Dov F. Sax - Curriculum Vitae – June, 2019

Department of Ecology and Evolutionary Biology & Institute at Brown for Environment and Society Brown University, Providence, RI 02912 401-863-9676; dov_sax@brown.edu

EDUCATION

- 1999 Ph.D. Biology, University of New Mexico, Albuquerque (Advisor: James Brown)
- 1992 B.A. Integrative Biology, University of California, Berkeley

PROFESSIONAL EMPLOYMENT AND APPOINTMENTS

- 2019-present Professor, Department of Ecology and Evolutionary Biology & Institute at Brown for Environment and Society, Brown University
- 2017-present Deputy Director, Institute at Brown for Environment and Society
- 2014-2016 Deputy Director for Education, Institute at Brown for Environment and Society
- 2013-2014 Director, Center for Environmental Studies, Brown University
- 2013-2019 Associate Professor, Department of Ecology and Evolutionary Biology (2013-2019) & Center for Environmental Studies (2013-2014)/Institute at Brown for Environment and Society (2014-2019), Brown University
- 2007-2013 Assistant Professor, Department of Ecology and Evolutionary Biology & Center for Environmental Studies, Brown University
- 2006-2007 Assistant Professor, Institute of Ecology, University of Georgia
- 2002-2005 Assistant Research Biologist, University of California, Santa Barbara
- 1999-2002 Postdoctoral Associate, UC Santa Barbara (Mentor: Steven Gaines)
- 1992-1994 Environmental Consultant, two firms in southern California

LEADERSHIP POSITIONS AND AWARDS

Past President, International Biogeography Society – 2019-2021
President, International Biogeography Society – 2017-2019
President-Elect, International Biogeography Society – 2015-2017
Highly Cited Researcher (Thomson Reuters, http://highlycited.com/) – 2014, 2015, 2016
Best Reviewer Award at *Global Ecology and Biogeography* – 2015
Co-Chair, Emerging Issues Conference of the Ecological Society of America on "Developing Ecologically-Based Conservation Targets Under Global Change" – 2012
Co-Leader, NSF and Cedar Tree funded working group, Managed Relocation – 2007-2010
Aldo Leopold Leadership Fellow – 2009
Director-at-Large, International Biogeography Society – 2007-2009
Steering Committee, NSF Research Coordination Network, Species Invasions – 2006-2007
Co-Leader, NCEAS working group, Insights from Species Invasions – 2004-2007
Secretary, International Biogeography Society – 2001-2007
Co-Founder, International Biogeography Society – 2000
Co-Leader, NCEAS working group, Foundations and Future of Biogeography – 1999-2001

PUBLICATIONS - Google Scholar Profile: <u>http://scholar.google.com/citations?user=_nnXeoYAAAAJ&hl=en</u>

Books

- Sax, D.F., Stachowicz, J.J., and Gaines, S.D., editors. (2005) Species Invasions: Insights into Ecology, Evolution and Biogeography. Sinauer, Sunderland, MA.
- Lomolino, M.V., <u>Sax, D.F.</u> and Brown, J.H., editors. (2004) *Foundations of Biogeography: Classic Works with Commentaries*. University of Chicago, Chicago, IL.

Journal Articles

- Rosenblad, K.C., Perret, D. and <u>Sax, D.F.</u> (2019) Niche syndromes and climate-driven extinction risk among island endemic conifers. *Nature Climate Change*: in press.
- Ivory, S.J., Early, R., Russell, J. and <u>Sax, D.F.</u> (2019) Broader niches revealed by fossil data don't reduce estimates of range loss and fragmentation of African montane trees. *Global Ecology and Biogeography*: in press.
- Perret, D. and <u>Sax, D.F.</u> (2019) Naturalized distributions show that climatic disequilibrium is structured by niche size in pines (*Pinus* L.). *Global Ecology and Biogeography* 28: 429-441.
- Peabody, C.E., Thompson, A.R., <u>Sax, D.F.</u>, Morse, R.E. and Perretti, J. (2018) Decadal Regime Shifts in Ichthyoplankton Assemblage Composition of the Southern California Bight. *Marine Ecology Progress Series* 607: 71-83.
- Amatangelo, K.L., Stevens, L., Wilcox, D.A., Jackson, S.T. and <u>Sax, D.F.</u> (2018) Provenance of invaders has scale-dependent impacts in a changing wetland ecosystem. *Neobiota*: 40: 51-72.
- Longman, E.K., Rosenblad, K. and <u>Sax, D.F.</u> (2018) Extreme homogenization: the past, present and future of mammal assemblages on islands. *Global Ecology and Biogeography* 27: 77-95.
- Rosenblad, K.C. and <u>Sax, D.F.</u> (2017) A new framework for investigating biotic homogenization and exploring future trajectories: oceanic island plant and bird assemblages as a case study. *Ecography* 40: 1040-1049.
- Bellemare, J., Connolly, B. and <u>Sax, D.F.</u> (2017). Climate change, managed relocation, and the risk of intra-continental plant invasions: a theoretical and empirical exploration relative to the flora of New England. *Rhodora* 119: 73-109.
- Vellend, M., Baeten, L., Becker-Scarpitta, A., Boucher-Lalonde, V., McCune, J.L., Messier, J., Myers-Smith, I.H. and <u>Sax, D.F.</u> (2017) Plant biodiversity change across scales during the Anthropocene. *Annual Review of Plant Biology* 68: 563-586.
- Crosby, S.C., <u>Sax, D.F.</u>, Palmer, M.E., Booth, H.S., Deegan, L.A., Bertness, M.D. and Leslie, H.M. (2016) Salt marsh persistence is threatened worldwide by predicted sea-level rise. *Estuarine, Coastal and Shelf Science* 181: 93-99.
- Ivory, S.J., Early, R., <u>Sax, D.F.</u> and Russell, J. (2016) Niche expansion and temperature sensitivity of tropical African montane forests. *Global Ecology and Biogeography* 25: 693-703.
- Javeline, D., Hellmann, J.J., McLachlan, J.S., <u>Sax, D.F.</u>, Schwartz, M.W. and Cornejo, R.C. (2015) Expert opinion on extinction risk and climate change adaptation for biodiversity. *Elementa: Science of the Anthropocene* 3 :057, doi: 10.12952/journal.elementa.000057

