Department of Environment & Society

2015 GRADUATE PRE-PROJECT SYMPOSIUM

April 3, 2015 • Univ. Inn 507 • 8:45-11:30 am
Welcome to the 2015 Symposium

One of the most difficult challenges for a new researcher is to learn how to convey complex, often unfamiliar ideas to a diverse audience of scholars in the space of a few minutes. Today’s event offers Environment and Society graduate students a chance to practice making a presentation for a scientific meeting. Rather than waiting for the thesis or dissertation defense, this symposium is an opportunity for graduate students to present their ideas to an audience of peers and professors, at a time when they’re just beginning to focus on a researchable problem.

We will hear from 3 Ph.D. and 2 M.S. students who seek degrees in Human Dimensions of Ecosystem Science and Management and Recreation Resource Management. Each will describe how they propose to undertake the research that will form the basis for their thesis or dissertation. Some students are just beginning to determine how best to tackle their topic of interest. Others may have already started their research process, but still can benefit by further developing their ideas as influenced by the insights of their colleagues in the department, college, and university.

Comments and questions, then, are not only welcome but also necessary. Today is a venue for helping each other do the best science we can. The pace of presentations is rapid: each student has been asked to speak for no more than 15 minutes, leaving about ten minutes for questions and suggestions. If you have an idea or question and don’t get a chance to raise the issue in the time allotted, please take advantage of the comment forms scattered around the room.
ENVIRONMENT AND SOCIETY DEPARTMENT
PRE-PROJECT SYMPOSIUM
College of Natural Resources, Utah State University
UNIVERSITY INN ROOM 507
April 3, 2015

8:45-9:00 am  Opening Social- light breakfast with coffee and juice

Opening Remarks- Chris Lant

9:10-9:35 am  Dan Blair (major professor: Chris Monz)
An Exploratory Approach to Better Understand Visitor Behavior in the Moose-Wilson Corridor of Grand Teton Nation Park

9:35-10:00 am  Abigail Kidd (major professor: Chris Monz)
Crafting Messages That Matter: An Application of Communication and Marketing Theory to Increase Managerial efficacy of messaging in parks and protected areas

10:00-10:25 am  Temis Taylor (major professor: Joseph Tainter)
Perceptions of Risk in Discourse and Framing of Energy Decisions

10:25- 10:45 am  BREAK

10:45-11:10 am  Bradley Kessler (major professor: Steve Burr)
Understanding the Causes of Conflict in Outdoor Recreation on the Pleasant Grove Ranger District - Uinta-Wasatch-Cache National Forest

11:10-11:35 am  Enjie Li (major professors: Joanna Endter-Wada; Shujuan Li)
Land and Water Transformation in the Arid American West

