awards**

**2016 –** IFAS, University of Florida- Species Interactions in the Critically Imperiled Pine Rockland Ecosystem: The role of research, management, and outreach for the UF/IFAS Tropical Research and Education Center, Pine Rockland **$74,525**- PI: B. Baiser

**2016 –** IFAS, University of Florida- Ordway-Swisher Biological Station seed grant **$53,479**- PI: B. Baiser

**2015 –** National Science Foundation- Division of Environmental Biology- **$300,000**- (total)

**$19,897**- PI: B. Baiser

**2015 –** National Science Foundation- Advances in Biological Informatics- **$896,105**- Co-PI: B. Baiser

**2014 –** Eppley Foundation for Scientific Research: **$25,410**- PI: B. Baiser

**2013 –** IFAS/University of Florida, Early Career Seed Award: **$48,510**- PI: B. Baiser

**2013 –** Travel award and invitation to *Scaling Up: Population and Community Ecology* - ESA workshop for early career scientists: **$600**

**2010** **–** REU supplement for NSF 05-4168, DEB 10-25362**: $7,000**- Co-Pi: B. Baiser

**2009** **–** Hutcheson Memorial Forest Fund: Spot mapping the breeding birds of Hutcheson

Memorial Forest: **$1,500**- PI: B. Baiser

**2008** **–** Hutcheson Memorial Forest Fund: Spot mapping the breeding birds of Hutcheson

Memorial Forest: **$1,500**- PI: B. Baiser

**2007** **–** Hutcheson Memorial Forest Fund: Spot mapping the breeding birds of Hutcheson

Memorial Forest: **$1,500**- PI: B. Baiser

**2007** **–** Society for Conservation Biology travel award: **$800**

**2006** **–** NAOC travel grant: **$400.00**

**Presentations**

**2017 –** The International Tropical Botany and Pine Rockland conference, Fairchild Tropical Botanic, Garden, Talk Titled: “*DNA barcoding of plant-herbivore networks to quantify change in network structure along anthropogenic gradients*”

**2016 –** Ecological Society of America 2016, Talk Titled:  **“***Non‐random Patterns of Invasion and Extinction Reduce Phylogenetic Diversity in Island Bird Assemblages*”

**2015 –** Ecological Society of America, Talk Titled: *Motifs in the Assembly of Food Webs*

**2014 –** Invited Seminar Georgia Southern University, Talk Titled: *Causes and consequences of the network structure of food webs.*

**2014 –** Invited Seminar Florida State University, Talk Titled: *Causes and consequences of the network structure of food webs.*

**2013 –** Ecological Society of America, Talk Titled: *Modeling foundation species in food webs*

**2012 –** Ecological Society of America, Talk Titled: *Predicting food web structure with metacommunity models*

**2011 –** Ecological Society of America, Talk Titled: *Species richness and trophic diversity increase decomposition in a co-evolved food web*

**2010 –** Ecological Society of America, Talk Titled: *The relationship between functional and*

*taxonomic homogenization*

**2009 –** Rutgers-Princeton-Penn Graduate student symposium: Talk Titled: *Food web topology*

*and species richness control invasion success via trophic interactions in model food webs*

**2009 –** Partnership for Regional Invasive Species Management: Talk titled: *The perfect storm:*

*two ecosystem engineers interact to degrade deciduous forests of New Jersey*

**2006 –** North American Ornithological Conference-Vera Cruz Mexico: Poster titled- *The Effect*

*of Water Level on the Nesting Success of the Cape Sable Seaside Sparrow*

**2006 –** Symposium for Conserving Birds in Human-Dominated Landscapes: Poster titled- *The*

*Effect of Water Level on the Nesting Success of the Federally Endangered Cape Sable*

*Seaside Sparrow*

**2005 –** Fire Ecology and Cape Sable Seaside Sparrow Recovery Symposium: Talk titled: *The*

*Effects of Water Level on Cape Sable Seaside Sparrow Breeding Biology*

**2002 –** University of California at Santa Cruz, Senior research symposium poster session: *Time*

*Budget Analysis of Nest Red-Tailed Hawk Behavior*

**Courses Taught**

**Current–** Introduction to Applied Statistics for the Agricultural and Life Sciences

**Current–**Multivariate Statistics for the Life Sciences

**2011–** Instructor - Ecology and Conservation, Emerson College

**2009 –** Teaching Assistant - Ornithology, Rutgers University

**2008 –** Co-Instructor - Field Methods in Ecology and Evolution, Rutgers University

**2006-2008 –** Teaching Assistant - General Biology, Rutgers University

**2004 –** Teaching Assistant - Vertebrate Ecology and Conservation, Rutgers University

**Mentoring**

Graduate Students:

2015- current Alicia McGrew PhD, University of Florida

2017- current Lauren Trotta PhD, University of Florida

2014-2016 Josh Epstein M.S., University of Florida

2014-2016 Lauren Trotta M.S., University of Florida

Undergraduate Students:

2016-current Chris Gale University of Florida

2015- 2016 Allan Gonzalez University of Florida

Postdoctoral Researchers:

2016-current Daijiang Li University of Florida

**Other Positions Held**

**2008-2009 –** Ecology Graduate Student Association Seminar Coordinator

**2009 –** Editorial assistant for *Biological Conservation*

**2009-Current –** Reviewer for:

*Biological Conservation*

*Diversity and Distributions*

*Ecology*

*Ecology Letters*

*Ecological Monographs*

*Global Ecology and Biogeography*

*Journal of Biogeography*

*Natrue Communications*

*Oecologia*

*Oikos*

*Proceedings of the National Academy of Sciences*

*Nature Communications*

**2006-current** **–** Member Ecological Society of America