- Armsworth, P.R., Larson, E.R., Jackson, S.T., <u>Sax, D.F.</u>, Simonin, P., Blossey, B., Green, N., Klein, M.L., Lester, L., Ricketts, T.H., Runge, M.C. and Shaw, M.R. (2015) Are conservation organizations configured for effective adaptation to global change? *Frontiers in Ecology and the Environment* 13: 163–169.
- Early, R. and <u>Sax, D.F.</u> (2014) Climatic niche shifts between species' native and naturalized ranges raise concern for ecological forecasts during invasions and climate change. *Global Ecology and Biogeography* 23: 1356-1365.
- Fridley, J.D. and <u>Sax, D.F.</u> (2014) The imbalance of nature: revisiting a Darwinian framework for invasion biology. *Global Ecology and Biogeography* 23: 1157-1166.
- Colautti, R.I., Parker, J.D., Cadotte, M.W., Pysek, P., Brown, C.S., <u>Sax, D.F.</u> and Richardson, D.M. (2014) Quantifying the invasiveness of species. *Neobiota* 21: 7–27.
- Sax, D.F., Early, R. and Bellemare, J. (2013) Niche syndromes, species extinction risks and management under climate change. *Trends in Ecology and Evolution* 28: 517-523.
- van der Geer, A.A, Lyras, G.A., Palombo, M.R., Lomolino, M.V. and <u>Sax, D.F.</u> (2013) Body size evolution of palaeo-insular mammals: temporal variations and interspecific interactions. *Journal of Biogeography* 40: 1440-1450.
- Lomolino, M.V., van der Geer, A.A., Lyras, G.A., Palombo, M.R., <u>Sax, D.F.</u> and Rozzi, R. (2013) Of mice and mammoths: generality and antiquity of the island rule. *Journal of Biogeography* 40: 1427-1439.
- Heard, M.J. and <u>Sax, D.F.</u> (2013) Coexistence between native and exotic species is facilitated by asymmetries in competitive ability and predator tolerance. *Ecology Letters* 16: 206-213.
- Schlaepfer, M.A, <u>Sax, D.F.</u> and Olden, J.D. (2012) Towards a more balanced view of non-native species. *Conservation Biology* 26: 1156-1158.
- Heard, M.J., <u>Sax, D.F.</u> and Bruno, J.F. (2012) Dominance of non-native species increases over time in a historically invaded strandline community. *Diversity and Distributions* 18: 1232-1242.
- Schwartz, M.W., Hellmann, J.J., McLachlan, J.M., <u>Sax, D.F.</u> *et al.* (2012) Managed Relocation: integrating the scientific, regulatory and ethical challenges. *Bioscience* 62: 732-743.
- Lomolino, M.V., <u>Sax, D.F.</u>, Palombo, M.R. and van der Geer, A.A. (2012) Of mice and mammoths: Evaluations of causal explanations for body size evolution in insular mammals. *Journal of Biogeography* 39: 842-854.
- Guo, Q., <u>Sax, D.F.</u>, Qian, H. and Early, R. (2012) Latitudinal shifts of introduced species: possible causes and implications. *Biological Invasions* 14: 547-556.
- Early, R. and <u>Sax, D.F.</u> (2011) Analysis of climate paths reveals potential limitations on species range shifts. *Ecology Letters* 14: 1125-1133.
- Schlaepfer, M.A, <u>Sax, D.F.</u> and Olden, J.D. (2011) The potential conservation value of nonnative species. *Conservation Biology* 25: 428-437.
- Jackson, S.T and <u>Sax, D.F.</u> (2010) Response to 'Biodiversity "surpluses" and "deficits" are not novel issues': We agree. *Trends in Ecology and Evolution* 25: 621-622.
- Jackson, S.T and <u>Sax, D.F.</u> (2010) Balancing biodiversity in a changing environment: extinction debt, immigration credit and species turnover. *Trends in Ecology and Evolution* 25:153-160.
- Smith, K.F., Behrens, M. and <u>Sax, D.F.</u> (2009) Local scale effects of disease on biodiversity. *Ecohealth* 6: 287-295.
- Sax, D.F., Smith, K.F. and Thompson, A.R. (2009) Managed relocation: a nuanced evaluation is

needed. Trends in Ecology and Evolution 24: 472-473.

