

## THOMAS PRAVIA ALBRIGHT

Laboratory for Conservation Biogeography  
Assistant Professor, Department of Geography  
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& Program in Ecology, Evolution, and Conservation Biology

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### RESEARCH INTERESTS

Biogeography, landscape ecology, climate change, conservation, ecoclimatology, avian ecology, plant ecology, biotic invasions, land cover and disturbance dynamics, remote sensing, GIS, spatial analysis, hierarchical modeling.

### EDUCATION

- 2007 **PhD**, University of Wisconsin-Madison, Dept. of Zoology. Thesis: "Invasive plant distributions: Lessons from native and exotic ranges." Advisor: Monica Turner.
- 1997 **MA**, University of California, Santa Barbara, Dept. of Geography. Thesis: "Mapping snow and ice on the North slope of Mt. Everest with DEM-corrected SIR-C/X-SAR imagery." Advisor: Jeff Dozier.
- 1993 **BS**, University of Wisconsin-Madison, Majors: Geography; Cartography & GIS.
- 1991-1992 Visiting student, Institut de Géographie, Université de Provence I, France.

### PEER-REVIEWED PUBLICATIONS (\* indicates student advisee or supervised student)

#### Published

- Anderson, DP, MG Turner, SM Pearson, **TP Albright**, RK Peet, A Wieben, 2012, Predicting *Microstegium vimineum* invasion in natural plant communities of the southern Blue Ridge Mountains, USA, *Biological Invasions*, [online] DOI 10.1007/s10530-012-0361-3.
- Rittenhouse, CD, AM Pidgeon, **TP Albright**, PD Culbert, MK Clayton, CH Flather, JG Masek, & VC Radeloff, 2012, Land Cover Change and Avian Diversity in the conterminous United States, *Conservation Biology*, 26(5)821-829, DOI: 10.1111/j.1523-1739.2012.01867.x.
- Culbert, PD, VC Radeloff, V St-Louis, CH Flather, CD Rittenhouse, **TP Albright**, & AM Pidgeon, 2012, Modeling broad-scale patterns of avian species richness across the Midwestern United States with measures of satellite image texture, *Remote Sensing of Environment*, 118:140-150, doi:10.1016/j.rse.2011.11.004
- Albright, TP**, J Cardille, & MG Turner, 2011, Characterizing spatial pattern in biogeographic data, in AC Millington, MA Blumler, GM MacDonald, and U Schickhoff, editors. *Handbook of Biogeography*. SAGE Publications, London.
- Li, Z, Q Dong, **TP Albright**, & QF Guo, 2011, Natural and human dimensions of a quasi-wild species: The case of kudzu, *Biological Invasions*, 13(10)2167-2179, DOI 10.1007/s10530-011-0042-7.

