EVAN M. REHM, Ph.D.

Post-Doctoral Researcher
Univ of California, Santa Barbara

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CURRENT POSITION

Post-doctoral Researcher, University of California – Santa Barbara 2017-present

EDUCATION

Ph.D. Biology (Tropical & community forest ecology) 2015
Florida International University
Dissertation: *Factors affecting current and future treeline locations and dynamics in the Peruvian Andes*

M.S. Wildlife Management (Wildlife conservation) 2006
SUNY College of Environmental Science and Forestry
Thesis: *Factors affecting marsh bird abundance and species richness of wetland birds in New York*

B.S. Wildlife and Fisheries Science (Wildlife & Fisheries Management) 2003
Penn State University

PROFESSIONAL APPOINTMENTS

Post-Doctoral Research 2017-Current
Project: Do ecological feedbacks across trophic levels affect alternate stable states and regeneration of tropical forests?
University of California, Santa Barbara, Santa Barbara CA; Work in Hawaii

Post-Doctoral Researcher 2015-2017
Project: Restoring ecological function to a novel ecosystem in the presence of one of the world's most destructive invasive species
Colorado State University, Ft Collins CO; Work in Saipan, Northern Mariana Islands

Doctoral Candidate 2010-2015
Project: Climate change effects on tropical treeline and cloudforest dynamics
Florida International University, Miami FL; Work in Manu National Park, Peru

Visiting Researcher 2013
Project: Spring patterns of freezing resistance and photosynthesis in *Hedera helix*
University of Basel, Switzerland; Work in Switzerland

Avian ecology researcher 2007-2010
Project(s): Conservation and ecology of threatened and endangered bird populations
Various locations including Australia, Northern Mariana Islands, Puerto Rico, and USA

Wetland Program Coordinator 2006-2007
Project: Development and application of Delaware's non-regulatory wetland strategy
Delaware Department of Natural Resources and Environmental Control, Dover DE

Master's of Science 2004-2006
Project: Secretive marsh bird habitat associations and detection protocol development
State University of New York, Syracuse, NY

PUBLICATIONS: [**19 total**: 12 first author, 7 coauthor, +4 in review or prep]
*** denotes Undergraduate or postgraduate co-author**

Rehm, E.M., Balsat M.*, Lemoine, N. and Savidge, J. *In Press*. Spatial dynamics of habitat use informs reintroduction efforts in the presence of an invasive predator. *Journal of Applied Ecology*

Rehm, E.M., Chojnaki, J.*, Rogers, H. and Savidge, J. *In Press*. Differences in potential seed dispersal to degraded habitats by an avian frugivore community. *Restoration Ecology*

Beer, K*., **Rehm, E.M.** and Savidge, J. 2016. First record of a passerine bird species, the Ashy Minivet (*Pericrocotus divaricatus*), for Saipan, Commonwealth of the Northern Mariana Islands. *Micronesica* 2016-2: 1-4

Rehm, E.M. and Feeley, K.J. 2016a. Seedling transplants reveal species-specific responses of high elevation tropical treeline trees to climate change. *Oecologia* 181:1233-1242

Rehm, E.M. and Feeley, K.J. 2016b. Many species risk mountain top extinction long before they reach the top? *Frontiers of Biogeography.* 8(1)

Rehm, E.M. and K.J. Feeley. 2015a. Freezing temperatures as a limit to forest recruitment above tropical Andean treelines. *Ecology* 96:1856-1865

Rehm, E.M. and K.J. Feeley. 2015b. The inability of tropical cloud forest species to invade grasslands above treeline during climate change: potential explanations and consequences. *Ecography* 38:1167-1175. Editor's Choice.

Rehm, E.M., Olivas, P., Stroud, J., and K.J. Feeley. 2015. Losing your edge: climate change and the conservation value of range-edge populations. *Ecology & Evolution* 5: 4315-4326.

Feeley, K.J. and **E.M. Rehm**. 2015. The *downward* shift of montane grasslands exemplifies the dual threat of human disturbances to cloud forest biodiversity (Letter). *Proceedings of the National Academy of Science.* 112:E6084.

Rehm, E.M., Lenz, A., Hoch, G., and C. Körner. 2014. Spring patterns of freezing resistance and photosynthesis in *Hedera helix*. *Basic and Applied Ecology* 15: 543-550

Rehm, E.M. 2014. Rates of upslope shifts for tropical species depend on life history and dispersal mode (Letter). *Proceedings of the National Academy of Science*. 111:1676.

Stroud, J.T., **Rehm, E.M**., Ladd, M. Olivas, P., and K.J. Feeley. 2014. Are we spending our money wisely? Changing trends in conservation research priorities. *Journal for Nature Conservation* 22: 471-473.

