

Research foci: modeling vegetation dynamics, remote sensing of terrestrial ecosystems, climate-ecosystem interactions, wildlife movement and conflict

Education

UC Berkeley, PhD in Energy and Resources 2018 – 2022 (expected)
Cum GPA (M.S./PhD)

UC Berkeley, M.S. in Energy and Resources 2016 – 2018
Thesis: Roosevelt Elk in the Klamath Mountains of California: Integrating Track and Sign, Spatial Ecology, and Visual Communication

Pitzer College, Claremont University Consortium, Claremont, California 2006 – 2010
Major: Environmental Science (BA), honors, GPA 3.87
Thesis: The spatial ecology of sooty mold fungus virulence on *Eriodictyon trichocalyx*

Fellowships and Work Experience

NASA Fellowship: Future Investigator in NASA Earth and Space Science Technology

Sept, 2020 - present

- 3 years of funding to use satellite observations to study post-fire forest regeneration
- Insights will be used to improve vegetation demographic models

NSF Research Traineeship: Data Science for the 21st Century, Student Fellow

Sept, 2018 – present

- 2-year fellowship in data science training, 1 year of funding from the National Science Foundation
- Coursework and applied projects in data science for environmental analysis and problem solving

UC ANR, Graduate Training in Cooperative Extension, Student Fellow

Sept, 2018 – Aug, 2019

- 1-year fellowship with UC Division of Agriculture and Natural Resources (ANR) to perform research on wildlife conflict on California's North Coast

UC Berkeley / Lawrence Berkeley National Lab, Graduate Student Researcher

Jan, 2017 – Aug 2018

- Worked with Professor Lara Kueppers and the Earth and Environmental Sciences team at LBNL to improve the way vegetation demographic models represent forest regeneration

TerViva Inc., Research Associate

Jul 2011 – June 2014; Dec, 2015 – Aug, 2016

- TerViva is an innovative agricultural company (www.terviva.com) focused on the commercialization of a sustainable tree crop: *Millettia pinnata* (pongamia).

- I reported to the Chief Technical Officer and carried out research on the ecology, agronomy, and genetics of *Millettia pinnata* to inform decisions about its development and global commercialization as a novel crop for protein and bioenergy.

SHARP, Avian and Vegetation Survey Technician

May 1st, 2015 – July 31st, 2015

- Avian point counts and vegetation transect surveys for SHARP (Saltmarsh Habitat and Avian Research Program), a federally funded research initiative

Lux Research Inc., Research Associate

Oct 6th, 2014 – Nov 26th, 2014

- As a research associate on the consulting team, I performed primary research, secondary data synthesis, and presentation of technical information to clients in the agriculture and energy industries.

NSF REBMI Fellowship (Research at the Biology-Mathematics Interface)

May 24th, 2010 – Jul 15th, 2010

- NSF-funded field research fellowship in ecology in Costa Rica.
- Worked in tropical lowland rainforest studying tree demography and rates of carbon sequestration to support the eventual goal of monetizing conservation practices via market mechanisms such as REDD.
- Identified, mapped, and managed data on hundreds of individual trees

Publications

Hanbury-Brown, A., Powell, T., Koven, C., Knox, R., Johnson, D., Comita, L., Kueppers, L. In Prep. A new regeneration submodel for vegetation demographic models. Intended for Ecology Letters.

Hanbury-Brown, A., Stackhouse J., Macaulay, L. 2020. Elk conflict with beef and dairy producers poses wildlife management challenges in northern California. In review for Ecology and Society.

Hanbury-Brown, A. and L. M. Kueppers. 2020. Future forests within Earth system models: regeneration processes are critical to prediction. In review for New Phytologist.

Pervasive shifts in forest dynamics in a changing world. 2020. Nate G. McDowell, Craig D. Allen, Kristina Anderson-Teixeira, Brian H. Aukema, Ben Bond-Lamberty, Louise Chini, James S. Clark, Michael Dietze, Charlotte Grossiord, **Adam Hanbury-Brown**, George C. Hurtt, Robert B. Jackson, Daniel J. Johnson, Lara Kueppers, Jeremy W. Lichstein, Kiona Ogle, Ben Poulter, Thomas A.M. Pugh, Rupert Seidl, Monica G. Turner, Maria Uriarte, Anthony P. Walker, Chonggang Xu. In press for Science.

Other

Launched EcoScienceWire.com (Fall, 2015) – reporting on the latest science behind our changing planet. EcoScienceWire converts impactful scientific articles on conservation and the environment into engaging one-pagers for the layperson.

I am the author of one of the chapters in an edited book: Physical and Biological Cycles of the Oceans and their Effects on Climate. Chapter 2 in Morhardt, J. E. [ed], 2009. Global Climate Change and Natural Resources. Roberts Environmental Center Press. Claremont.

Thru-hiked the Appalachian Trail (2008)