- Richardson, D.M, Hellmann, J.J., McLachlan, J., <u>Sax, D.F.</u>, Schwartz, M.W. et al. (2009) Multidimensional evaluation of managed relocation. *Proceedings of the National Academy of Sciences* 107: 9721-9724.
- Sax, D.F. and Gaines, S.D. (2008) Species invasions and extinction: The future of native biodiversity on islands. *Proceedings of the National Academy of Sciences* 105: 11490-11497.
- Sax, D.F., Stachowicz, J.J., Brown, J.H., Bruno, J.F., Dawson, M.N., Gaines, S.D., Grosberg,
 R.K., Hastings, A., Holt, R.D., Mayfield, M.M., O'Connor, M.I. and Rice, W.R. (2007).
 Ecological and evolutionary insights from species invasions. *Trends in Ecology and Evolution* 22: 465-471.
- Vellend, M., Harmon, L.J., Lockwood, J.L., Mayfield, M.M., Hughes, A.R., Wares, J.P. and <u>Sax</u>, <u>D.F.</u> (2007) Effects of exotic species on evolutionary diversification. *Trends in Ecology* and Evolution 22: 481-488.
- Smith, K.F., <u>Sax, D.F.</u>, Gaines, S.D., Guernier, V. and Guegan, J.F. (2007) Globalization of human infectious disease. *Ecology* 88:1903-1910.
- Mittelbach, G.G. et al. (2007) Evolution and the latitudinal diversity gradient: Speciation, extinction and biogeography. *Ecology Letters* 10: 315-331.
- Fridley, J.D., Stachowicz, J.J., Naeem, S., <u>Sax, D.F.</u>, Seabloom, E.W., Smith, M.D., Stohlgren, T.J., Tilman, D. and Von Holle, B. (2007) The invasion paradox: Reconciling pattern and process in species invasions. *Ecology* 88: 3-17.
- Lomolino, M.V., <u>Sax, D.F.</u>, Riddle, B.R. and Brown, J.H. (2006) The island rule and a research agenda for studying ecogeographic patterns. *Journal of Biogeography* 33: 1503-1510.
- Smith, K.F., <u>Sax, D.F.</u> and Lafferty, K.D. (2006) Evidence for the role of infectious disease in species extinction and endangerment. *Conservation Biology* 20: 1349-1357.
- Cassey, P., Blackburn, T.M., Lockwood, J.L. and <u>Sax, D.F.</u> (2006) A stochastic model for integrating changes in species richness and community similarity across spatial scales. *Oikos* 115: 207-218.
- Brown, J.H. and <u>Sax, D.F.</u> (2005) Biological invasions and scientific objectivity: Reply to Cassey *et al.* (2005). *Austral Ecology* 30: 481-483.
- Sax, D.F., Kinlan, B.P. and Smith, K.F. (2005) A conceptual framework for comparing species assemblages in native and exotic habitats. *Oikos* 108: 457-464.
- Brown, J.H. and <u>Sax, D.F.</u> (2004) An essay on some topics concerning invasive species. *Austral Ecology* 29: 530-536.
- Sax, D.F. and Gaines, S.D. (2003) Species diversity: from global decreases to local increases. *Trends in Ecology and Evolution* 18: 561-566.
- Sax, D.F., Gaines, S.D. and Brown, J.H. (2002) Species invasions exceed extinctions on islands worldwide: a comparative study of plants and birds. *American Naturalist* 160: 766-783.
- Sax, D.F. (2002) Equal diversity in disparate species assemblages: a comparison of native and exotic woodlands of California. *Global Ecology & Biogeography* 11: 49-58.
- Sax, D.F. (2002) Native and naturalized plant diversity are positively correlated in scrub communities of California and Chile. *Diversity & Distributions* 8: 193-210.
- Sax, D.F. (2001) Latitudinal gradients and geographic ranges of exotic species: implications for biogeography. *Journal of Biogeography* 28: 139-150.
- Sax, D.F. and Brown, J.H. (2000) The Paradox of Invasion. *Global Ecology & Biogeography* 9:

363-372.

