# AESS 2012 CONFERENCE PROGRAM 21-24 JUNE 2012 SANTA CLARA UNIVERSITY

# THURSDAY, 21 JUNE FIELD TRIPS see Registration Website for Information

# THURSDAY, 21 JUNE WORKSHOPS

1.

# Community Filmmaking

#### Time:

9:00 am - 12 noon, and 1:00 pm - 4:00 pm

### **Coordinator:**

Dyanna Smith, The Red Eft Project and Antioch University New England, dsmith2@antioch.edu

Workshop Size: Limited to 18 participants.

# **Workshop Description:**

Film is a communication tool for science. It can be used to translate environmental issues in an engaging way. Advances in technology mean we are all carrying video cameras now; and we are all potential filmmakers. But how can we harness the basics of communicating and connecting through film?

This workshop is designed to train you to visually communicate environmental issues through film. We will learn the process of community filmmaking. In the first part of the workshop, we will identify shared goals, and discuss how to express them through film. We will play off of the conference theme, "Preparing for our Environmental Future." You will then be guided through camera activities (cameras provided), after which you will set out individually with the cameras to shoot footage for a group film. In the afternoon, participants will share the clips they feel best capture their message. As a group, we will then enter the storyboarding process, editing our film together. This ensures that all voices are represented equally in the final product, and strengthens the group vision.

The workshop is open to anyone, regardless of prior experience with video and filmmaking, or discipline. The techniques learned in this workshop can be used in your classroom or community as a vehicle for positive change.

### **About the Coordinator:**

Dyanna is a scientist and a practicing artist with a 20-year career in environmental work and conservation. She developed a process of working with small groups to share their environmental vision through community filmmaking. An example can be found on the website for the Red Eft Project, an environmentally-focused nonprofit (http://www.redeft.org/2011/12/12/contoocook-valley-film-short-2/). The 10-minute film features a group of New Hampshire farmers who share a goal of creating food security in their region within 30 years. Red Eft Project produces these short films as a way to promote environmental leadership, sustainability through community action, and strengthen people's environmental message and work within their own communities.

2

# **Resources for Climate Educators: Any and All Disciplines**

### Time:

9:00 am – 12 noon

### **Coordinators:**

David Hassenzahl, Chatham University and National Council for Science and the Environment, <a href="mailto:dhassenzahl@gmail.com">dhassenzahl@gmail.com</a> with

- David Blockstein, National Council for Science and the Environment
- Ginny Brown, National Council for Science and the Environment
- Andy Jorgensen, University of Toledo and National Council for Science and the Environment

### **Workshop Description:**

This workshop introduces you to the Climate Adaptation and Mitigation E-Learning (CAMEL) project. CAMEL, an U.S. National Science Foundation (NSF)-funded project run by the Council of Environmental Deans and Directors through the National Council for Science and the Environment, is a multi-media on-line resource for climate change educators and students. It includes an extensive collection of articles, data sets, images, videos, syllabi, teaching modules, and other educational materials. It also includes webbased infrastructure that functions as a place where a growing community of educators and students gather to network, share and evaluate approaches and materials, and host courses. The workshop will begin with an overview of CAMEL, but quickly move to having participants engage with the resource.

By the end of the workshop, each participant will have joined the CAMEL community, and learned how to use CAMEL resources. This will include some or all of the following: adding resources, accessing resources, adapting resources for teaching uses, networking with fellow instructors, and developing personal teaching web portals.

# **Interdisciplinary Environmental Research Workshop**

#### Time:

9:00 am - 12 noon

### **Coordinators:**

Amanda Cravens, Stanford University, Emmett Interdisciplinary Program in Environment and Resources (E-IPER), <u>acravens@stanford.edu</u>

#### with

- Meg Caldwell, Stanford University Law School and Executive Director, Center for Ocean Solutions
- Marilyn Cornelius, E-IPER, Stanford University
- Adam Royalty, Hasso Plattner Institute of Design, Stanford University
- Anja Svetina Nabergoj, Assistant Professor of Economics, University of Ljubljana (Slovenia)
- Nicola Ulibarri, E-IPER, Stanford University

# **Workshop Description:**

This workshop introduced you to "design thinking." As environmental researchers attempt to address pressing real-world challenges, their reliance on implicit disciplinary research paradigms and practices becomes insufficient, creating the need for a common communication and innovation process across disciplines. Design thinking is a creative problem-solving methodology originally developed for designing physical products and other commercial solutions.