Moderators:
Ashley D’Antonio
Gwendwr Meridith
Visitation numbers to Grand Teton National Park are continuing to increase from year to year, reaching over 2.8 million visits in 2014. As park managers are expanding their methods of collecting visitor-use information, Global Positioning System (GPS) technology is another tool managers have utilized to better understand visitor travel patterns. GPS technology has empowered managers with an accurate and reliable method to collect visitor data, while showing precise movement patterns. Though GPS technology has provided information about travel patterns, managers have limited knowledge about how first time or repeat visitor groups may differ, or if pre-trip planning information results in different behavior patterns. This study in the Moose-Wilson Corridor of Grand Teton National Park pairs survey and GPS data to see if any behavioral patterns differ among specific types of user groups. This exploratory research study may provide managers with a more informed understanding of how different user groups behave inside park boundaries.
The Wasatch Front of Utah is an area experiencing rapid growth, with the population expected to double by 2050. With this growth there will be increased pressure on the public lands that surround the area for recreational uses. This study will be located in the America Fork Canyon area of the Pleasant Grove Ranger District in the Uintah-Wasatch-Cache National Forest. This study will address questions that will become more pertinent as population and recreational use of the canyon increases. 1) What role does crowding have on conflict in America Fork Canyon? 2) What groups of recreationists are most likely to experience a conflict with each other? 3) What changes can be made on the National Forest to reduce conflict in the future? To gain insight into these questions, this study will utilize a combination of face-to-face intercept surveys in conjunction with web-based follow up surveys. The aim of this study is to understand what challenges will face the US Forest Service management on the Pleasant Grove Ranger District, and to begin to recognize trends that may become exacerbated with increasing population. The final product of this research will result in recommendations to the US Forest Service of direct and indirect management strategies to deal with increased usage and the resulting implications of crowding and conflict on the Pleasant Grove Ranger District.
Recreation and tourism activities in parks, wilderness, and protected areas continue to show trends of increasing participation worldwide. However, this increase in visitation has raised concerns regarding both the degradation of quality experiences and the protection of resources. More so than ever before, visitor behavior is influencing the quality of recreation resources and experiences. Signs are universally used by managers of parks and protected areas to communicate messages to visitors intended to influence visitor behavior. These messages may be important to visitor safety, resource protection, or improving visitor experience through interpretation of the resource. However, research suggests that signs may not be the most effective means of communicating to visitors. An understanding of what makes a particular message and mode of delivery “work” is critical to successful communication between managers and visitors. Building on previous research conducted in Acadia National Park, I plan to undertake a thorough investigation into communication and marketing theory in order to determine “best practices” in message framing and mode of message delivery. Employing information derived from this analysis and from existing theory, I will use a quasi-experimental design to develop, deploy, and test different messaging treatments at multiple field sites to answer the following questions: What is the most effective mode of communicating messages intended to change visitor behavior? How do we best craft and deploy messaging to elicit behavioral change in visitors? It is my hope that the answers to these questions will provide managers to parks and protected areas with field-tested messaging strategies and interpretive materials that can be readily applied in situations where management of visitor behavior is necessary to protect both park resources and the quality of the visitor experience for future generations.
In the last two centuries, the U.S. West has been dramatically transformed into a series of large urban concentrations embedded in a mostly arid landscape. Water has always been a vital, scarce, and variable resource in the region. Today, under climate change, rapid population growth, and significant land transformations due to urbanization, the U.S. West is heating up and drying out. The region’s already fragile landscapes and aging water systems are confronting significant threats to future sustainability. My research examines the dynamics and consequences of land and water transformations in Utah’s Wasatch Range Metropolitan Area (WRMA), a rapidly urbanizing area located in the heart of the U.S. West. My primary research objectives are: 1) to analyze the processes and characterize the patterns of historical land conversion; 2) to investigate the implications of agricultural land conversion on water resources and its management; and, 3) to contribute to a better understanding of the challenges of integrating land use planning and water management in practice and modeling. Three distinct cases studies will be conducted to meet the research objectives. For the first case study, I will use a comparative research approach and spatial analysis technique to analyze the patterns of agricultural land conversion across four water basins in Utah. For the second case study, I will use both quantitative and qualitative research methods to examine the water implications of agricultural land conversion in Cache County, Utah. For the third case study, I will use literature review and documents analysis to assess the barriers to integrated land and water planning and management in practice and modeling. For all case studies, I will mostly rely on secondary data and documents. This research will allow for knowledge of spatiotemporal dynamics of land and water use during rapid urbanization in the West, as well as understanding of the interconnectivities between land use planning and water management.
Perceptions of Risk in Discourse and Framing of Energy Decisions

Advisor: Joseph Tainter

The study of the perception of risk began in earnest in the 1970s when public opposition to new technological risks, nuclear energy in particular, conflicted with experts' assessments of risk. Public opinion was viewed by scientists and policy makers to be illogical and impeding the progress of new technologies and social good. Since that time, the perception of risk has gained greater respect as an important part of a democratic society. Research and theory on risk perception have grown to include psychometrics, dual process theories, Cultural Theory of Risk, Beck's "Risk Society," the Social Amplification of Risk Framework, Cultural Cognition of Risk, and the importance of emotions and trust. In a preliminary study on discourse and framing of water rights for commercial oil shale development, risk played an important role in the arguments presented in print media. This project applies risk theories and frameworks to the analysis of discourse and framing in energy development decisions. Risk communication often focuses on increasing the amount or legibility of scientific information to the lay public. Results from this research are expected to provide insight into the social rationalities used in communication by the general public that may permit better flow of important risk science between the public, policy makers and scientists.