Book Chapters

- Sax, D.F. and Gaines, S.D. (2011) The equilibrium theory of Island Biogeography. *In*, Scheiner, S.M. and M.R. Willig. *The Theory of Ecology*. University of Chicago Press, Chicago.
- Lomolino, M.V., Brown, J.H. and <u>Sax, D.F.</u> (2009) Island biogeography theory: Reticulations and reintegration of a biogeography of the species. *In*, Losos, J. B., and R. E. Ricklefs. *The Theory of Island Biogeography Revisited*. Princeton University Press, Princeton.
- Sala, O.E., <u>Sax, D.F.</u> and Leslie, H. (2009) Biodiversity consequences of increased biofuel production. *In*, Howarth, R.W. and S. Bringezu, *Biofuels: Environmental Consequences and Interactions with Changing Land Use*. Scientific Committee on Problems of the Environment (SCOPE), Ithaca, NY.
- Sax, D.F. and Gaines, S.D. (2006) The biogeography of naturalized species and the species-area relationship. *In*, Cadotte, M.W. et al. *Conceptual ecology and invasions biology: reciprocal approaches to nature.* Springer, Netherlands.
- Rice, W.R. and <u>Sax, D.F.</u> (2005) Testing fundamental evolutionary questions at large spatial and demographic scales. *In*, Sax, D.F et al. *Species Invasions: Insights into Ecology, Evolution and Biogeography.* Sinauer, Sunderland, MA.
- Sax, D.F., Brown, J.H., White, E. and Gaines, S.D. (2005) The dynamics of species invasions: Insights into the mechanisms that limit species diversity. *In*, Sax, D.F., Stachowicz, J.J., and Gaines, S.D., editors. *Species Invasions: Insights into Ecology, Evolution and Biogeography*. Sinauer, Sunderland, MA.
- Sax, D.F., Stachowicz, J.J. and Gaines, S.D. (2005) Capstone: Where do we go from here? *In*, Sax, D.F., Stachowicz, J.J., and Gaines, S.D., editors. *Species Invasions: Insights into Ecology, Evolution and Biogeography.* Sinauer Associates, Sunderland, MA.
- Sax, D.F. and Whittaker, R.J. (2004) Dynamics of species diversity. *In*, Heaney, L.R. and Lomolino, M.V. *Frontiers of Biogeography: New Directions in the Geography of Nature*. Sinauer, Sunderland, MA.
- Brown, J.H. and <u>Sax, D.F.</u> (2004) Geographic gradients in diversity. *In*, Lomolino, M.V., Sax, D.F. and Brown, J.H, editors. *Foundations of Biogeography: Classic Works with Commentaries*. The University of Chicago Press, Chicago.

Book Reviews

- Sax, D.F. (2012) Review of "Saving a Million Species: Extinction Risk from Climate Change", Hannah, L., 2012, Island Press. *Bioscience* 62: 844-845.
- Sax, D.F. (2007) Review of "Plants on Islands", Cody, M.L., 2006, University of California Press. *Ecology* 88: 1068-1069.
- Sax, D.F. (2004) Review of "The Structure and Dynamics of Geographic Ranges", Gaston, K.J., 2003, Oxford U. Press. *Quarterly Review of Biology* 79: 100-101.
- Sax, D.F. (2002) Review of "Trees and shrubs of California", Stuart, J.D. and Sawyer, J.O., 2001, University of California Press. *Diversity & Distributions* 8: 309-310.

Popular Press Publications & Non-Refereed Journal Articles

Whittaker, R.J, Hortal, J., <u>Sax, D.F</u>., Currie, D.J., Richardson, D.M., Stigall, A.L. and Dawson, M.N. (2018). Frontiers of Biogeography: taking its place as a journal of choice for the

publication of high quality biogeographical research articles. *Frontiers of Biogeography*: 10(1-2). <u>http://dx.doi.org/10.21425/F5101-240499</u>

- Sax, D.F. (2010) Journal Club: A conservation biologist considers the role of nature reserves in a warming world. *Nature* 466: 669.
- Brown, J.H. and <u>Sax, D.F.</u> (2007) Do biological invasions decrease biodiversity? *Conservation Magazine* 8: 16-17.
- Gibbons, W. and [Sax, D.F. principal author of text] (2007) Why not let the aliens take over? Part 2. *New York Times Regional News Group* (publisher of 14 regional news papers), Sunday, April 22.
- Whittaker, R.J. and <u>Sax, D.F.</u> (2003) A 21st century Pangea? The emergence of a new international forum for Biogeographers. *Journal of Biogeography* 30: 315-317.

