Environmental Studies Program • Wellesley College • 106 Central Street • Wellesley, MA 02481

PROFESSIONAL POSITIONS AND EDUCATION

Wellesley College, Wellesley, Massachusetts

Assistant Professor, Environmental Studies
Botany Fellow, Wellesley College Botanic Gardens

2011 - Present

2008-2011

University of California, Santa Cruz, California

Ph.D., Environmental Studies

2008

Wesleyan University, Middletown, Connecticut

B.A., Biology

2001

PUBLICATIONS

- Griffith, A.B., 2017. Perturbation approaches for integral projection models. Oikos 126: 1675-1686.
- **Griffith, A.B.**, R. Salguero-Gómez, C. Merow, S. McMahon. 2016. Demography beyond the population. <u>Journal of Ecology</u> 104: 271-280.
- **Griffith, A.B.**, T. Ahmed, A. L.G. Hildner, S. Kuckreja, S. Long. 2015. Constraints on coastal dune invasion for a notorious plant invader. <u>AoB Plants</u> 7: plv126.
- Sexton, J. and A.B. Griffith. 2015. Evolutionary conservation under climate change. in T.L. Root, K.R. Hall, M. Herzog, C.A. Howell, editors. Biodiversity in a changing climate: Linking science and management in conservation. University of California Press.
- Loik, M.E., **A.B. Griffith**, H. Alpert, A. Concilio, C. Wade, S. Martinson. 2015. Impact of intra-vs. inter-annual snow depth variation on water relations and photosynthesis for two Great Basin Desert shrubs. <u>Oecologia</u> 178: 403-414.
- **Griffith, A.B.**, K. Andonian, C.P. Weiss, M.E. Loik. 2014. Variation in phenotypic plasticity for native and invasive populations of *Bromus tectorum*. <u>Biological Invasions</u>. 16: 2627-2638.
- **Griffith, A.B.**, M. Higgins, J.M. Turner. 2014. A rooftop revolution? A multidisciplinary analysis of state-level residential solar programs in New Jersey and Massachusetts. <u>Journal of Environmental Studies and Sciences 4: 163-171.</u>
- Loik, M.E., **A.B. Griffith**, H. Alpert. 2013. Impacts of long-term snow climate change on a highelevation cold desert shrubland, California, USA. <u>Plant Ecology</u> 214: 255-266.
- Ogle, K., R.W. Lucas, L.P. Bentley, J.M. Cable, G. Barron-Gafford, A. Griffith, D. Ignace, G.D. Jenerette, A. Tyler, T.E. Huxman, M.E. Loik, S.D. Smith, D.T. Tissue. 2012. Differential daytime and nighttime stomatal behavior and substantial nighttime water loss in plants from North American deserts. New Phytologist 194: 464-476.
- Schindler, B.Y., **A.B. Griffith**, K.N. Jones. 2011. Factors influencing arthropod diversity on green roofs. Cities and the Environment 4.
- Cable, J.M., K. Ogle, R.W. Lucas, T.E. Huxman, M.E. Loik, S.D. Smith, D.T. Tissue, B.E. Ewers, E. Pendall, J.M. Welker, T.N. Charlet, M. Cleary, A. Griffith, R.S. Nowak, M. Rogers, H. Steltzer, P.F. Sullivan, and N.C. van Gestel. 2011. The temperature responses of soil respiration in deserts: a seven desert synthesis. <u>Biogeochemistry</u> 103: 71-90.
- **Griffith, A.B.** and M.E. Loik. 2010. Effects of climate and snow depth on *Bromus tectorum* population dynamics at high elevation. Oecologia 164: 821-832.
- **Griffith, A.B.** 2010. Positive effects of native shrubs on *Bromus tectorum* demography. <u>Ecology</u> 91: 141-154.
- **Griffith, A.B.**, H. Alpert, M.E. Loik. 2010. Predicting shrub ecophysiology in the Great Basin Desert using spectral indices. <u>Journal of Arid Environments</u> 74: 315-326.
- Loik, M.E., H. Alpert, A.B. Griffith. 2010. Climate change and snow depth impacts on vegetation at the Great Basin Desert – Sierra Nevada Ecotone. in F. Dallmeier, A. Fenech, D. Maciver, and R. Szaro, editors. Climate change, biodiversity, and sustainability in the Americas. Smithsonian Institution Scientific Series, Smithsonian Institution Scholarly Press.

Patrick, L., J. Cable, D. Potts, D. Ignace, G. Barron-Gafford, A. Griffith, H. Alpert, N. Van Gestel, T. Robertson, T. Huxman, J. Zak, M. Loik, D. Tissue. 2007. Effects of an increase in summer precipitation on leaf, soil, and ecosystem CO₂ and H₂O fluxes in a sotol grassland in Big Bend National Park, Texas. Oecologia 151: 704-718.

Other Publications and Reviews

• **Griffith, A.** 2015. *Book review:* Bridger, Rose. 2013. Plane Truth: Aviation's Real Impact on People and the Environment. London: Pluto Press. *in* Global Environmental Politics 15: 133-134.

