

JODI BRANDT

Assistant Professor
Human Environment Systems Initiative
College of Innovation and Design
Boise State University
Boise, Idaho 83725
Email: jodibrandt@boisestate.edu
Tel: (208) 426-2935; Office: ERB 2159

Research Interests

Land use and Land Cover Change, Ecosystem Services, Sustainability Science, Biodiversity Conservation, Remote Sensing, Geospatial Analysis, Policy Impact Analysis

Professional Preparation

- 2014 Dartmouth College, Hanover NH
Postdoctoral Research Fellow in Environmental Studies (Advisor: Nicholas Reo)
Project: Pro-active Stewardship of Great Lakes Wetlands
- 2013 University of Michigan, Ann Arbor, MI
Postdoctoral Research Fellow in Natural Resources and Environment (Advisor: Arun Agrawal)
Project: Impacts of Sustainable Forestry in the Congo Basin
- 2012 University of Wisconsin, Madison, WI,
Ph.D. in Forest and Wildlife Ecology (Advisor: Volker Radeloff)
Thesis: Landscape change and impacts on biodiversity in the Chinese Himalaya
- 2004 University of Maryland
MS in Ecology and Environmental Science (Advisor: Phil Townsend)
Thesis: Landscape change and water resources in the Bolivian Andes
- 1996 Yale University
B.A. in Geology & Geophysics
Thesis: Land use impacts on water quantity/quality in the Susquehanna Basin

Publications

- Brandt, J. S., C. Nolte, and A. Agrawal. 2016. Deforestation and timber production in Congo after implementation of sustainable forest management policy. *Land Use Policy* 52:15-22.
- Brandt, J. S., V. Butsic, B. Schwab, T. Kuemmerle, and V. C. Radeloff. 2015. The relative effectiveness of protected areas, a logging ban, and sacred areas for old-growth forest protection in southwest China. *Biological Conservation* 181:1-8.
- Wood, E. M., J. S. Brandt, A. M. Pidgeon, and V. C. Radeloff. 2015. Habitat-occupancy associations and tree-species use patterns by breeding birds in Tibetan sacred forests. *Biodiversity and Conservation* 24:129-148
- Hudson, L. N., et. al 2014. The PREDICTS database: a global database of how local terrestrial biodiversity responds to human impacts. *Ecology and Evolution* 4:4701-4735.
- Brandt, J. S., C. Nolte, J. Steinberg, and A. Agrawal. 2014. Foreign capital, forest change and regulatory compliance in Congo Basin forests. *Environmental Research Letters* 9.
- Haynes, M. A., K.-J. S. Kung, J. S. Brandt, Y. Yang, and D. M. Waller. 2014. Accelerated climate change and its potential impact on Yak herding livelihoods in the eastern Tibetan plateau. *Climatic Change* 123:147-160.

- Allendorf, T. D., J. S. Brandt, and J. M. Yang. 2014. Local perceptions of Tibetan village sacred forests in northwest Yunnan. *Biological Conservation* 169:303-310.
- Brandt, J. S., M. A. Haynes, T. Kuemmerle, D. M. Waller, and V. C. Radeloff. 2013. Regime shift on the roof of the world: Alpine meadows converting to shrublands in the southern Himalayas. *Biological Conservation* 158:116-127.
- Brandt, J. S., E. M. Wood, A. M. Pidgeon, L.-X. Han, Z. Fang, and V. C. Radeloff. 2013. Sacred forests are keystone structures for forest bird conservation in southwest China's Himalayan Mountains. *Biological Conservation* 166:34-42.
- Brandt, J. S., T. Kuemmerle, H. Li, G. Ren, J. Zhu, and V. C. Radeloff. 2012. Using Landsat imagery to map forest change in southwest China in response to the national logging ban and ecotourism development. *Remote Sensing of Environment* 121:358-369.
- Brandt, J. S., and P. A. Townsend. 2006. Land use - land cover conversion, regeneration and degradation in the high elevation Bolivian Andes. *Landscape Ecology* 21:607-623.

Book

- Brandt, JS, and E. Bartee. (2012). "The Birds of Shangrila". Yunnan Minorities Publishing. 266 pp. Interactive pdf: [E-book](#)

Technical Reports

- Brandt, J.S., 2009: "Mapping Wild Rice in culturally-important lakes in Northern Wisconsin". Final Report for Circle of Flight project with the Lac Courte Oreilles Ojibwa Community College
- Klein, D., Brandt J, Cook C., Graham, R., Postle, J., Rheineck, B. 2008. Agricultural Chemicals in Wisconsin Groundwater. Wisconsin DATCP ARM Publication 180.
- Brandt, J.S. 2006. "Evaluation of the Biological Health of the Rivers of the Central Valley of Tarija, Bolivia" (in Spanish, for TNC-Bolivia Country Program).