GRANT FUNDING (*abridged to include awards granted after receiving a Ph.D.*)

- 2015-2020 SERDP (Department of Defense) Conserving Threatened Plants in a Nonstationary World: A Predictive Framework for Assessing Risks and Guiding Management (PI with co-PIs Jesse Bellemare and Regan Early). \$1,106,062
- 2014-2016 IBES (Brown University intramural funding) Rapid Climate Change and Species Range Shifts: Advancing Frontiers in Biology and Geography (PI with PI James Kellner). Project budget \$99,972
- 2010-2014 NSF Ecology Program Collaborative Research: Spatial and Temporal Dynamics of Local Extinctions: A 300 Year-Experiment (Lead-PI with co-PI Stephen Jackson). Project budget \$695,055; Brown budget, \$402,864
- 2010-2013 NSF Geography and Spatial Sciences Program Collaborative Research: Toward a General Theory of Body Size Across Space and Time (Brown-PI with Lead-PI Mark Lomolino). Project budget \$83,037; Brown budget, \$4,418
- 2007-2010 Cedar Tree Foundation Assisted Migration: Evaluating a New Strategy for Species Conservation (PI with co-PIs Jason McLachlan and Jessica Hellmann). \$102,000
- 2007-2008 NSF Population Dynamics Program Collaborative Research: Interdisciplinary Workshop on Assisted Migration (PI with co-PIs Jessica Hellmann, Jason McLachlan). Project budget \$29,900; Brown budget \$14,950
- 2007-2008 US Forest Service An Early Warning System for Plant Invasions: Predicting Risk in the Context of Multiple Environmental Stresses (PI with co-PI Qinfeng Guo). \$59,172
- 2006-2007 NSF Population Dynamics Program U.S. Graduate Student Travel to the International Biogeography Society Conference (sole PI). \$37,100
- 2004-2007 National Center of Ecological Analysis and Synthesis Exotic Species: A Source of Insight into Ecology, Evolution and Biogeography (PI with co-PIs Steven Gaines and Jay Stachowicz). \$58,700
- 1999-2001 National Center of Ecological Analysis and Synthesis The Foundations and Future of Biogeography (co-PI with PI Mark Lomolino and co-PI James Brown). \$27,000

[Fellowships awarded to students and postdocs in my lab include a NSF predoctoral Fellowship, an E.U.-funded Marie Currie Award, and four Voss Postdoctoral Fellowships

(competitive, intramural awards from Brown University)]

INVITED SEMINAR, COLLOQUIM AND SYMPOSIUM PRESENTATIONS

Miami and Naples, Florida, Brown University, Fundraising Campaign, January 2018 Swiss Inter-University Program in Ecology, Invasions Workshop, Keynote Speaker, Sept. 2017 British Ecological Society, Symposium on the Macroecology of Invasions, July 2017 New England Botanical Club, Climate Change and Conservation, May 2017 National Academy of Sciences, BASC-BLS Joint Session, Ecology/Climate Change, Nov. 2016 Chicago, Brown University, Regional Launch of Fundraising Campaign, September 2016 Los Angeles, Brown University, Regional Launch of Fundraising Campaign, May 2016 San Francisco, Brown University, Regional Launch of Fundraising Campaign, May 2016 Aarhus University, Denmark, Ecology Institute, March 2016 Brown University, Global Launch of Fundraising Campaign, October 2015 Ecological Society of America, Symposium on change in species diversity, August 2015 Cary Institute of Ecosystem Studies, April 2015 New England Wild Flower Society, Symposium on climate change, March 2015 Bennington College, Biology Program, March 2015 Harvard University, Arnold Arboretum, November 2014 University of Connecticut, Ecology and Evolutionary Biology, November 2014 Society for Conservation Biology, Symposium on species invasions, July 2014 University of Wisconsin's Annual Ecology Symposium, Keynote Speaker, March 2014 Pennsylvania State University, Ecology Seminar Series, February 2014 Ecological Society of America, Symposium on climate change and range shifts, August 2013 Rutgers University, Dept. of Ecology, Evolution and Natural Resources, March 2013 Ecological Society of America, Emerging Issues Conference, February 2012 Harvard University, Harvard University Herbaria, May 2011 UCLA, Ecology and Evol. Bio. & Inst. of Environment and Sustainability, February 2011 Yale University, Department of Ecology and Evolutionary Biology, April 2010 Cornell University, Biogeochemistry and Environmental Biocomplexity, February 2010 University of Wyoming, Department of Botany, January 2009 Tufts University, Department of Biology, December 2009 University of Massachusetts Amherst, Organismic and Evol. Biology, October 2009 University of Connecticut, Ecology and Evolutionary Biology, September 2008 State University of New York, Syracuse, Environ. Science and Forestry, February 2008 National Academy of Sciences, Colloquium on biodiversity and extinction, December 2007 Stony Brook University, Department of Ecology and Evolution, October 2007 University of North Carolina, Department of Biology, April 2007 Brown University, Department of Ecology and Evolutionary Biology, February 2007 Emory University, Population Biology, Ecology and Evolution, September 2006 Ecological Society of America, Symposium on species invasions, August 2006 University of California, Davis, Ecology/Evolution Seminar Series, April 2006 University of California, San Diego, Ecology, Evolution and Behavior, October 2005 University of Chicago, Committee on Evolutionary Biology, October 2005 Ecological Society of America, Symposium on species invasions, August 2005 Syracuse University, Department of Biology, April 2005