Our workshop adapts design thinking techniques and mindsets to present a creative, playful concept of "doing research." One of the most powerful features of design thinking is that it makes the process behind innovation explicit and accessible. Scientific and other environmental research requires not only analytical rigor, but also creative mindsets that are rarely a systematic part of graduate student training. Innovative researchers must not only solve problems, but also identify new problems and subsequently design new methods to solve the problems they find. Increasingly, they do this work in multidisciplinary teams and are asked to work on applied, real-world problems.

This half-day "learning by doing" workshop introduces participants to concrete methods for framing and re-framing problems, generating ideas, and prototyping proposed solutions. Using techniques adapted from design thinking pedagogy as taught at Stanford's Hasso Plattner Institute of Design, participants will work in teams to playfully address challenges from their own work. They will come away with a renewed perspective on "doing research" as a creative endeavor as well as an analytical one. This energizing curriculum has been successfully taught to graduate students, post-docs, and faculty at Stanford University and through the Monterey Area Research Institutions' Network for Education (MARINE) consortium. Participants are encouraged to register either as individuals or with their research collaborators.

# Translating Research into Policy: How to Participate Effectively in the Policy Process Workshop

### Time:

1:00 pm - 5:00 pm

### **Coordinators:**

Abigail Abrash Walton, Conservation Psychology Institute Faculty, Antioch University New England, <a href="mailto:aabrash@antioch.edu">aabrash@antioch.edu</a> with

- Carolyn Bartholomew, Antioch University New England
- Michael Simpson, Chair, Department of Environmental Studies, Antioch University New England

# **Workshop Description:**

This workshop is designed to strengthen the ability of scientists and applied academicians to engage effectively in the public policy process. The workshop is one in a series, the first of which was delivered at the January 2012 National Conference on Science, Policy and the Environment. The focus of the workshop series is on improving the scientific basis of environmental decisionmaking in public policy.

There is a wealth of useful research conducted by scientists and others in higher education institutions which could and should inform public policy debates across the nation and internationally. But scientists and policymakers generally operate within different frameworks. They communicate in different ways in terms of both type and extent of information required for drawing conclusions. They work under different timeframes. And, they have different constituencies. Delivering a scientific research paper to an audience of peers is a very different exercise than providing usable, understandable information to policy makers. These differences mean that public policy discussions are not as rich as they should be and much scientific expertise remains untapped.

This workshop will demystify the policy-making process and build scientists' capacity to make communicating about their work relevant, useful, and used in the policy arena. Workshop faculty, experienced in policy-making and policy advocacy, will provide training in how to communicate effectively across the academic/policymaker divide. The workshop will present a primer on how the public policy-making process works, where the opportunities exist for injecting scientific expertise into this process, and how scientists can frame their expertise in ways that policymakers can understand, respond to and incorporate into public policymaking.

Participants will increase their understanding of:

- how the public policy-making process works at the U.S. Congressional and state legislative level
- where the opportunities exist for injecting academic expertise into this process

• how scientists and researchers can frame their expertise in ways that policymakers can understand, respond to and incorporate into public policymaking.

5

# Getting Published: Preparing Manuscripts for Journal Submission

#### Time:

1:00 pm - 4:00 pm

#### **Coordinators:**

Walter (Tony) Rosenbaum, Editor-in-Chief, Journal for Environmental Studies and Sciences, <u>Tonyros@ufl.edu</u>

with

- Kimberly K. Smith, Carleton University
- Several Associate Editors of JESS
- Several members of the JESS Editorial Board

# **Workshop Description:**

This workshop is intended for graduate students and young professionals desiring to prepare articles and have manuscripts reviewed for submission the *Journal for Environmental Studies and Sciences*, or other professional publication.

For the workshop, each participant will be asked to submit a draft manuscript at least a month to six weeks in advance of the workshop. The manuscripts will be reviewed by the workshop coordinators and satisfactory submissions will each be read by the workshop coordinators and at least two other workshop participants (divided among participants so each will have no more than two articles to review).

Before the session, the participants will be divided into small groups where each consisting of 2-4 workshop participants and a Journal editor or otherwise qualified reviewer. Each small group participant's submission will be read by the other group members in advance of the meeting. The workshop will consist of several activities

- a brief explanation by Lindy Paul, Springer Publication's AESS liaison, of the Editorial Manager software used for journal reviews;
- the division into the small working groups were the manuscripts will be reviewed and discussed among the members;
- a final collective meeting to discuss issues and ideas from the review sessions.

6.