- Albright, TP**, AM Pidgeon, CD Rittenhouse, MK Clayton, CH Flather, PD Culbert, & VC Radeloff, 2011, Heat waves measured with MODIS land surface temperature data predict changes in avian community structure, *Remote Sensing of Environment*, 115(1)245-254, doi:10.1016/j.rse.2010.08.024.
- Albright, TP** & DJ Ode, 2011, Monitoring the dynamics of *Potamogeton crispus* using remote sensing, 2011, *Hydrobiologia*, 661(1)469-474, DOI 10.1007/s10750-010-0537-8.
- Albright TP**, AM Pidgeon, CD Rittenhouse, MK Clayton, CH Flather, PD Culbert, BD Wardlow, & VC Radeloff, 2010, Combined effects of heat waves and droughts on avian communities across the conterminous United States, *Ecosphere*, 1(5)art11.
- Rittenhouse, CD, AM Pidgeon, **TP Albright**, PD Culbert, MK Clayton, CH Flather, C Huang, JG Masek, SI Stewart, & VC Radeloff, 2010, Conservation of forest birds: Evidence of a shifting baseline in community structure. *PLoS ONE*, 5(8): e11938, doi: 10.1371/journal.pone.0011938.
- Albright TP**, AM Pidgeon, CD Rittenhouse, MK Clayton, CH Flather, PD Culbert, BD Wardlow, & VC Radeloff, 2010, Effects of drought on avian community structure, *Global Change Biology* 16:2158-2170, doi: 10.1111/j.1365-2486.2009.02120.x.
- Albright, TP**, H Chen, LJ Chen, & QF Guo, 2010, The ecological niche and reciprocal prediction of the disjunct distribution of an invasive species: The example of *Ailanthus altissima*, *Biological Invasions*, 12:2413–2427, DOI 10.1007/s10530-009-9652-8.
- Rittenhouse CD, AM Pidgeon, **TP Albright**, PD Culbert, MK Clayton, CH Flather, CQ Huang, JG Masek, & VC Radeloff, 2010, Avifauna response to hurricanes: Regional changes in community similarity, *Global Change Biology*, 16:905-917, doi: 10.1111/j.1365-2486.2009.02101.x.
- Albright, TP**, DP Anderson, NS Keuler, SM Pearson, & MG Turner, 2009, The spatial legacy of introduction: *Celastrus orbiculatus* in the southern Appalachians, USA., *Journal of Applied Ecology*, 46:1229-1238, doi: 10.1111/j.1365-2664.2009.01707.x.
- Chen, H, LJ Chen, & **TP Albright**, 2007, Predicting the potential distribution of invasive exotic species using GIS and information-theoretic approaches: A case of ragweed (*Ambrosia artemisiifolia* L.) distribution in China, *Chinese Science Bulletin*, 52:1223-1230, 10.1007/s11434-007-0192-2.
- Chen H, LJ Chen, & **TP Albright**, 2007, Developing habitat-suitability maps for invasive ragweed (*Ambrosia artemisiifolia* L.) in China using GIS and statistical methods, In: *GIS for Health and the Environment* (eds. PC Lai and ASH Mak), pp. 105-121. Springer, Berlin, doi:10.1007/978-3-540-71318-0\_8.
- Albright, TP**, TG Moorhouse, & TJ McNabb, 2004, The rise and fall of water hyacinth in Lake Victoria and the Kagera River Basin, 1989-2001, *Journal of Aquatic Plant Management*, 42:73-84.
- Albright, TP**, TH Painter, DA Roberts, JC Shi, J Dozier, & E Fielding, 1998, Classification of surface types using SIR-C/X-SAR, Mount Everest area, Tibet, *Journal of Geophysical Research*, 103(E11)25,823-25,837, DOI:10.1029/98JE01893.

#### *In Review*

- Trowbridge, W, **TP Albright**, S Ferguson, J Li, B Perryman, RS Nowak, Explaining patterns of species dominance in the shrub steppe systems of the Junggar Basin (China) and Great Basin (USA), *Journal of Arid Lands*.

#### *In Preparation*

- Rittenhouse, CD, AM Pidgeon, **TP Albright**, PD Culbert, MK Clayton, CH Flather, & VC Radeloff, Accounting for observer effects in bird surveys: Does experience matter?
- Sadoti, G\*, Pollock MG, KT Vierling, **TP Albright**, EK Strand, Using variogram models to investigate

animal-habitat relationships; territory preference and nest survival in the vesper sparrow.

**PRESENTATIONS, POSTERS, AND PROCEEDINGS** (\* indicates supervised student or advisee)

*Invited*

Pidgeon, AM, B Bateman, EM Wood, S Vavrus, CH Flather, **TP Albright**, VC Radeloff, 2012, Do existing protected areas adequately buffer birds from the effects of extreme climate events? Invited as part of symposium: Synergistic effects of climate and land-use change, *The Wildlife Society 19<sup>th</sup> Annual Conference*, 15 Oct, Portland ,OR (symposium presentation).

**Albright, TP**, Trowbridge, W, 2012, *Bromus tectorum*: Exploring community and climate influence on dominance, *International Symposium on Invasive Plants and Global Change*, 14-17 June, Urumqi, China (presentation).