Feeley, K.J, **Rehm, E.M.,** and J. Stroud. 2014. There are many barriers to species' migrations. *Frontiers of Biogeography*. 6:63-66

Feeley, K.J. and **E.M. Rehm.** 2014. Corridors are meant for connecting (Correspondence). *Nature Climate Change* 4: 405-406

Rehm, E.M. and K.J. Feeley. 2013. Forest patches and the upward migration of timberline

in the tropical Andes. *Forest Ecology and Management* 305: 204-211.

Feeley, K.J. and **E.M. Rehm.** 2012 Amazon's vulnerability to climate change heightened by deforestation and man-made dispersal barriers. *Global Change Biology* 18: 1335-1341. Recommended by the Faculty of 1000

Feeley, K.J., **Rehm, E.M**., and B. Machovina. 2012. The responses of tropical forest species to global climate change: acclimate, adapt, migrate, or go extinct? *Frontiers of Biogeography* 4(2): 69-84.

Rehm, E.M. and G. Bladassarre. 2007. Temporal variation in detection of marsh birds during broadcast of conspecific calls. *Journal of Field Ornithology* 78(1): 56-63.

Rehm, E.M. and G. Bladassarre. 2007. The influence of interspersion on marsh bird abundance in New York. *The Wilson Journal of Ornithology* 119(4): 648-654.

In review or in preparation

Fricke, E., Bender, J., **Rehm, E.M**. and Rogers, H. Functional outcomes of mutualistic network interactions: a community-scale study of frugivore gut passage on germination. To be submitted December 2017 to Ecology Letters

Rehm, E.M., Fricke, E., Ochocki, B. Bender, J., Rogers, H. and Savidge, J. *In Prep.* Seed dispersal distance reveals important differences in disperser effectiveness at the community scale. To be submitted January 2018 to Proceedings of the Royal Society Series B.

Rehm, E.M., Fricke, E., Savidge, J, and Rogers, H. *In Prep.* Quantifying a complete disperser network – costs, benefits and caveats of two common methodologies. To be submitted Spring 2018.

Rehm, E.M., Smith, M.*, Yelenik, S. and D'Antonio, C. *In Prep*. Tree characteristics and local neighborhoods determine seedling recruitment in an abandoned mid-elevation pasture. To be submitted Spring 2018

NON-REFEREED PUBLICATIONS

Rehm, E.M. and Feeley, K.J. 2012. Saving the forests in the clouds. The Tropical Garden. 72: 28-33

Rehm, E.M. and Rothweiler, R. 2008. Delaware Wetlands Conservation Strategy. Delaware Department of Natural Resources and Environmental Control. Dover, Delaware, USA

TEACHING EXPERIENCE

Instructor on Record, Ecology - LIFE 320 2017
Colorado State University, Fort Collins CO

Instructor on Record, Discussions in Ecology – Group Study BZ 496 2017
Colorado State University, Fort Collins CO

Teaching Assistant, Ecology Lab 2010-2015
Florida International University, Miami FL

Volunteer Instructor, Fairchild K-12 Challenge 2010-2015
Fairchild Tropical Botanic Gardens, Miami FL

Teaching Assistant, Deserts of Southern Africa 2004-2005
State University of New York, Syracuse, NY; *course location Namibia and South Africa*

Teaching Assistant, Ornithology Lab 2004
State University of New York, Syracuse, NY

UNDERGRADUATE AND POSTGRADUATE (< 1 YEAR POST GRADUATION) STUDENTS MENTORED

Marley Puanani Smith (Undergraduate)	Current
Tree architecture and seedling recruitment in abandoned pastures	
Cheryl Elgersma (Undergraduate)	Current
Soil nitrogen dynamics in abandoned pastures and restoration forests	
Janelle Chojnacki (Postgraduate)	2016-2017
Movement of seed dispersers across ecotones	
Mallory Balsat (Postgraduate)	2016-2017
Night roosts and home range of native seed dispersers	
Christine Pardo (Undergraduate)	2013-2015
Soil seed bank of tropical cloud forests and treeline	
Jonathan Valdivieso (Undergraduate)	2013
Seed predation at and above tropical treeline	
Nelson Cahuana (Masters, Peru)	2010-2015
Grazing effects on grassland biomass in high elevation puna	
Cintia Gutierrez (Masters, Peru)	2010-2015
Grazing effects on grassland biomass in high elevation puna	
Flor Zamora (Undergraduate, Peru)	2010-2012
Grassland biodiversity and ecological dynamics	
Adan Quispe (Postgraduate, Peru)	2010-2015
Fire ecology and biodiversity in puna grasslands	
Fernando Bravo (Undergraduate, Peru)	2010-2015
Germination rates of high elevation tropical tree species	