# Return of the Population Factor: Seven Billion Reasons to Communicate More Effectively

#### Time:

9:00 am - 12 noon

#### **Coordinator:**

Marilyn Hempel, Editor, Population Press, and Executive Director, Blue Planet United, <a href="mailto:mshempel@mac.com">mshempel@mac.com</a>

# **Workshop Description:**

In a world of increasingly uncivil debate, fuzzy statistics, and still exploding population growth, we need a renewed effort to communicate effectively about the relationship between numbers of people, what they do, and environmental crises. The goal of our workshop is to address this. We will codify findings and develop a set of recommendations for communicating population in environmental teaching and research. The recommendations we develop will be published in Population Press (a news journal) and made available to AESS for possible use in its journal or newsletter. Workshop participants will become familiar with contemporary thinking on how to communicate about population issues, and will have the opportunity to become better communicators themselves.

Key Topics to be discussed are:

- 1. the role of population and family planning in environmental debate,
- 2. Ecological Footprint analysis as a way to understand population and consumption impacts,
- 3. how to communicate those ideas within higher education and beyond,
- 4. how to separate science-based population arguments from anti-immigrant and anti-Developing World rhetoric.

In order to maximize the exchange of information and make the event both enjoyable and productive for all participants, the workshop will employ a carefully structured set of reports, multimedia presentations, breakout groups, and thought-leader exercises. Highlights of the workshop will be video-recorded and made available for AESS members and others on YouTube

#### **About the Coordinators:**

This workshop is led by nationally recognized experts in population-and-environment issues, including Paul and Anne Erhlich, Mathis Wackernagel, Martha Campbell, Marilyn Hempel, and Monty Hempel. Monty Hempel will moderate the session.

7

# Using Creative Thinking to Solve Educational, Activist and Research Challenges

# Time:

1:00 pm - 4:00 pm

### **Facilitator:**

Jennifer Joy Pawlitschek, Independent Artist and Activist, <u>jjoy@jenniferjoyonline.com</u>

### **Workshop Description:**

AESS members are researchers, activists and educators. Challenges are rife in each of

these areas. Solutions based on convergent thinking—thinking that follows a logical step-by-step process to a single solution—do not always address the complexity of these problems. Creative (divergent) thinking, which follows a spontaneous and free-flowing process, can generate fresh and previously unimagined solutions. In order to help participants find innovative solutions, this workshop will apply creative thinking skills and exercises to their pedagogical, research or activist challenges.

The workshop is structured according to Edward de Bono's 4-phase creative thinking process:

- Focusing
- Generating ideas
- Harvesting Ideas
- Treating Ideas.

In the first step, the group together will do a series of exercises and games designed trigger creative thinking. The next 3 steps will be done in small groups, with the entire group applying the following process to each individual's specific challenge: First, participants will engage in creative brainstorming (generating ideas); second, they will identify the most promising ideas. Finally, each possible solution's strengths and weaknesses will be tested, and real-life constraints will be considered. Each participant will then leave the workshop with at least one new solution to a challenge, a fresh solution derived through divergent/creative thinking, and then tested and adjusted through convergent/rational analysis.

By the end of the workshop, participants will:

- Increase their creative thinking and problem solving skills
- Learn and experience how creative thinking can impact their intellectual performance
- Use repeatable exercises to further develop their creative thinking skills after the workshop
- Use a repeatable creative problem solving process for finding innovative solutions to other challenges
- Solve at least one challenge from their teaching, activism and/or research.

#### **About the Facilitator:**

Jennifer Joy Pawlitschek is a writer actor, comedian and trainer. She has performed her third one-woman show, The Physics of Love, a romantic comedy inspired by the scientific history of the universe-at the Fresh Fruit Festival, NYC, Solo Acts at the Emerging Artists Theatre and at the Laurie Beechman Theatre, NYC. She has appeared in many stage plays and has taught theatre and communications courses at Long Beach City College, Pace University, City University of New York, the United Nations and the South Korean diplomatic corps. She holds an MFA in Drama from the University of California, Irvine.

# RECEPTION 5:00 – 7:00 pm

# THURSDAY, 21 JUNE OPENING KEYNOTE PANEL (Michelle Marvier and Susanne Moser) 7:00 – 8:30 pm

The Value of Nature: How Do We Reach the Public's Heart? Michelle Marvier, Santa Clara University

Michelle Marvier is a professor of Environmental Studies and Sciences at Santa Clara University. She received her Ph.D. from the University of California, Santa Cruz and was a National Science Foundation (NSF) postdoctoral fellow at the University of Washington. Michelle has worked for the U.S. National Oceanic and Atmospheric Administration (NOAA) on salmon conservation and has served as an advisor to the U.S. Environmental Protection Agency (USEPA), the U.S. Department of Agriculture (USDA), and The Nature Conservancy on matters of statistics, monitoring, and risk analysis. Her efforts to apply evidence-based risk analysis to genetically engineered crops were funded by the USEPA. She has published over 40 articles and currently serves on the editorial board of Frontiers in Ecology and the Environment. Most recently, Michelle completed a new textbook, *Conservation Science: Balancing the Needs of People and Nature*, coauthored with Peter Kareiva.