**Albright, TP**, 2012, Hot extremes: Characterizing a key driver of ecological change, *US Regional Chapter of International Association of Landscape Ecology Annual Symposium*, 8-12 April, Newport, RI (presentation).

Simeral, DS\*, **TP Albright**, 2012, Topographic Influences on Near-Surface Temperature Regimes in Complex Terrain, San Francisco Peaks, Arizona, *US Regional Chapter of International Association of Landscape Ecology Annual Symposium*, 8-12 April, Newport, RI (presentation).

**Albright, TP**, S. Hardage\* (presenter), 2011, Climate comparisons between Xinjiang Province, PR China and the Great Basin, USA", *Second US-China Joint Workshop on Invasive Species*, 3-10 Sep., Reno, NV (presentation).

**Albright, TP**, 2010, Spatial (and other forms of) uncertainty: A caution for climate work, *The Wildlife Society 17<sup>th</sup> Annual Conference*, 2-6 Oct, Snowbird, UT (symposium presentation).

**Albright, TP**, 2009, Avian responses to heat waves and drought: Implications for a more variable future?, *Climate, People, and the Environment Program seminar*, 7 Apr., Madison, WI (presentation).

**Albright, TP**, LJ Chen, QF Guo, & ZL Zhu, 2004, Predicting potential distributions of plants invasive between the U.S. and China: a Sino-U.S. collaboration, *89th Annual Meeting of the Ecological Society of America*, 1-6 Aug., Portland, OR (symposium presentation).

**Albright, TP**, QF Guo, & ZL Zhu, 2004, Prediction of the potential distribution of plant invaders between China and the US: Sino-US collaboration, ecological modeling, and GIS implementation, *Beijing International Symposium on Biological Invasions*, 8-11 June, Beijing, China (presentation).

*Contributed*

**Albright, TP**, AP Vitale\*, JF Brown, G Schmidt, 2013, Heterogeneous land surface phenology from fusion of multi-sensor Earth observations, *Association of American Geographers, Annual Meeting*, 9-13 Apr., Los Angeles, CA (poster).

Sadoti, G\*, **TP Albright** 2013, Extreme weather and the museum vault: making the climate connection with historic egg sets, *Association of American Geographers, Annual Meeting*, 9-13 Apr., Los Angeles, CA (presentation).

Sadoti, G\*, **TP Albright**, 2012, The influence of cheatgrass (*Bromus tectorum*) cover on bird communities in northern Nevada USA, *International Symposium on Invasive Plants and Global Change*, 14-17 June, Urumqi, China (presentation).

Simeral, D\*, and **TP Albright**, 2012. Near-Surface Air Temperature Patterns in Complex Terrain, San Francisco Peaks, Arizona. MTNCLIM 2012 Conference. 1-4 Oct., Estes Parks, CO (poster).

