

University of Nebraska
School of Natural Resources
2015 Academic Program
Review

External Team

UNL Representatives

SNR Student Representatives

Dr. Stuart Marsh

Director, School of Natural Resources and the Environment, University of Arizona



Research: Stuart is Director and a Professor in the School of Natural Resources and Environment. Stuart also holds an adjunct faculty appointment with the School of Geography and Development. He is currently involved in a broad range of research designed to assess surface environmental conditions utilizing advanced remote sensing and geographic information system technologies. These research efforts have attempted to enhance our abilities to employ these technologies to address the impacts of land use and land cover change and environmental degradation, particularly in the arid and semi-arid lands of the world.

Active research projects have focused on 1) discrimination of invaded and native species sites using multitemporal remote sensing, 2) understanding anthropogenic impacts when estimating biomass in semi-arid environments, 3) estimating the impacts of grazing and fuel-wood management on soil-carbon, 4) biophysical characterization and management effects on semi-arid rangelands using Landsat satellite data, 4) evaluating post-wildfire vegetation patterns, and 5) characterizing the spatial structure of endangered species habitat using geostatistical analysis.

Teaching: Stuart teaches classes on Natural and Human Impacts on natural resources in Arid Lands.

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Source: <http://geography.arizona.edu/user/stuart-marsh> and <https://snre.arizona.edu/people/stuart-marsh>

Dr. Lewis Gilbert

Managing Director and Chief Operating Officer, Institute on the Environment, University of Minnesota



Lewis E. Gilbert is Interim Director with the Institute on the Environment at the University of Minnesota. As Interim Director, he is the Chief Operating Officer and represents the Institute at senior levels in University governance and to the public. Gilbert is responsible for inspiring collaboration among existing Ione programs and creating new endeavors that advance the Institute's mission. He also oversees the operational aspects of Ione's facilitator role across the whole of the University of Minnesota. He joined Ione in late 2011.

Gilbert's career as an academic entrepreneur has focused on the design, implementation and management of complex interdisciplinary activities in large research universities. He was a key architect in the creation of the Earth Institute at Columbia University and a central figure in the revitalization of the Nelson Institute at the University of Wisconsin-Madison. Among the major activities he has worked on are: creation of the International Research Institute for climate prediction, integration of CIESIN into the Earth Institute, creation of the Wisconsin Initiative on Climate Change Impacts, and evolution of the Wildlife Data Integration Network. He has also served as a consultant to Arizona State University, CINCS LLC and the Twycross Zoo.

Gilbert has taught regularly in the MPA program at Columbia and in the Business School at the University of Wisconsin. He has also designed undergraduate curricula and taught occasionally at the undergraduate level. He has been an invited speaker at a wide range of conferences in the U.S. and abroad. His courses and lectures focus on the human role in the evolution of Earth and on the inherent complexity of natural and human systems.

His intellectual interests are highly varied and his writings have appeared in venues ranging from the Journal of Geophysical Research to posts in the AAAS blog Qualia. He also maintains and slowly builds his own blog, [Earth Systems Management](#).

Gilbert listens to and collects music from off the beaten path. While his nephew is a chef, he likes to fancy himself a cook and the reviews are generally favorable.

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Source: <http://environment.umn.edu/contact-us/directory/lewis-gilbert/>

Dr. Michael Masser

Professor and Department Head, Department of Wildlife and Fisheries Sciences, Agriculture and Life Sciences, Texas A&M University

Specialty: Aquaculture and aquatic vegetation management

Current Research: Aquaculture, Pond Management, Recreational Fisheries, Aquatic Ecology, Aquatic Ecosystem Management, and Aquatic Vegetation Management

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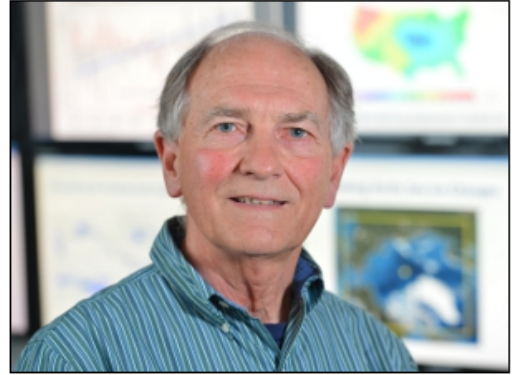
Source: <http://wfsc.tamu.edu/staff/michael-masser/>