Psychological and Social Challenges in Preparing for our Environmental Future Susanne Moser, Susanne Moser Research & Consulting, and Stanford University

Dr. Susanne Moser is Director and Principal Researcher of Susanne Moser Research & Consulting, in Santa Cruz, California. She also is a Social Science Research Fellow at Stanford's Woods Institute for the Environment and a Research Associate of the Institute for Marine Sciences at the University of California, Santa Cruz. Her work focuses on adaptation to climate change, resilience, decision support, and effective climate change communication in support of social change. Dr. Moser is a geographer by training (Ph.D. 1997, Clark University). Previously she served as a Research Scientist at the National Center for Atmospheric Research in Boulder, Colorado, worked for the Heinz Center in Washington, DC, and served as staff scientist for the Union of Concerned Scientists. She contributed to the Fourth and Fifth Assessment Report of the Nobel-prize winning Intergovernmental Panel on Climate Change (IPCC) and was a Review Editor for its Special Report on "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation." She is a fellow of the Aldo Leopold Leadership, Kavli Frontiers of Science, Donella Meadows Leadership, and Google Science Communication Programs.

# FRIDAY, 22 JUNE Breakfast Roundtables 7:30 – 9:00 am

### FRIDAY, 22 JUNE

Meeting of The Journal for Environmental Studies and Science Editorial Board 8:00-9:00 am

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# How to land a job interview and get a job offer

Coordinators: Phil Camill (Bowdoin College, AESS President) and Wil Burns (Johns Hopkins University, AESS President-Elect)

#### Abstract:

Interested in tips to help you navigate the job market? This roundtable discussion will provide insights on important things to think about, including developing a CV, writing a cover letter, considering what to include in an application package, and engaging the interview process. The discussion will focus on academic positions in both disciplinary and interdisciplinary departments/programs, and we encourage attendees to bring questions about the process.

# Science and policy, including engaging politicians

**Coordinator:** David Blockstein (National Council for Science and the Environment)

#### **Abstract:**

TBA

10

# How to help interdisciplinary faculty make it through the tenure-track process

**Coordinators:** Dave Hassenzahl (Chatham University) and Stephanie Kaza (University of Vermont)

### Abstract:

TBA

FRIDAY, 22 JUNE Session A 9:00 – 10:30 am

# **Environmental Studies and Global Studies: Exploring their Interface**

Chair: Ken Wilkening

#### **Discussants:**

Barbara Goldoftas (Clark University) Jim Proctor (Lewis & Clark College) Peter Rogers (University at Buffalo) Gary Silverman (Bowling Green State University) Ken Wilkening (University of Northern British Columbia)

# Individual, Social, and Institutional Roadblocks to Sustainability: Problems and **Solutions**

Chair: Marc E. Pratarelli

#### **Discussants:**

Marc E. Pratarelli (Colorado State University, Pueblo) Emily Chan (Colorado College) Jorge Conesa (Portland State University) Sarah M. Johnson (University of Colorado, Colorado Springs)

# 13. Ecocriticism and the Environmental Future

Chair: Jeffrey Mathes McCarthy

### **Discussants:**

Scott Slovic (University of Nevada, Reno) Robert Marzec (Purdue University) Allison Carruth (Stanford University) George Handley (Brigham Young University) Ursula Heise (Stanford University) Jeffrey Mathes McCarthy (Westminster College)

# Climate Change and Indigenous Peoples: Perspectives, Impacts and Strategies

Chair: David Blockstein and Al Kuslikis

#### **Presentations:**

Integrating Climate Change into the Tribal College Curriculum - Case of the College of Menominee Nation

William Van Lopik and Lisa Bosman (College of the Menominee Nation)

Incorporating Traditional Ecological Knowledge into Climate Change Education Octaviana Trujillo (Northern Arizona University) and Teresa Newberry (Tohono O'odham Community College)

Conversations with the Earth: Indigenous Voices on Climate Change Claire Greensfelder (Conversations with the Earth) and Jeffrey Campbell (Christensen Fund)

Nevada's Native American Tribes and Climate Change: What they know, want, and are ready for -- and how to collaborate with them William James Smith, Jr. (University of Nevada, Las Vegas)