**Albright, TP**, AM Pidgeon, VC Radeloff, & BD Wardlow, 2011, Identifying thermally challenging

- landscapes and time periods for wildlife using remote sensing, *American Geophysical Union, Fall Meeting*, 5-9 Dec. 2011, San Francisco, CA (presentation).
- Pidgeon, AM, **TP Albright**, CD Rittenhouse, CF Flather, PD Culbert, JG Masek, VC Radeloff, 2011, Regional variation in response to climate extremes by avian communities-predictions for a no-analog future, *130<sup>th</sup> State Meeting of the American Ornithologists' Union*, 27 July, Jacksonville, FL (presentation).
- Albright, TP**, CD Rittenhouse, AM Pidgeon, MK Clayton, PD Culbert, VC Radeloff, CH Flather, & BD Wardlow, 2011, Timing and geography structure heat wave and drought effects on avian community dynamics, *5<sup>th</sup> Conference of the International Biogeography Society*, 7-11 Jan., Irakleion, Greece (poster).
- Albright, TP**, CD Rittenhouse, AM Pidgeon, CH Flather, PD Culbert, MK Clayton, BD Wardlow, & VC Radeloff, 2010, Birds under stress: Effects of heat waves and drought on US avian communities, *Association of American Geographers, Annual Meeting*, 14-18 Apr., Washington, DC (presentation).
- Rittenhouse, CD, AM Pidgeon, **TP Albright**, PD Culbert, MK Clayton, CH Flather, SI Stewart, RB Hammer, & VC Radeloff, 2010, Effects of land-cover change on patterns of bird diversity in the United States, *128<sup>th</sup> Stated Meeting of the American Ornithologists' Union*, 7-11 Feb., San Diego, CA (presentation).
- Rittenhouse CD, AM Pidgeon, **TP Albright**, PD Culbert, MK Clayton, CH Flather, CQ Huang, C Masek, & VC Radeloff, 2009, Conservation of forest birds: Evidence of a shifting baseline in community structure, *127<sup>th</sup> Stated Meeting of the American Ornithologists' Union*, 12-15 Aug., Philadelphia, PA (presentation).
- Albright, TP**, CD Rittenhouse, AM Pidgeon, CH Flather, PD Culbert, MK Clayton, BD Wardlow, & VC Radeloff, 2009, Diverse responses of avian communities to heat waves, *Association of American Geographers, Annual Meeting*, 22-27 Mar., Las Vegas, NV (presentation).
- Rittenhouse CD, AM Pidgeon, **TP Albright**, MK Clayton, CH Flather, & VC Radeloff, 2008, Avifauna response to hurricanes: Changes in community similarity over time, *The Wildlife Society Annual Conference*, 8-12 Nov., Miami, FL (presentation).
- Albright, TP**, MK Clayton, PD Culbert, CH Flather, AM Pidgeon, CD Rittenhouse, SI Stewart, & VC Radeloff, 2008, Patterns of declining US breeding bird abundance since 1980, *93<sup>rd</sup> Annual Meeting of the Ecological Society of America*, 3-8 Aug., Milwaukee, WI (poster).
- Albright, TP**, AM Pidgeon, MK Clayton, CH Flather, CD Rittenhouse, BD Wardlow, & VC Radeloff, 2008, Characterization and influence of drought on avian abundance and diversity in the Great Plains, USA, *US Regional Chapter of International Association of Landscape Ecology Annual Symposium*, 6-10 Apr., Madison, WI (presentation).
- Rittenhouse CD, AM Pidgeon, **TP Albright**, MK Clayton, CH Flather, & VC Radeloff, 2008, Effects of hurricanes on avian species richness and abundance, *US Regional Chapter of International Association of Landscape Ecology Annual Symposium*, 6-10 Apr., Madison, WI (presentation).
- Chen, H. LJ Chen, JT Li, & **TP Albright**, 2007, Study on species invasion warning modeling using GIS and data mining, *MIPPR 2007: Remote Sensing and GIS Data Processing and Applications; and Innovative Multispectral Technology and Applications*, 15 Nov., Wuhan, China (presentation).
- Albright, TP**, JS Clark, DP Anderson, SM Pearson, & MG Turner, 2007, Explaining and predicting the distribution of *Celastrus orbiculatus* in the Southern Appalachians using hierarchical Bayesian modeling, *US Regional Chapter of International Association of Landscape Ecology Annual Symposium*, 9-13 Apr., Tucson, AZ (presentation).