International Biogeography Society, Symposium on species invasions, January 2005 University of Georgia, Institute of Ecology, December 2004 University of California, Los Angeles, Department of Geography, October 2004 National Center for Ecological Analysis and Synthesis (NCEAS), October 2004 NSF PEET V Conference, Symposium on assessing spatial biogeography, September 2004 Ecological Society of America, Symposium on species invasions, August 2004 Chinese Academy of Sciences, Conference on biological invasions, June 2004 Columbia University, Ecology, Evolution and Environmental Biology, March 2004 University of British Columbia, Departments of Botany and Zoology, January 2004 Lincoln University, New Zealand, Ecology & Entomology Group, November 2003 North Carolina State University, Department of Botany, May 2003

NEWS COVERAGE & REVIEWS OF RESEARCH – selected examples

Newspapers & Science News Coverage:

New York Times – 10/09/14: "Turning to Darwin to Solve the Mystery of Invasive Species" <u>nytimes.com/2014/10/09/science/turning-to-darwin-to-solve-the-mystery-of-invasive-species.html?_r=0</u> *Nature* – 10/05/11: "Following Frogs as They Flee" <u>http://www.nature.com/nature/journal/v478/n7367/full/478009a.html</u> *Scientific American* – 09/29/11: "Amphibians... May Struggle with Climate-Induced Migration"

Scientific American – 09/29/11: "Amphibians... May Struggle with Climate-Induced Migration http://www.scientificamerican.com/article/amphibians-other-species-may-struggle-climate-induced-migration/ *New York Times* – 09/08/08: "Friendly Invaders" http://www.nytimes.com/2008/09/09/science/09inva.html

Podcasts & Radio Interviews:

NY Science Times Podcast with David Corcoran, 9-9-08 *Earth and Sky*, Program #3761 and 3762, Island Biodiversity

Book Reviews:

Bioscience 56:694-695, 2006, James T. Carlton *Science* 310:623-624, 2005, Michael J. Crawley *Trends in Ecology and Evolution* 21:234-235, 2006, W. Mark Lonsdale *Ecology* 86:1073-1074, 2005, Stephen T. Jackson *Nature* 431:401, 2004, Mark Williamson

UNIVERSITY SERVICE

Brown University:

Deputy Director of IBES (and other leadership positions) – see Leadership Positions (page 1) Chair, Search Committee, Professor of Climate Change Biology, 2018-2019 Nominations Committee, Office of Faculty Governance, member 2017-2018, Vice Chair 2018-

2019, Chair (planned) 2019-2020

Coordinator, EEB Weekly Seminar Series, 2017-present

Chair, Search Committee (annually), Voss Postdoctoral Fellows, 2017-present

Chair, IBES Graduate Funding Committees (Fellowships & research, travel and training grants), 2017-present

Chair, IBES Faculty Seed Grants Committee (annually), 2017-present

Concentration Advisor, Health & Human Biology 2015-present

Concentration Advisor, Environmental Science, 2012-present

Search Committee, Visiting Assistant Professor of Environ. Geography, 2017-2018

Search Committee, Professor for IBES/Political Science joint position, 2016-2017 Committee, Establishing a new ENVS track in "Environment and Inequality", 2016 Chair, Search Committee, Professor of Conservation Biology, 2015-2016 Director, Voss Undergraduate Fellows Program, 2015-2016 Director of Undergrad. Studies, Env. Studies and Env. Sci. Concentrations, 2013-2016 Undergraduate Curriculum Cmt. for Environmental Studies and Science, 2008-2016 Search Committee, Director of Brown's Career Lab, 2014-2015 Search Committee, Professor of Environmental Epidemiology, 2013-2014 Co-Chair, Search Committee, Professor of Environmental Sociology, 2013-2014 First-Year and Sophomore Student Advising, 2009-2014 Search Committee, Professor of Remote Sensing, 2012-2013 Committee to Evaluate the Concentration in Environmental Studies/Science, 2012-2013 Strategic Planning Meetings, Division of Biology, Summer 2012 Graduate Admissions Committee, Ecology and Evolutionary Biology, 2011-2012 Search Committee, Professor of Environmental Science, 2011-2012 Beckman Scholars Awards Committee, 2011 & 2012 Undergraduate Research and Teaching Awards (UTRA) Committee, spring 2010 Concentration Advisor (sole advisor for the entire concentration), Environmental Science, 2008-2009 Graduate Admissions Committee, Ecology and Evolutionary Biology, 2008-2009 Graduate Thesis Committee, Center for Environmental Studies, 2007

University of Georgia:

Graduate Program Committee, Institute of Ecology, 2006-2007 Green Building Committee, Institute of Ecology, 2006-2007 Executive Committee, Institute of Ecology, Elected Member, 2006-2007