15. Energy & Society: Carbon Emissions and Social Change

Chair: Shannon Bell

### **Presentations:**

Dina Biscotti (University of California, Davis)

The Social Diffusion of Energy Efficiency in Religious, Educational, and Community Organizations: A Systems of Exchange-Based Perspective

Hilary Boudet (Stanford University)

Girls Learning Environment and Energy (GLEE): Outcomes of an Experimental Community Trial of Energy Reduction

Shannon Elizabeth Bell (University of Kentucky)

"I can't believe we're breathing that stuff!" Moving Campuses Beyond Coal through Community-Engaged, Team-Based Student Research

Remaking University-Community Partnerships through Community Based Participatory Action Research for Environmental and Food Justice

Chair: Christopher M. Bacon

### **Presentations:**

Empowered Partnerships: Community-Based Participatory Action Research for **Environmental Justice** 

Christopher M. Bacon (Santa Clara University), Mary Louise Frampton, Tony LoPresti and Saneta de Vuono-Powell (University of California, Berkeley), and Camille Pannu (Center on Race Poverty and the Environment)

The Three R's: How Community Based Participatory Research Strengthens the Rigor,

Relevance and Reach of Science Rachel Morello-Frosch (University of California, Berkeley) and Carolina Balazs (Community Water Center)

Power and the Process of Participatory Research: Critical Reflections on Forging and Sustaining Em(power)ed Partnerships for Environmental Justice in West Oakland, CA Catalina Garzón, Eyal Matalon and Eli Moore (Pacific Institute), and Brian Beveridge, Margaret Gordon and Cassandra Martin (West Oakland Environmental Indicators Project)

Supporting community-based environmental and food justice research through undergraduate class work

Iris Stewart, Leslie Gray, Christopher Bacon, Lisa Kealhofer and Gregory Guillette (Santa Clara University)

17

# Public Attitudes Toward Climate Change: Engagement, Communication, and Skepticism

Chair: Karin Warren

#### **Presentations:**

Combating Climate Denialism: Student-created Videos to Debunk Scientific Misinformation
Karin Warren (Randolph College)

Local Versus Expert Perception of Climate Change: An Analysis of Fishers in Trinidad and Tobago

April Baptiste (Colgate University)

A Simulation for Discovery Learning about Carbon Accumulation Krystyna Stave (University of Nevada, Las Vegas)

NIMBY Rhetoric: Blaimers, Bashers, and Bystanders Rebecca C Potter (University of Dayton)

18

# **Sustainability Education**

Chair: Shirley Vincent

#### **Presentations:**

Trends in Interdisciplinary Environmental and Sustainability Education Shirley Vincent (National Council for Science and the Environment)

Labour Market Perspectives for Environmental Studies and Science Programs Chris Stewart (Environmental Careers Organization (ECO) Canada) Shaping Perceptions of the Concept of Sustainability: The Role of Post-Secondary Curriculum

Jennifer Jones (College of Charleston)

Does Environmental Studies Course Work Influence College students' Perceptions of Climate Change?

Rose Njoroge (Florida State University)

19

# Environmental Justice

Chair: Steven Kolmes

#### **Presentations:**

Situating Recognition Justice for Environmental Justice: Critical Paradigms for the Future

David Utsler (University of North Texas)

Teaching for Environmental Justice: Collaborative Development and Implementation of an EJ Simulation

Adrienne Cachelin (University of Utah) and Andree Walker (Utah Society for Environmental Education)

Toxic Water, Toxic Fish, and Tribal Communities Steven Kolmes and Russell Butkus (University of Portland)

20.

Maintaining Special Landscapes: Parks, Gardens, and People

Chair: Robert Turner

# **Presentations:**

The Gardens of Portland: Authenticity, World-Cities, and the Creation and Exchange of "Prestige Ecosystems"

Zachary A Holz (Lewis & Clark College)

Using Contingent Choice Surveys to Inform National Park Management Robert W Turner (Colgate University)

Impacts of Tourism on Rural Livelihoods Depend on How Tourism is Organized: Survey Findings from China

John Zinda (University of Wisconsin, Madison)

# Understanding Climate Change Skepticism and Denial

**Chair:** Riley Dunlap

### **Discussants:**

Riley E. Dunlap (Oklahoma State University)

Maxwell T. Boykoff (University of Colorado, Boulder)

Shannon McNeeley (National Center for Atmospheric Research)

Patricia Mynster (University of Nevada-Las Vegas)

Rose Njoroge (Florida State University)