- Chen, H, LJ Chen, **TP Albright**, & QF Guo, 2006, Improved logistic regression approach to predict the potential distribution of invasive species using information theory and frequency statistics, *Sixth IEEE International Conference on Data Mining*, 18-22 Dec., Hong Kong (presentation).
- Chen, H., LJ Chen, QF Guo, & **TP Albright**, 2006, Predicting invasive species distributions at the large-scale using GIS and remote sensing, *27th Asian Conference on Remote Sensing*, 10-14 Nov., Ulaanbaatar, Mongolia (presentation).
- Albright, TP**, H Chen, & LJ Chen, 2006, Modeling the distributions of invasive tree-of-heaven and ragweed in native and exotic ranges, *US Regional Chapter of International Association of Landscape Ecology Annual Symposium*, 28 Mar.-1 Apr., San Diego, CA (presentation).
- Albright, TP** & LJ Chen, 2005, Explaining and predicting US/China invasive species distributions using statistical and machine learning tools, *Association of American Geographers, Annual Meeting*, 5-9 Apr., Denver, CO (illustrated paper).
- Guo, QF, **TP Albright**, & ZL Zhu, 2004, Transpacific biological invasions: The need to study the native habitats *89th Annual Meeting of the Ecological Society of America*, 1-6 Aug., Portland, OR (symposium presentation).
- Albright, TP**, QF Guo, S Price, & Z Zhu, 2003, Mapping and modeling the current and potential distributions of invasive plants from China, *30<sup>th</sup> Natural Areas Conference*, 24-27 Sept., Madison, WI (poster).
- Albright, TP**, TG Moorhouse, & TJ McNabb, 2002, The abundance and distribution of water hyacinth in Lake Victoria and the Kagera River Basin, 1989-2001, *Aquatic Plant Management Society 42<sup>nd</sup> Annual Meeting*, 21-24 July, Keystone, CO (presentation).
- Albright, TP**, M Sall, EC Wood, & GG Tappan, 1999, Aerial videography-aided land cover classification for change detection: A case study in southern Senegal, *Proceedings – 1999 ASPRS Annual Conference*, 17-21 May, Portland, OR (CD-ROM) (published presentation).
- Albright, TP** & LL Tieszen, 1999, Remote sensing and geographic information support for water hyacinth management on Lake Victoria, East Africa, *BioGeo99*, 2-4 Nov., Lafayette, LA (presentation).
- Albright, TP**, TH Painter, DA Roberts, E Fielding, J Shi, & J Dozier, 1997, Mapping snow and ice in the Khumbu Himal with DEM-corrected SIR-C/X-SAR data, *Workshop on Remote Sensing of Planetary Ices: The Earth and Other Solid Bodies*, 11-13 June, Flagstaff, AZ (presentation).
- Aizen, VB, EM Aizen, J Dozier, J Melack, **TP Albright**, & TH Painter, 1997, Estimation of mountain glacier distribution based on surface and remote sensing data, *Workshop on Remote Sensing of Planetary Ices: Earth and Other Solid Bodies*, 11-13 Jun., Flagstaff, AZ (presentation).
- Albright, TP**, JC Shi, & J Dozier, 1996, Assessing the accuracy of SIR-C snow cover classification, *Proceedings - International Snow Science Workshop*, 6-10 Oct., Banff, AB, Canada (published poster).

#### **OTHER PUBLICATIONS**

- Albright, TP**, AP Vitale\*, JF Brown, G Schmidt, 2013, STAR-FM Evaluation and Testing - Great Basin National Park/Snake Range, Nevada, *Report delivered to US Geological Survey Center for Earth Resources Observation and Science*, 21 pp.
- Albright, TP**, 2012 Environmental sensors and loggers: New approaches to characterizing heterogeneity and applications in landscape ecology, *US-IALE Newsletter*, 27:2.
- Albright, TP**, 2007 Curly pondweed on Lake Sharpe, South Dakota: A remote sensing assessment, 2000-2006, Final report submitted to South Dakota Department of Game, Fish, and Parks, USGS Center for EROS, Sioux Falls, SD.
- Wood, EC, G Tappan, R Leitzow, & **TP Albright**, 1998, The impact of agricultural production systems on

land use/cover change: Senegal, West Africa, *Center for Global Change* (Newsletter published by Raytheon STX Corporation) V 5 N 2.

Miller, A, I Mintzer, **TP Albright**, *et al.*, 1995, Policy formulation and decision making, Chapter 10, pp. 10-1 - 10-5, in *Proc. EOSDIS Potential User Model Development Effort*, NASA, Leesburg, VA.