RESEARCH FUNDING AND AWARDS

2011 Tinker Field Grant – LACC FIU	$1,160
2011 Kelly Tropical Botany Scholarship – Kelly Foundation	$290
2011 Exploration Fund Grant – Explorer's Club	$1,000
2012 Doctoral Evidence Acquisition Fellowship – FIU	$16,600
2012 Kelly Tropical Botany Scholarship – Kelly Foundation	$290
2014 Tinker Field Grant – LACC FIU	$1,800
2014 Dissertation Year Fellowship – FIU	$16,600
2014 International Center for Tropical Botany – FIU	$3,000

SELECTED PRESENTATIONS AND POSTERS

Rehm, E.M. et al. 2016. Determining seed dispersal services by avian frugivores to guide rewilding efforts. Ecological Society of America (Presentation).

Rehm, E.M. and Feeley, K.J. 2015. Factors affecting current and future treeline dynamics in the Peruvian Andes Association for Tropical Biology and Conservation. (Presentation)

Rehm, E.M. and Feeley, K.J. 2014. Hitting the Grass Ceiling: Recruitment limitation inhibits climate driven shifts of tropical treelines. Ecological Society of America (Presentation)

Rehm, E.M. and Feeley, K.J. 2014. The Grass Ceiling: Tropical treelines as a threat to biodiversity. 16th Annual Biology Research Symposium. Florida International University. Best presentation award. (Presentation)

Rehm, E.M. and Feeley, K.J. 2013. The Grass Ceiling: recruitment limitation above Andean timberlines. Association for Tropical Biology and Conservation (Presentation)

Rehm, E.M. and Feeley, K.J. 2013. The Grass Ceiling: recruitment limitation above timberline may limit tropical montane cloud forest's ability to adapt to global climate change. 6th International Biogeography Society Meeting. (Poster)

Rehm, E.M., Bravo, C. and K.J. Feeley. 2012 (Invited). Ecología, conservación y efectos del cambio climático en el bosque de nubes del Parque Nacional Manu. Lima Natural History Museum. Lima, Peru. (Presentation)

Rehm, E.M. and Feeley, K.J.. 2012. Will above-timberline forest patches facilitate the upward migration of Andean montane cloud forests in response to climate change? Ecological Society of America. (Presentation)

Rehm, E.M. and G.A. Baldassarre. 2005. Temporal variation in marsh bird detection. The Wildlife Society's 12th Annual Conference. (Poster)

Rehm, E.M. and G.A. Baldassarre. 2005. Temporal variation in marsh bird detection. 58th New York State Ornithological Association. (Presentation)

Feeley K.J. and **Rehm E.M**. 2013. Los efectos sinérgicos de los cambios climáticos y las perturbaciones antropogénicas en los bosques Andinos-Amazónicos. Annual Meeting of the Andes and Biodiversity Research Group. Pisac, Peru. (Presentation)

Feeley K.J. and **Rehm E.M**. 2013. Amazon's vulnerability to climate change heightened by deforestation and man-made dispersal barriers. Annual Meeting of the Association for Tropical Biology and Conservation. San José, Costa Rica. (Presentation)

Feeley K.J. and **Rehm E.M**. 2012. Amazon's vulnerability to climate change heightened by deforestation and man-made dispersal barriers. Annual meeting of the Ecological Society of America, Portland, Oregon. (Presentation)

UNIVERSITY AND OUTREACH SEMINARS

2014 Franklin and Marshall College, Biology Department Speaker Series
2014 Concord University, Guest Lecturer, Biogeography and Environmental Change
2015 Saipan Southern High School, Invited Speaker, Bird loss on Saipan and Guam
2016 Poudre High School, Invited speaker, Global change ecology
2017 Colorado State University, Department Seminar Series, Rewilding tropical islands
2017 Ignite Series, Colorado State University, Biodiversity loss on tropical islands
2017 USGS seminar series, Volcano National Park, Rewilding Guam
2017 University of Hawaii at Hilo, TCBES seminar, Conservation on islands

REVIEWER

Alpine Botany
Arctic, Antarctic, and Alpine Research
Forest Ecology and Management
Global Change Biology
Journal of Biogeography
Journal of Ecology
Mountain Research and Development
Plant Ecology
Plos One Biology
Wetlands
Wilson Journal of Ornithology

PROFESSIONAL SOCIETIES

Ecological Society of America
International Biogeography Society
Assoc. for Tropical Biology and Cons.

PROFESSIONAL DEVELOPMENT

Tropical Biology: An Ecological Approach - Organization for Tropical Studies 2012

REFERENCES:

Dr. Stephanie Yelenik
Research Scientist – Botanist
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