PROFESSIONAL SERVICE

Panel Review, European Commission (Horizon 2020 program), 2019 Past President, International Biogeography Society, 2019-2021 President, International Biogeography Society, 2017-2019 Editorial Board, Frontiers of Biogeography, 2018-present Invited Participant, National Academy of Sciences: Sackler Forum on Climate Change and Ecosystems, 2018 Chair, Advisory Board, Frontiers in Biogeography, 2017-2019 President-Elect, International Biogeography Society, 2015-2017 Editorial Board, Ecology Letters, 2012-2015 Panel Review, European Commission (Horizon 2020 program), 2014 Panel Review, National Science Foundation (pop. & community ecology program), 2014 Co-organizer, SCB Symposium on dualistic considerations of non-native species, 2014 Panel Review, US Southwestern Climate Change Center, 2013 Development Committee, Ecological Society of America, 2012-2014 Project Review, "SCALES": a 10 Million Euro project funded by the European Commission and E.U. member states to assess how threats to biodiversity and appropriate policy responses vary in their impacts across spatial and temporal scales in Europe – annual assessments 2011-2013

Co-Chair (organized, planned scientific content, and lead), 4-day, 80-participant conference funded by the Ecological Society of America that brought academics, NGO and government agency employees together to develop "Ecologically-Based Conservation Targets Under Global Change", planning: 2010-2012, event: spring 2012 Panel Review, National Science Foundation (pop. & community ecology program), 2011 Nominations Committee, Ecological Society of America, 2011 Co-Leader, NSF and Cedar Tree funded working group on managed relocation, 2007-2010 Co-Organizer, ESA Symposium on managed relocation/assisted colonization, 2009 Project Review, "ALARM": a 24 Million Euro project funded by the European Commission and E.U. member states to assess threats to biodiversity conservation in Europe – annual assessments 2005-2009 Invited Participant, Diversitas Biodiversity and Health Initiative, 2006-2009 Nominations and Elections Committee, International Biogeography Society, 2008 Panel Review, Environmental Protection Agency (ecological impacts), 2007 Co-Organizer, IBS Symposium on ecogeographic rules, 2007 Steering Committee, NSF Research Coordination Network, Species Invasions, 2006-2007 Invited Participant, Smithsonian Biodiversity Initiative (BSEI), 2005-2007 Co-Leader, NCEAS working group on species invasions, 2004-2007 Editorial Board, Journal of Biogeography, 2004-2007 Co-Organizer, ESA Symposium on species invasions and ecological saturation, 2006 Co-Editor, Special Issue on 'Conservation Biogeography', Journal of Biogeography, 2006 Co-Organizer, ESA Symposium on species invasions across spatial scales, 2005 Invited Workshop Speaker, "How to succeed in ecology" Ecological Soc. America, 2005 Co-Organizer, IBS Symposium on the biogeography of species invasions, 2005 Invited Participant, LTER Planning Grant, "Group of 100", 2004 Co-Organizer, ESA Symposium on insights from species invasions, 2004 Co-Organizer, IBS Symposium on dynamics of species diversity, 2003 Co-Leader, NCEAS working group on foundations and future of biogeography, 1999-2001 Reviews for Publishers: Chicago University Press; Columbia University Press; Oxford University Press; Princeton University Press; Sinauer Associates Reviews for Awards/Fellowships: MacArthur Fellows Program; Smith Fellows Program Proposal Reviews: CalFed Bay-Delta Program; National Geographic Society; National Science Foundation (NSF); Netherlands Organisation for Scientific Research; Strategic Environmental Research and Development Program (SERDP); US Department of Agriculture (USDA); US Environmental Protection Agency (EPA); US Geological Survey, SW Climate Science Center Journal Reviews: American Naturalist, Animal Conservation, American Journal of Botany, Biodiversity and Conservation, Biological Conservation, Basic and Applied Ecology, Biodiversity and Conservation, Biological Conservation, Biological Invasions, Biology Letters, Boreal Environment Research, Climatic Change, Conservation Biology, Current Biology, Diversity & Distributions, Ecography, Ecohealth, Ecology, Ecology Letters, Evolutionary Ecology Research, Frontiers in Ecology and Evolution, Global Change Biology, Global Ecology & Biogeography, Journal of Biogeography, Journal of Ecology, Journal of the Royal Society Interface, Landscape Ecology, Nature, Nature Climate Change, Nature Communications, NeoBiota, New York Academy of Sciences, Oikos, PLOS Biology, Proceedings of the National Academy of Sciences, Research Letters in Ecology, Revista Chilena de Historia Natural, Science,

COMMUNITY SERVICE

Participant, ESA's 'Rapid Response Team', which provides input on ecological science to the media and policy makers, 2009-present

Guest lecture at a school in Barrington, RI, 2018, 2019

Developed, in collaboration with a high school science teacher, educational modules on species invasions and extinction that meet the state standards for three states, 2011

[available at http://www.brown.edu/Research/Sax_Research_Lab/]

Mentoring a high school student on a summer research project, 2010

Corresponded with CPO Sciences on material for a middle school textbook, 2005

SEEDS Mentor (for minority students) at the ESA Conference, 2005

Guest lectures at a Middle School in Goleta, CA, 2003

TEACHING EXPERIENCE

Brown University:

Conservation Biology – undergraduate course (Biol 1470) - Fall 2008-2013, 2015-2018