Dr. Eugene Takle

Director, Climate Science Program and Professor of Atmospheric Science; Department of Geological and Atmospheric Science and Professor of Agricultural Meteorology, Department of Agronomy, College of Agriculture, Iowa State University

Research: Transferability Working Group of the GEWEX Hydrometeorology Panel, North American Regional Climate Change Assessment Program (NARCCAP) Experiment, Project to Intercompare Regional Climate Simulations, Shelterbelt Research, Regional Climate Modeling Laboratory



Email: gstakle@iastate.edu

Source: <http://www.meteor.iastate.edu/faculty/takle/>

Dr. Elizabeth Wentz

Director and Professor, School of Geographical Sciences and Urban Planning, Arizona State University



Elizabeth Wentz's research focuses on the design, implementation and evaluation of geographic technologies with particular emphasis on how such technologies can be used to understand urban environments. Geographic technologies, which include Geographic Information Systems (GIS), remote sensing, and spatial analysis, offer insight into how human activities and physical space relate in urban systems by using quantitative methods to measure and analyze such activities.

Dr. Wentz's most current projects concentrate on water resource management and urban remote sensing. She is working on using Environmental Spatial Decision Support System (ESDSS) modeling to support watershed land use management and to improve household water and energy consumption. The ESDSS for the watershed project visually displays nitrogen sources and nitrogen sinks that occur in landscapes. Modeling these sources and sinks helps local decision makers, such as planning and zoning committees, better manage nitrogen levels in estuaries. The ESDSS for the household water and energy project determines how to plant trees so that they use minimal water while providing maximum shade for homes.

Wentz's teaching focuses on geographic technologies and graduate-level research design and proposal writing. Her book, *How to Design, Write, and Present a Successful Dissertation Proposal*, guides students through the dissertation proposal process.

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Source: <https://geoplan.asu.edu/people/elizabeth-wentz>

Dr. Mark Riley

Professor and Head, Department of Biological Systems Engineering

Research: Bioprocess engineering and biosensors, Detection of pathogens in drinking water, Lung cell spectroscopy

Teaching: Biosystems Analysis and Design, Fermentations and bioprocess engineering, Cell and tissue engineering, Graduate research methods

Email: mriley3@unl.edu

Source: <http://engineering.unl.edu/bse/mark-riley/>



Dr. William Wagner

*Professor, Department of Psychology, School of
Biological Sciences*

Research: My research focuses on the evolution of animal communication systems, particular the evolution of sexual communication. This includes natural and sexual selection on male traits used to attract females, the costs and benefits of female mating preferences, and the coevolution of male-female interactions. My current research is primarily with field crickets, but I have also worked with fishes and frogs.



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Source: <http://cricket.unl.edu/People/Wagner.html>

Mr. Braymond Adams

UNL School of Natural Resources Graduate Student Representative

I graduated from Lincoln University in Jefferson City Missouri where I earned a bachelors in agriculture and natural resources. After several years of field experience in wildlife management I have been blessed to find myself here at the University of Nebraska Lincoln working towards completing my masters in applied ecology. My past experiences in this field have primarily dealt with “charismatic megafauna”. Now, working alongside (and lashed to the hip of) some of the Universities top entomologists I switch gears; marrying my interests, background and experience to the disciplines of insect ecology and entomology.

I am enjoying my second semester here in the School of Natural Resources. Along with meeting new people and gathering a broader scope of the many the philosophies of development in SNR, my aim is to transition from technician to student and ultimately scientist while expanding on the basis of stewardship.

Research: insect ecology *Dermestes maculatus* in regards to bone modification

Email: adams.braymond@gmail.com



Ms. Jasmine Mausbach

UNL School of Natural Resources Undergraduate Student Representative

Jasmine Mausbach, originally from Omaha, Neb., is a sophomore working on bachelor's degrees in Environmental Restoration Science, Environmental Studies, and Spanish at the University of Nebraska-Lincoln. She has been interning at the Water for Food Institute since January 2015 and hopes to make a difference in the lives of those without enough food due to poor water management and farming techniques by assisting with international and local development. Her career goals include traveling the world, identifying environmental issues and proposing and implementing sustainable solutions.

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