## GRANTS

### *Current*

- 2012-2015 Desert Birds in a Warming World: Characterizing thermal stress with daily Earth observation data in complex terrain (**TP Albright**, Education co-I; J Ewing-Taylor), NASA New Investigator in Earth Science, \$350,000.
- 2011-2015 The effects of extreme climate events on avian demographics: The role of habitat refugia in mitigating climate change (P Heglund, AM Pidgeon, R Akçakaya, W. Thogmartin, **TP Albright**, SJ Vavrus, CH Flather, & VC Radeloff), NASA Climate and Biological Response, \$1,633,444.
- 2011-2013 Great Basin Ecohydrology - demonstration of the utility of the Nevada Climate Transect System as a novel research platform (SA Mensing, N Lancaster, **TP Albright**, F Biondi, D Devitt, J Arnone, L Fennstermaker), Nevada NSF EPSCoR Climate Change subaward, \$300,000.

### *Completed*

- 2012 Climate Solutions: Local to Global Perspectives (**TP Albright**), Nevada NSF EPSCoR Curriculum Task Force, \$6,614.
- 2005-2006 Remote monitoring of an invasive aquatic plant on the Missouri River (**TP Albright** & LL Tieszen), South Dakota Department of Game, Fish, and Parks, \$25,000.
- 2004-2005 A Mesoamerican and Caribbean geospatial alliance (LL Tieszen, E van Praag, **TP Albright**, D Pedreros, K Lance, & G Hyman), US Agency for International Development – Global Development Alliance, \$229,000.
- 2003-2005 Integrated geographic and ecological research for identifying potential habitats and predicting future spreading of invasive species in the U.S. and China (**TP Albright**, QF Guo, ZL Zhu, & S Price), USGS, National Mapping Discipline, \$293,000.
- 1999-2002 Monitoring agricultural and natural resource change in the Sahel: 1965-2000 (G Tappan & **TP Albright**), US Agency for International Development, \$400,000.
- 1999-2001 Capacity for aquatic ecosystem monitoring and information support in the Greater Horn of Africa (LL Tieszen & **TP Albright**), Clean Lakes, Inc., \$123,000.

## MEDIA

- University of Nevada, Reno medial release, "University scientists explore effects of climate change on Sierra", 7 Nov. 2011, <http://www.unr.edu/nevada-today/news/2011/sierra-nevada>.
- NASA Feature Story, "Extreme weather impacts migratory birds", 29 Mar. 2010, <http://www.nasa.gov/topics/earth/features/migratory-birds.html>.
- Wisconsin State Journal, "Birds and climate change studied", 15 Jan. 2010.
- University of Wisconsin media release, "Migratory birds bear brunt of climate-charged weather", 11 Jan. 2010, <http://www.news.wisc.edu/17520>.
- National Drought Mitigation Center, University of Nebraska-Lincoln, "Researchers Document Effects of Drought on Bird Populations", Dec. 2009, <http://drought.unl.edu/news/newsarchive/whatsnewfullstoryDec09.html#avi>.

## PROFESSIONAL EXPERIENCE

- 2010- **Assistant Professor**, Dept. of Geography, University of Nevada, Reno.
- 2010- **Graduate Faculty**, *Program in Ecology, Evolution, and Conservation Biology*, University of Nevada, Reno.
- 2007-2010 **Postdoctoral Research Associate**, Dept. of Forest and Wildlife Ecology, UW-Madison. Project: Effects of fire, extreme weather, and anthropogenic disturbance on avian biodiversity in the U.S. (NASA). Advisors: Volker Radeloff and Anna Pidgeon.
- 2006-2007 **Teaching Assistant**, Dept. of Geography, UW-Madison (Geog./Env. St. 120).
- 2002-2007 **Senior Scientist**, SAIC, contractor to US Geological Survey at EROS, Sioux Falls, SD. Selected projects:
- *Invasive Species Monitoring and Modeling*, project leader. Used remote sensing, GIS, and statistical modeling to explain and predict the potential distribution of invasive plants from China. Used optical remote sensing to infer locations of an invasive aquatic plant in Lake Sharpe, SD.
  - *Caribbean Land Cover Initiative*, project leader. Partnered with The Nature Conservancy and US Forest Service-International Institute for Tropical Forestry to develop a regionally consistent Caribbean land cover map and database.
- 2004-2006 **Research Assistant**, Dept. of Zoology, UW-Madison.
- 2003 **Teaching Assistant**, Dept. of Zoology, UW-Madison (Zoo./Bot. 152).
- 1997-2002 **Scientist**, Raytheon, contractor to US Geological Survey at EROS, Sioux Falls, SD. Selected projects:
- *Sahel Land Use Land Cover Change Monitoring*. Quantified and analyzed regional land cover and land-cover change in the Sahel, West Africa.
  - *Capacity for Aquatic Ecosystem Monitoring and Information Support*, Project leader. Developed and implemented remote monitoring of water hyacinth infestation in the Lake Victoria Basin, East Africa.
  - *Madagascar Environmental Conservation*. Developed and automated techniques for processing and analyzing remotely sensed time-series fire data.
- 1994-1997 **Graduate Student Researcher**, Institute for Computational Earth Systems Science, UC Santa Barbara. Developed and applied radar remote sensing techniques to map snow and ice.
- 1993-1994 **GIS Programmer/Cartographer**, Applied Population Laboratory, UW-Madison. Developed GIS user interface for geo-demographic analysis used by the Wisconsin legislature.