Proceedings at Scientific Meetings

- Torres A., J. Brandt, K. Lear and J. Liu. (2016) "Global sand trade is paving the way for a tragedy of the sand commons." American Geophysical Union (AGU), San Francisco.
- Torres A., J. Brandt and Lear K. (2016) "Telecouplings of Limited Resources: The case of sand." International Association of Landscape Ecology (IALE), Asheville, NC.
- Allendorf T. and J. Brandt. (2016) "Outcomes of national forest governance policy in the Trans-Himalaya". Association for Nepal and Himalayan Studies (ANHS), Austin, TX, February 2016
- Brandt J., T. Allendorf and V. Radeloff. (2016) "Impacts of ecotourism on land use in the High Himalaya". NASA LCLUC International Meeting, Yangon, Myanmar.
- Brandt J. (2015) "Avoiding imminent regime shifts in the northern Great Lakes". International Association of Landscape Ecology (IALE), Portland, Oregon.
- Brandt J. (2014) "An Ecosystem Services framework for tribal stewardship of Great Lakes coastal ecosystems" Natural Capital Annual Meeting, Stanford University.
- Brandt J., Wood E. Pidgeon A. and Radeloff V. (2013) "Sacred forests and bird conservation in the Himalaya". American Ornithological Union (AOU), Chicago, IL.
- Brandt J. (2011) "Land systems change in southwest China's Himalayas" NASA 2011 Carbon Cycle and Ecosystems (CC&E) Joint Science Workshop.
- Brandt J. (2011) "Ecotourism accelerates logging in old-growth forests in southwest China". NASA 2011 Land Cover Land Use Change (LCLUC) Annual Team Meeting.

- Brandt J. (2011) “Old-growth forest conservation in southwest China”. International Congress for Conservation Biology (ICCB), Auckland, New Zealand.
- Brandt, J. (2011) “Sacred sites are refugia for Himalayan forest birds.”. Association for Nepal and Himalayan Studies (ANHS) Conference, St. Paul, MN.
- Brandt J. and Townsend P. (2008) “Land cover conversion, regeneration, and degradation in the Bolivian Andes”. International Association of Landscape Ecology (IALE), Madison, WI.

Invited Seminars

- Brandt, J.S. (2016) “Land Use and Ecosystem Services”, Summer Research Community Ten Talk Session, Boise State University
- Brandt, J.S. and J. Tallant (2016). “Early detection of invasive species in Great Lakes coastal wetlands”, University of Michigan BioStation, Annual Project Stakeholder Meeting.
- Brandt, J.S. (2016) “Forest Conservation in the Eastern Himalaya”, Yangon University, Myanmar
- Brandt, J.S. (2016) “Tourism as a sustainable development strategy in Myanmar”, Myitkina University Myanmar
- Brandt, J.S (2015) “Integrated Stewardship in Great Lakes Coastal Wetlands”. University of Vermont
- Brandt, J.S (2015) “Resolving Human-Environment Conflicts with Land Use Science”. Ohio University
- Brandt, J.S (2014) “Social-ecological Impacts of Ecotourism in a Biodiversity Hotspot”. James Cook University Queensland, Australia.
- Brandt, J.S (2014) “Land systems change and socio-ecological trajectories: The Good, the Bad, and the Unexpected”. Dartmouth Environmental Studies Program
- Brandt, J.S (2014). “Consequences of land systems change in a biodiversity hotspot”. Dartmouth Ecology and Evolutionary Biology Department
- Brandt, J.S (2012) “Coupled socioecological systems in southwest China” University of Michigan
- Brandt, J.S (2012) “Land use systems in the Himalayan mountains”. Boston University
- Brandt, J.S (2012) “Threatened bird conservation in a rapidly changing Tibetan landscape”. U. Missouri