Jeffrey S. Sinn (Winthrop University)

Shawn Olson (University of Colorado, Boulder)

# 22. Bringing Diversity to Environmental Studies Programs

**Chair:** Michael Steven Marx

### **Discussants:**

Michael Steven Marx (Skidmore College)

Clare Ginger (University of Vermont)

Marie Vea-Fagnant (University of Vermont)

Soraya Cadrenas (University of Maine at Fort)

Sabiha S. Daudi (University of Wisconsin, Stevens Point)

Riley Neugebauer (Skidmore College)

Xinmin Liu (Washington State University)

# Funding for Environmental Science from the National Science Foundation

Chair: Peter Alpert

#### **Discussant:**

Peter Alpert (Program Director, National Science Foundation)

**24. Gulf Coast Oil Disaster: Was it a Teachable Moment?** 

Chair: David Blockstein

### Discussants:

**TBA** 

# Interdisciplinary Graduate Programs - Common Themes, Challenges, and Successes

Chair: Helen Doyle

#### **Presentations:**

Arizona State University's PhD in Sustainability: The First Five Years Lisa Murphy (Arizona State University)

Graduate Education in Environmental Studies Daniel Press (University of California, Santa Cruz)

Interdisciplinary Graduate Education in Environmental Studies at the University of Oregon

Alan Dickman (University of Oregon)

Stanford's Experiment in Interdisciplinary Graduate Education-E-IPER's First Decade Helen Doyle (Stanford)

Interdisciplinary Graduate Training at UCSB's Bren School of Environmental Science and Management

Satie Airame (University of California, Santa Barbara)

<u> 26</u>

# Agro-Food Systems Change: Agroecology, Justice and Transformation

Chair: Christopher Bacon

#### **Presentations:**

Agroecology as a Force for Food System Transformation Stephen R. Gliessman (University of California, Santa Cruz)

A Time for Change: Syncopating Community-Based Participatory Action Research and Agroecology with Smallholder Cooperatives to Move from Seasonal Hunger to Food Sovereignty

Christopher M. Bacon (Santa Clara University)

Nurturing Diversified Farming Systems in The United States: How Public Policy Can Contribute

Alastair Iles and Robin Marsh (University of California, Berkeley)

Diversified Farming Systems (DFS): An agroecological, systems-based alternative to modern industrial agriculture

Claire Kremen and Alastair Iles (University of California, Berkeley), and Christopher M. Bacon (Santa Clara University)

# Climate Change: Mitigation, Adaptation, and Advocacy

Chair: Tony Tancini

# **Presentations:**

Bridging the Gap: Legal and Policy Approaches for Blending Climate Change Mitigation and Adaptation

Katherine Trisolini (Loyola Law School)

Adapting to Climate Change in the San Francisco Bay Area: Progress and Obstacles Julia Ekstrom (University of California, Berkeley)

Paving the Way or Crowding Out? The Impact of the Rise of Climate Change on Environmental Issue Agendas
Jessica Boscarino (Marist College)

Preparing Communities for Climate Change Tony Tancini (Marstel-Day)

28

# ESS Institutional Experiences: New Programs and New Curriculum

**Chair:** Richard Shearman

### **Presentations:**

Integrating 21st Century Skills into an Undergraduate Environmental Studies Program at the University of Nebraska-Lincoln David Gosselin (University of Nebraska-Lincoln)

Environmental Science Curricula and Transdisciplinarity Richard Shearman (Rochester Institute of Technology)

The Environmental Science B.S. program at Appalachian State University: Bridging the systems science and adaptive management models Chris Thaxton (Appalachian State University)

Students spanning boundaries to address environmental challenges Eileen Johnson (Bowdoin College)

A Franciscan Model of Environmental Studies Wolfgang Natter (St. Bonaventure University)

29.

# **Environmental Policy in the United States:**

Chair: Greg Mohr

#### **Presentations:**

Assessing Obama's Environmental Record John Berg (Suffolk University)

What's So Funny about The Maintenance and Enhancement of Long-Term Productivity? (With Apologies to Elvis Costello.)

Greg Mohr (Retired Environmental Specialist and Planner, Santa Barbara County, CA)

Cooperating with Wildlife: The Past, Present, and Future of Wildlife Federalism Kalyani Robbins (University of Akron School of Law)

Managing to Collaborate or Collaborating to Manage? Interagency Cooperation and Natural Resource Governance in the Mississippi River Basin Ryan Aylesworth (University of Minnesota)

30.

