# Andrew T. Tredennick

CONTACT INFORMATION	Postdoctoral Fellow Department of Wildland Resources and The Ecology Center, Utah State University	mobile: (970) 443-1599 e-mail: atredenn@gmail.com website: atredennicik.github.io
RESEARCH INTERESTS	stability of populations, communities, and ecosystems; data—model assimilation; ecology of savannas and forests; coexistence of species and functional groups; ecological forecasting	
Education	Colorado State University, Fort Collins, CO Doctor of Philosophy Ecology	2014
	Texas Tech University, Lubbock, TX	
	Bachelor of Sciences BIOLOGY	2006
Professional Appointments	Utah State University, Dept. of Wildland Resources, Logan Postdoctoral Fellow	, UT <b>2014</b> – <b>Pres.</b>
	Colorado State University, Natural Resource Ecology Lab, Graduate Research Fellow	Ft. Collins, CO <b>2011</b> – <b>2014</b>
	Colorado State University, Natural Resource Ecology Lab, Graduate Research Assistant	Ft. Collins, CO <b>2009</b> – <b>2011</b>
	USFS Rocky Mountain Research Station, Ft. Collins, CO Research Assistant	2009
	Colorado State University, FRWS, Ft. Collins, CO Graduate Teaching Assistant	2008
Fellowships	NSF Postdoctoral Research Fellowship in Biology	2014
AND AWARDS	1 <sup>st</sup> Place Oral Presentation, Front Range Student Ecology Symp.	2013
	NSF FORECAST Research Coordination Network Travel Award	2012
	Sustainability Leadership Fellow, School of Global Environmental S	ustainability, CSU 2012
	NASA Earth and Space Science Graduate Fellowship	2011
	James E. Ellis Memorial Scholarship, Natural Resource Ecology Lab	2010
	NSF Graduate K-12 Fellowship, Natural Resource Ecology Lab	2009
Publications	Tredennick, A.T., Hanan, N.P. in press. Effects of tree harvest on the stable-state dynamics of savanna and forest. <i>American Naturalist</i> (open access)  Hanan, N. P., Tredennick, A.T., Prihodko, L., Bucini, G., and Dohn, J 2014. Analysis of stable states in global savannas: Is the CART pulling the horse? <i>Global Ecology and Biogeography</i> (open	

Hanan, N. P., **Tredennick, A.T.**, Prihodko, L., Bucini, G., and Dohn, J.. 2014. Analysis of stable states in global savannas: Is the CART pulling the horse? *Global Ecology and Biogeography* (open access)

**Tredennick, A. T.**, L. P. Bentley, and N. P. Hanan. 2013. Allometric convergence in savanna trees and implications for the use of plant scaling models in variable ecosystems. *PLoS One* 8(3):e58241 (open access)

Rice, J., **Tredennick, A.T.**, and Joyce, L. 2011. The climate of the Shoshone National Forest: A synthesis of past changes, future projections, and ecosystem implications. USDA National Forest Service General Technical Report 264

Sutton, A.E., Dohn, J., Loyd, K., **Tredennick, A.T.**, Bucini, G., Solrzano, A, Prihodko, L. and Hanan, N.P. 2010. Does warming increase the risk of civil war in Africa? *Proceedings of the National Academy of Sciences* 107(25):E102 (open access)

Competitive Funding "Diversity-stability relationships and coexistence: new theory and empirical tests", NSF Postdoctoral Research Fellowship in Biology, \$207,000 (2014-2017)

External: \$297,000 Internal: \$16,000

"Effective Science Communication and Public Relations at NREL through EcoPress," Natural Resource Ecology Lab, \$6,000 (Co-I) (2013)

"NESSF: Fuelwood, Savannas, and Climate Change: Integrating Modeling, Field Experimentation, and Optical and Radar Remote Sensing," NASA, \$90,000 (2011-2014)

"Building a WCNR 'Partnership for International Research and Education' in African Savannas: Undergraduate and Graduate Field-Based Education in Mali, West Africa," Warner College of Natural Resources, \$10,000 (PI-Hanan; collaborative proposal of the Hanan lab group) (2010)

Data Products Tredennick AT, Bentley LP, Hanan NP (2013) Data from: Allometric convergence in savanna trees and implications for plant scaling models in variable ecosystems. Dryad Digital Repository. http://dx.doi.org/10.5061/dryad.4s1d2

Tredennick AT, Hanan NP, Martinez K, Keita, L (2014) Data from: Effects of tree harvest on the stable-state dynamics of savanna and forest. Dryad Digital Repository. http://dx.doi.org/10.5061/dryad.vg121

TEACHING EXPERIENCE

# Colorado State University

2013

Plant Ecology

Guest Lecture on Tree-Grass Coexistence

# Colorado State University

2012

NREL Skills for Undergraduate Participation in Ecological Research

Data Analysis/Visualization Workshop Leader

# Colorado State University

2011

RS 351, Ecosystem Processes in a Changing World

 $\hbox{Co-Instructor}$ 

# Colorado State University

2009, 2010, 2012

RS 351, Wildland Ecosystems

Guest Lecture on Ecosystem Modeling

### Irish Elementary School Ft. Collins, CO

2010-2011

5th and 4th Grade Science and Advanced Science Program

NSF GK-12 Fellow

#### Colorado State University

2008

RS 351, Wildland Ecosystems Graduate Teaching Assistant

Professional Service

### Reviewer

Proceedings of the National Academy of Sciences; Ecology; Ecological Applications; Forest Ecology and Management; PLoS One; Agriculture, Ecosystems, and Environment; Environmental Management; National Research Foundation, South Africa

### University Service and Public Outreach

Director of Social Media, NREL EcoPress

Student Review Committee, New Ecology Faculty Search, CSU

Organizing Committee, Global Savanna Workshop, CSU

Advertising and Outreach Committee, Front Range Student Ecology Symposium

Graduate Student Representative, Natural Resource Ecology Lab

#### Professional Society Membership

Ecological Society of America American Society of Naturalists

### Other Leadership Activities

Co-organizer, Data Visualization in R, ESA 2013 and 2014 Workshop