## SELECTED TEACHING, FACILITATION, AND TRAINING EXPERIENCE

- 2012, Fall **Instructor**, *Geography 411/611: Remote Sensing: Principles and Applications*, UNR.
- 2011, Fall **Instructor**, *Geography 701S: Seminar in Biogeography: Climate-Change Ecology*, UNR.
- 2011, Spr **Instructor**, *Geography 311: Maps and Image Interpretation*, UNR.
- 2010 **Guest lecturer**, *Environmental Studies 556: Digital Image Processing, "Remote sensing applications in the ecology of extreme weather"*, UW-Madison.
- 2010 **Guest lecturer**, *Colloquium in Environmental Toxicology, "Birds in a changing world"*, UW-Madison.
- 2006-2007 **Teaching assistant**, *Global Physical Environments (Geography/Env. Studies 120)*, UW-Madison. Taught four discussion sections per semester for lower division non-science majors. Developed active learning exercises used by over 300 undergraduate students.
- 2003 Fall **Teaching assistant**, *Introductory Biology (Zoology/Botany 152)*, UW-Madison. Led two laboratory sections targeting biology majors. Guided and evaluated students in writing term papers in this writing-intensive course.
- 2002 **Workshop co-leader**, *Agro-ecological Stratification and Analysis of Image Samples for Regional Land Cover Change Analysis*, Niamey, Niger (in French and English).
- 2001 **Workshop leader**, *Introduction to the Principles, Applications, and Use of GPS*, Santo Domingo, Dominican Republic (in Spanish).
- 2000 **Guest lecturer**, *Introduction to Digital Image Processing for Remote Sensing*, Sioux Falls, SD (in Spanish and English).
- 2000 **Workshop co-leader**, *Geospatial Data Clearinghouse and Metadata Creation and Management*, Antananarivo, Madagascar (in French).
- 1999 **Workshop co-leader**, *Sahel Landuse/Landcover Mapping and Analysis*, Niamey, Niger (in French and English).
- 1998 **Workshop co-leader**, *Using DMSP Nighttime Imagery and Idrisi GIS for Analysis of Bush Fires*, Antananarivo, Madagascar (in French).

## STUDENT MENTORING AND SUPERVISION

Denis Mutibwa	Postdoctoral Fellow		2013-
Andrew Vitale	Geography	M.S.	2012-
Giancarlo Sadoti	Geography	PhD	2011-
David Simeral	Geography	PhD	2011-
Sarah Hardage	Undergraduate research technician		2011-
Nyssa Perryman	Geography	PhD	2011

## ACADEMIC AND PROFESSIONAL HONORS AND AWARDS

- 2012 NASA EPSCoR Travel Award, Nevada System for Higher Education, \$3,538.
- 2011 International Biogeography Society Travel Award, AAG/Biogeography Specialty Group.
- 2007 NASA-MSU Professional Enhancement Award, Michigan State University.
- 2006, 2007 John Jefferson Davis Travel Award, Dept. of Zoology, UW-Madison.
- 1999 Performance Award, Raytheon Corporation.
- 1998 On-the-Spot Award, Raytheon Corporation.
- 1996, 1997 Club Sport Scholar Athlete Award, UC Santa Barbara.
- 1993 Graduation with distinction, UW-Madison.