Water: Politics, Policy and Governance

Chair: Ruth Langridge

#### **Presentations:**

Climate Change and Water Supply Security: Managing Groundwater to Increase Drought Resilience

Ruth Langridge (University of California, Santa Cruz)

Remaking the Feather River: Governance and Politics in the Headwaters of California's Water Supply

Sarah Di Vittorio (University of California, Berkeley)

Interest Group Participation in Localized Environmental Market Design: comparative analysis of policy processes that enable water quality trading Devin Judge-Lord (Yale School of Forestry & Environmental Studies)

The Water Use Efficiency Rule and Overcompliance: An Analysis of Water Conservation in Washington State
Julianna Mandler (University of Washington, Bothell)

An EcoTipping Points story from Rajasthan (India): Using rainwater harvesting to leverage the rescue of an aquifer Gerald Marten (East-West Center)

# 31. Preparing Communities for Climate Change

**Coordinator:** Tony Tancini (Marstel-Day)

#### **Abstract:**

Climate change affects every communities throughout the globe. They can respond to the threat of climate change by developing climate action plans (CAPs). CAPs provide a roadmap that outlines mitigation and adaptation strategies. Their development and implementation processes enhance community partnerships, since CAP planning involves actions by individuals, community experts, government officials and businesses. Developing these partnerships is integral to the success of CAPs because climate change impacts cross all business, academic and community boundaries. At this Roundtable, we will discuss the risks that climate change presents to communities at large, the drivers that contribute to community risk with respect to food and water security, critical infrastructure and the public health as a whole, and the various mitigation and adaption strategies that can be employed to reduce a community's environmental footprint and provide adequate measures that will prepare a community for responding to the threat of climate change. We will brainstorm on how to guide communities in preparing and implementing their CAPs.

# **32.** Cultural Diversity in the Teaching of Environmental Studies

#### **Coordinators:**

Nancy Rich (Antioch University New England) Michael Marx (Skidmore College) Soraya Cardenas (University of Maine at Fort Kent)

#### **Abstract:**

Cultural diversity in the teaching of environmental studies is a need that is here to stay. While Western and scientific approaches to environmental education and environmental problem-solving offer a great deal, contributions from other cultural paradigms and perspectives are also valuable. As the number of students of color in colleges and universities increases, ES programs need to speak to their experiences and concerns. Communities of color, in the US and abroad, are also calling for their young peopleas well as environmental professionals of all backgrounds--to learn culturally-conscious ways of addressing environmental issues. But for many faculty and departments seeking to respond to these issues, perplexities abound--how do you start? where are the models? how do you help your department make way for this? This roundtable will discuss how environmental studies faculty are finding pathways by re-visioning syllabi, curricula, and pedagogies; learning by doing; collaborating with others; and re-examining assumptions.

# An Insider's View of the Udall Undergraduate Scholarship

Coordinators: Katie Purvis-Roberts (Claremont McKenna, Pitzer, and Scripps Colleges) and Rich Wallace (Ursinus College)

#### **Abstract:**

The Morris K. Udall and Stewart L. Udall Foundation awards \$5000 scholarships to sophomore and junior level college students committed to careers related to the environment, tribal public policy, or Native American health care. Recipients demonstrate exceptional academic achievement, leadership, and commitment to their chosen field and to public service – whether in the area of environmental policy and conflict resolution, or Native American policy. Udall scholars have gone on to serve in federal, state and tribal governments; with not-for-profits and advocacy organizations; at universities and research institutions; and in business and legal professions. Rich was a Morris K. Udall Dissertation Fellow in 1998. Both he and Katie are Faculty Representatives for the Udall Scholarship on their campuses, and have served on the scholarship selection committee several times. They would like to provide insights into choosing strong candidates for the scholarship on your campus and what the selection committee looks for in student applications.

# 34. A Working Group for "Big Ideas" in ESS

**Coordinators:** Gerry Marten (East-West Center)

#### Abstract:

This roundtable is a follow-up on Phil Camill's recent President's Message, in which he proposed the formation of working groups to generate high-impact products and outreach. I'm inviting colleagues to join me in launching a group. The broad goal will be to identify and explore bold, game-changing ideas for theory, education, and/or practical application. The group can use the Journal of Environmental Studies and Sciences and other venues to move promising ideas quickly into AESS dialogue and beyond. The Friday roundtable will provide an opportunity to explore terms of reference for the group and plan how to work together at a distance after the conference. Phil mentioned a possible working group to address "environmental science not always translating well into policy." Interpreting policy in the broadest sense, so we're talking about the positive impact of ESS on what happens in the world, there is plenty of scope to explore not only how to make ESS more effective for education and action, but also research agendas that will enable ESS to offer more. Please join the roundtable if you're interested. There is no obligation, and it's all wide open with regard to themes, strategies, and everything else. The possibilities are exciting, and different people can contribute to the group's ongoing work in different ways. Gerry Marten can be contacted at <a href="mailto:gerrymarten@hawaii.rr.com">gerrymarten@hawaii.rr.com</a> before the conference and 808-551-3685 during the conference.