Biogeography - undergraduate course (Biol 1475) - Spring 2012, 2016

Climate Change and Extinction Risk – graduate seminar – Spring 2013

Ecology and Evolution on Islands – graduate seminar (Biol 2440) – Spring 2010

Topics in Conservation Science - senior seminar (Biol 1940X) - Fall 2009

Climate Change and Species Extinction – 1st year Seminar (Biol 0190Q) - Spring 2009 University of Georgia:

Conservation Biology – undergraduate course (ECOL 3530) - Fall 2006 Species Invasions – graduate seminar (ECOL 4990) - Spring 2006, 2007

University of California, Santa Barbara:

Global Change – graduate seminar (EEMB 595GC) - Winter 2002, 2003 Global Ecology – undergraduate course (EEMB 173) - Spring 2002, 2003 Conservation Biology – undergraduate course (EEMB 133) - Winter 2004 <u>University of New Mexico:</u>

Biogeography (T.A.), Ecology Lab (T.A.), Introductory Biology Lab (T.A.)

MENTORING EXPERIENCE

Postdoctoral Scholars:

Dr. Laura Nunes (2017-present) – supported by a DoD grant Dr. Sarah Ivory (2014-2016) – Assistant Professor, Pennsylvania State University Dr. John Zinda (2013-2016) – Assistant Professor, Cornell University Dr. Jacquelyn Gill (2012-2013) – Assistant Professor, University of Maine Dr. Heinke Jager (2011-2013) – Research Scientist, Charles Darwin Foundation, Galapagos Dr. Katie Amatangelo (2010-2013) – Assistant Professor, SUNY Brockport Dr. Veronique St-Louis (2009-2010) – Adjunct Assistant Professor, University of Minnesota Dr. Regan Early (2007-2010) – Senior Lecturer, University of Exeter Ph.D. Students: Daniel Perret (2016-present)

Emily Heyne (2012-2018) – Independent researcher, Monteverde, Costa Rica

Dr. Matthew Heard (2006-2011) – Assistant Professor, Belmont University **Dissertation/Advisory Committee Member:** Sarah Corman KellyAnn Duncan Patrick Freeman Laura Garrison Robert Lamb Joaquin Nunez Kara Pellowe Courtney Reed Carlos Silva **External Dissertation Committee Member:** Blake Mathys (Rutgers University) Melissa Caspary (University of Georgia) Anna Walentowitz (University of Bayreuth, Germany) **Masters Thesis Committee Member:** Cicely Marshall (2011) William Yandik (2007-2008) **Research Technician:** Bailey McLaughlin (2017-2019) – supported by a DoD Grant Samantha vanDeurs (2016-2017) – supported by a DoD Grant **Undergraduate Thesis and Independent Study Projects:** Morgan Florsheim (Senior Thesis 2019-2020) Kenji Hayashi (Senior Thesis 2017-2018, Independent Project, 2016-2017) Clare Peabody (Senior Thesis 2017-2018) Elizabeth Purington (Senior Thesis 2017-2018) Alexis van Pernis (Independent Project, 2017) Bailey McLaughlin (Senior Thesis, 2016-2017) Yesenia Valverde (Senior Thesis, 2016-2017) Birch Malotky (Senior Thesis, 2015-2016) Emmaline Suchland (Senior Thesis, 2015-2016) Ada Bersoza Hernandez (Senior Thesis, 2014-2015) Phoebe Hopkins (co-advisor, Senior Thesis, 2014-2015) Emily Longman (Senior Thesis, 2014-2015) Kay Holland (Senior Project, 2014) Dara Illowsky (Senior Project, spring 2014) Erin Capra (Senior Thesis, 2013-2014) Katherine Reardon (co-advisor, Senior Thesis, 2012-2013) Elizabeth Ryan (Senior Thesis, 2012-2013) Madelyn Johnston (Senior Thesis, 2012-2013) Maggie Gotter (Senior Thesis, 2011-2012) Lee Stevens (Senior Thesis, 2011-2012) Ariana Spawn (Senior Thesis, 2010-2011) Madison Miketa (Senior Thesis, 2009-2010) Megan Whelan (Senior Thesis, 2009)

Gabrielle Salazar (Independent Project, 2009) Kyle Rosenblad (Thesis 2009-2010, Independent Project 2009) **Undergraduate Thesis External Reader:** Jenny Adler (Biology, Brown University) Eric Axelman (Environmental Science, Brown University) Sinead Crotty (Biology, Brown University) Hailey Jacobson (Biology, Brown University) Lindsay McAlpine (Environmental Science, Brown University) Olivia Rhodes (Biology, Brown University) Katherine Siegel (Environmental Science, Brown University) Cooper Tamano (Environmental Science, Brown University) Elisabeth Ward (Biology, Brown University) **Undergraduate Concentration (Major) Advising:** Human Health and Biology, A.B. degree, one of many advisors, 2015-present Environmental Science, Sc.B. degree, one of several advisors 2012-present Environmental Science, Sc.B. degree, sole concentration advisor 2008-2009 Freshman and Sophomore Advising:

24 students (Brown University)