## PROFESSIONAL AFFILIATIONS

- 2010-2011 The Wildlife Society.  
2007- International Biogeography Society.  
2006- US Regional Chapter, International Association for Landscape Ecology.  
2003- Ecological Society of America.  
2003- Association of American Geographers.

## PEER REVIEWS

*Journals* (\* = multiple reviews)

*Agricultural and Forest Meteorology, Applied Geography, Biological Invasions\*, Boreal Environment Research, Climatic Change, Diversity and Distributions, Earth Interactions\*, Ecological Applications\*, Ecosphere, Ecosystems\*, Environmental Management, Global Change Biology\*, International Journal of the Digital Earth, Journal of Aquatic Plant Management, Journal of Arid Lands, Journal of Biogeography\*, Land Use Policy\*, Landscape Ecology, Natural Areas Journal, New Phytologist\*, Progress in Physical Geography, Remote Sensing of Environment, Sensors, Weed Science*

*Proposals*

- 2012 National Science Foundation, ad hoc reviewer (2 x); College of Agriculture, Natural Resources, and Biotechnology, UNR  
2011 National Science Foundation, ad hoc reviewer  
1999 New Millennium Program Earth Observing-1 Mission Instrument Performance Evaluation and Data Validation, NASA/USGS, ad hoc reviewer

*Other*

- 2011 Summer Undergraduate Research Opportunity, Nevada EPSCoR.

## OTHER SERVICE AND ACTIVITIES

- 2012 Participant, New Mexico EPSCoR Junior Faculty Leadership Workshop, Jemez Springs, NM.  
2012 Symposium organizer, "Environmental sensors and loggers: New approaches to characterizing heterogeneity and applications in landscape ecology", *US Regional Chapter of International Association of Landscape Ecology Annual Symposium*.  
2012 Invited presentation to Lahontan Audubon Society "Birds and a changing climate: Can they beat the heat?", Reno, NV.  
2012- Space committee, *Department of Geography*, UNR  
2012- Personnel committee, *Department of Geography*, UNR  
2011 Small grants committee, *Program in Ecology, Evolution, and Conservation Biology*, UNR.  
2011 Consultant, *Sierra Nevada: An Adaptation*, a climate-change themed art work by the Harrison Studio shown at Feldman Gallery, NY, NY, and the Nevada Museum of Art, Reno, NV.  
2011 Member/participant, Dickinson College/NASA Changing Planet Study Group  
2010 Session co-organizer "Wildlife responses to environmental change", AAG annual meeting, Washington, DC.  
2008 Field trip organizer, US-IALE Annual Symposium, Madison, WI.  
2007 Search committee, Research Specialist-GIS, SILVIS lab, Madison, WI.  
2007-2010 Board member, ProRail, Madison, WI.

- 2005-2009 Co-founder and organizer, Madison Ecologists Bayesian Interest Group.  
2003 What do geographers do?, high school forum, Sioux Falls, SD.  
2002-2004 Member, EROS Toastmasters Club.  
2002 Careers in environmental science, guest speaker, Brookings, SD.  
1998 National Science & Technology Week/Polar Connections, public talks, Marshall, MN.  
1995-1996 President, UC Santa Barbara cycling club.  
1994 Geography Awareness Week school visits, Santa Barbara, CA.

**NATURAL LANGUAGES** (Interagency Language Roundtable rating)

- |                            |  |
|----------------------------|--|
| Written and spoken English | Native proficiency (ILR-5).                |
| Written and spoken French  | General professional proficiency (ILR-3+). |
| Written and spoken Spanish | Limited working proficiency (ILR-2+).      |
| Spoken Mandarin (Chinese)  | Elementary proficiency (ILR-1).            |