Advisee Presentations

- Steimke, A, B. Han, J. Brandt, R. Som-Castellano, A. Leonard, and A. Flores. “Quantifying the effects of climate and landscape change on hydrologic processes. Poster. December 2016, American Geophysical Union (AGU), San Francisco.
- Maksimowicz, M., J. Brandt and A. Flores. “Regional Climate Modeling and Remote Sensing to Characterize Impacts of Civil War Driven Land Use Change on Regional Hydrology and Climate.” Poster. December 2016, American Geophysical Union (AGU), San Francisco.
- Quintas-Soriano, Brandt, J., Castro, A.J. 2016. Land use scenarios and ecosystem services within the Program for Ecosystem Change and Society (PECS). Idaho EPSCoR Annual Meeting Oral, Plenary Session. Coeur d’Alene, Oct. 20, 2016. Oral presentation.
- Narducci, J., J. Brandt and A. Castro. “Stakeholder Values, Land Use, and Ecosystem Services Trade-Offs.” Poster at 2016 Idaho EPSCoR Annual Meeting. October 19-21, Coeur d’Alene Idaho. Bernardini, S., Quintas-Soriano, C., Brandt, J., Narducci, J., Gibson, D., Castro, A.J. 2016. Socio-cultural Valuation of Ecosystem Services across Portneuf and Treasure Valley. Idaho EPSCoR Annual Meeting Oral, Student Research Presentations. Coeur d’Alene, Oct. 20, 2016. Oral presentation

- Narducci, J., Brandt, J., Quintas-Soriano, C., Castro, A.J. Stakeholder Values, Land Use, and Ecosystem Services Trade-offs. Idaho EPSCoR Annual Meeting Oral, Plenary Session. Coeur d'Alene, Oct. 20, 2016. Poster presentation
- Valencia, M., X. Sanchez and D. Bakyono (2016). "Political Affiliation and Ecosystem Services in the Treasure Valley" Idaho Conference on Undergraduate Research (ICUR), Boise State University

TEACHING AND MENTORSHIP ACTIVITIES

Teaching

Spring 2017: HES 597 Human Environment Systems Research Design and Methods (3 credits). 9 students.

Fall 2016: HES 597 Human Environment Systems Seminar (1 credit), 10 students, 6 outside guest lectures. 3 student/post-doc presentations.

Mentoring

- Jenna Narducci (MS Geosciences)
 - Role: Lead Advisor starting Fall 2016
- Matthew Unitis (MS Biology)
 - Role: Lead Advisor starting Fall 2016
- Amy Steimke (MS Geosciences)
 - Role: Committee Member, Advise on Land Use component
- Megan Maksimowicz (MS Geosciences)
 - Role: Committee Member, Advise on Land Use component
- Nayani Ilangakoon (PhD Geosciences)
 - Role: Committee Member, Advise on Landscape Ecology component
- Hanna Kim (MS Biology)
 - Role: Committee Member, Advise on Spatial Analysis
- Daniel Ognomo (Undergraduate, Computer Sciences, MURI Student)
 - Role: Faculty Mentor on Team Research Project: "Social Demand for Ecosystem Services"
- Melissa Valencia (Undergraduate, Mathematics, MURI Student)
 - Role: Faculty Mentor on Team Research Project: "Social Demand for Ecosystem Services"
- Xochitl Sanchez (Undergraduate, Psychology, MURI Student)
 - Role: Faculty Mentor on Team Research Project: "Social Demand for Ecosystem Services"

Journal Reviews

- Ecosphere, Remote Sensing of Environment, Environmental Research Letters, Biological Conservation, Regional Environmental Change, Remote Sensing, Biodiversity and Conservation, Mountain Research and Development

OTHER RELEVANT TRAINING, EMPLOYMENT AND ACTIVITIES

Past Employment and Training

2007 - 2012	NSF IGERT Trainee
2009 – 2012	NASA Land Cover Land Use Science Team
2005 - 2006	Fulbright Fellow, Bolivia, South America
2000 - 2002	US Peace Corps Volunteer, Guatemala, Central America

1996 - 2000 Hydrogeologist, Waterborne Environmental, Inc., Leesburg, VA

Fieldwork

2016 Myanmar Far North, Kachin State (2 weeks)

2014-2015 Lake Superior coastal wetlands, Upper Peninsula of Michigan (6 weeks)

2013 Tropical forests, Southeastern Cameroon, Central Africa (1 month)

2008 - 2011 Himalayan Forest and Alpine systems, Northwest Yunnan Province, China (1.5 years)

2005 Andean streams and rivers, Fulbright fellowship, Tarija, Bolivia (1 year)

2003 Andean arid rangelands and croplands, M.S. Research, Tarija, Bolivia (2 months)

2000 - 2002 Guatemalan highlands (US Peace Corps) (2 years)

1996 - 2000 Agricultural areas throughout the US (frequent trips)

1995 Susquehanna River tributaries, Pennsylvania Appalachians (summer field tech for USGS)

Past and present professional affiliations

Technical Advisory Group for INTACT: International Action for Primary Forests, International Association of Landscape Ecology, Society for Conservation Biology, Soil and Water Conservation Association