AWARDS AND DISTINCTIONS

National Science Foundation #1655541, RUI: Advancing the ecological niche through demography. \$473,977

2017

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Distinguished Faculty Member, Madeline K. Albright Institute for Global Affairs

2011-2014

PROFESSIONAL MEETINGS AND ACTIVITIES

Oral Presentations

- **Griffith, A.B.** Differential demographic effects of plant-plant facilitation across the life cycle of an alpine perennial. 2017 Meeting of the Ecological Society of America, Portland, OR.
- **Griffith, A.B.** Fluctuating resources and herbivory interact to influence the demography of a novel plant population. 2016 Meeting of the British Ecological Society, Liverpool, England, UK.
- **Griffith, A.B.** Perturbation analysis for Integral Projection Models. 2016 Meeting of the Ecological Society of America, Fort Lauderdale, FL.
- **Griffith, A.B.** Extending the framework of Life Table Response Experiment (LTRE) to examine the influence of environmental drivers on population dynamics. 2015 Meeting of the British Ecological Society, Edinburgh, Scotland, UK.
- Griffith, A.B., V.L. Rodgers, J.S. Dukes. Fluctuating resources and invasion establishment: linking demography with environmental drivers. 2015 Meeting of the Ecological Society of America, Baltimore, MD.
- **Griffith, A.B.** Demography beyond the population. 2015 Symposium of the British Ecological Society, Sheffield, England, UK.
- **Griffith, A.B.** Sometimes there isn't a "right" answer: integrating complexity, human values, and conservation in the classroom. 2014 Association for Environmental Studies and Sciences Conference, New York City, NY.
- **Griffith, A.B.**, M.E. Loik. Effects of climate and snow depth on *Bromus tectorum* population dynamics at high elevation. 2010 Meeting of the Ecological Society of America, Pittsburgh, PA
- **Griffith, A.B.**, K. Andonian, M.E. Loik. Phenotypic plasticity in native and invasive populations of *Bromus tectorum*. 2009 Meeting of the Botanical Society of America, Snowbird, UT
- **Griffith, A.B.**, M.E. Loik. Facilitation of an invasive grass by native shrubs. 2008 Meeting of the Ecological Society of America, Milwaukee, WI
- **Griffith, A.B.**, M.E. Loik. Impacts of snow depth and microhabitat on the growth and demography of *Bromus tectorum*. 2006 Meeting of the Ecological Society of America, Memphis, TN
- Tissue, D., L. Patrick, **A.B. Griffith**, H. Alpert, D. Ignace, J. Cable. The effect of changes in timing and magnitude of precipitation on carbon and water fluxes: Scaling C3, C4 and CAM to ecosystem. 2005 Meeting of the Ecological Society of America, Montreal, Canada
- Loik, M.E., **A.B. Griffith**, H. Alpert. Plant, community and ecosystem responses to long-term snow depth forcing. 2005 Meeting of the Ecological Society of America, Montreal, Canada

Poster Presentations

• Griffith, A.B., C.H. Pao, J. Fant, C. Flowe, K. Andonian. Phenotypic and genetic variation of

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- Bromus tectorum in native and invasive populations. 2013 Meeting of the Ecological Society of America, Minneapolis, MN
- Shafer, D., E.R. Estes, A.B. Griffith, W. Guenther, D.J. Brabander. A geochemical, geospatial, geostatistical framework for trace element fate and transport in urban watersheds. 2010 Meeting of the Geological Society of America, Denver, CO
- Griffith, A.B. Extending nurse shrub effects to the intershrub: Simulations of *Bromus tectorum* seed dispersal and implications for fire risk. 2009 Annual Symposium of the British Ecological Society, Aberdeen, Scotland, UK
- **Griffith, A.B.** and M.E. Loik. Facilitation of an invasive grass by native shrubs. 9th Annual War on Weeds Central Coast Invasive Weeds Symposium, Monterey, CA
- **Griffith, A.B.** and M.E. Loik. Facilitation of an invasive grass by native shrubs. 2007 Annual Meeting of the Ecological Society of America, San Jose, CA
- **Griffith, A.B.** and M.E. Loik. Impacts of snow depth and microhabitat on *Bromus tectorum* growth and demography. 2005 Janet Meakin Poor Research Symposium: Plant Conservation in an Era of Global Climate Change, Chicago, IL
- **Griffith, A.B.** Effects of precipitation change and cattle grazing on the invasive grass *Bromus tectorum*. 2004 Annual Meeting of the Ecological Society of America; Portland, OR

Organizing and Professional Development

- Guest editor for the British Ecological Society cross-journal special feature, Demography Beyond the Population. Publications in Journal of Ecology, Journal of Animal Ecology, Methods in Ecology and Evolution, Functional Ecology, Journal of Applied Ecology, Ecology and Evolution. Published February 2016.
- Lead organizer for the British Ecological Society Symposium, *Demography Beyond the Population*. Sheffield, UK, March 24-26, 2015.
- Participant and certificate recipient, Summer Course on Integral Projection Models at the Max Planck Institute for Demographic Research, Rostock, Germany. 2012.

TEACHING EXPERIENCE

Wellesley College Courses Taught

ES 101: Fundamentals of Environmental Science with Laboratory

ES 102: Environment and Society: Addressing Climate Change

BISC 108: Environmental Horticulture

BISC/ES 217: Field Botany with Laboratory

ES 220: Environmental Limits and Conservation with Laboratory

ES/BISC 247: Plant Diversity and Ecology

ES 289: Environmental Mapping and Analysis

BISC/ES 327: Biodiversity Topics: Plant Invasions

ES/BISC 347: Advanced Plant Diversity and Ecology

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