# FRIDAY, 22 JUNE Session C 2:00 - 3:30 pm

# 35. Theory for Our Environmental Future

**Chair:** Jim Proctor

#### **Discussants:**

Susan Clark (Yale School of Forestry & Environmental Studies) Kimberly Smith (Carleton College) Rich Wallace (Ursinus College)

**Business Sustainability and Education: How Far? How Fast?** 

Chair: Eban Goodstein

### **Discussants:**

Eban Goodstein (Bard MBA in Sustainability)

Hunter Lovins (Bainbridge Graduate Institute and Natural Capitalism Solutions)

Deborah Gallagher (Duke University)

Helen Doyle (Stanford University)

Richard Smardon (State University of New York)

Elise Amel (University of St Thomas)

# **37. Behavioral approaches to energy conservation**

Chair: Beth Karlin

### **Presentations:**

Residential Energy Feedback: Naturalistic Users and Their Experiences Beth Karlin (University of California, Irvine)

Developing promising options for deep and widespread energy savings Marilyn Cornelius (Stanford University)

Skip Laitner (American Council for an Energy-Efficient Economy) The Climate Crisis, Energy Pathways and the Economic Imperative of Efficiency

38.
Is God Green? Not So Much: Critical Perspectives on the 'Greening' of Religion

Chair: Bernard Zaleha

### **Presentations:**

We're Pessimistic Because We Pay Too Much Attention to Conservative Christians Andrew Szasz (University of California, Santa Cruz)

How Conservative Christians Talk about Climate Change Robin F. Globus (University of Florida)

Another sort of global warming: Fundamentalist disinterest in the Fate of the Earth Bernard Daley Zaleha (University of California, Santa Cruz)

<u> 39</u>

# **Environmental Health & Safety**

Chair: Barry Muchnick

#### **Presentations:**

Environmental Citizenship and Fresh Air Activism in America Barry Muchnick (Yale University)

Public Awareness, Concern, and Opinion about Toxicants in Personal Care Products Anna Kreutz and Kenneth Stancil (Pacific Lutheran University)

Ambient Ozone, Health, Regulation and Politics: A Theoretical Consideration of Whether National Policy Can Effectively Protect Environmental Health Martha Richmond (Suffolk University)

40

# Art for the Environment: film, video, apps

Chair: Soraya Cardenas

#### **Presentations:**

The Cangandi Expedition: Blending Business, Art, and Environmental Science in Encounters with Nature and Indigenous Peoples Monty Hempel (University of Redlands)

Documentary Production as a tool in Environmental and Sustainability Studies Soraya Cardenas (University of Maine at Fort Kent)

Underground Histories: Exposing the Stories of Silicon Valley's Most Polluted Neighborhoods through Augmented Reality Artwork Elliot Anderson (University of California Santa Cruz)

41.

**Climate Change: Overview and Models** 

Chair: Mohammed Rabbi

#### **Presentations:**

Global Climate Change & the Challenges to Long Term Sustainability Frank Princiotta (USEPA)

Globalization, Climate Change and Human Health: linkages with emerging infectious diseases and public health

Mohammed Rabbi (Valley Forge Military College)

The Incorporation and Use of Climate Science in Policy and Planning Decisions Ajay Singh (Ohio State University)

Translating climate change knowledge into action in British Columbia: The case of the Pacific Institute for Climate Solutions (PICS)

Ken Wilkening (University of Northern British Columbia)

# 42. Community and Organizational Partnerships for ESS

Chair: Jameson F. Chace

### **Presentations:**

Case Study: Developing and Implementing a Community-based Science Research Program and Coursework for Undergraduates Barbara Blonder (Flagler College)

A Watershed Opportunity for Student-led, Community-based Environmental Education Jameson F. Chace (Salve Regina University)

The Effectiveness of Experiential Environmental Education in Connecting Youth to Nature: A Case Study on the O'Neill Sea Odyssey Program Lauren Hanneman (San Jose State University)

Implementing the Principles of Universal Design of Instruction to Increase Engagement in Environmental Conservation Kitrina Carlson (University of Wisconsin, Stout)

Oceans: Overview

Chair: Ellen Hines

**Presentations:** 

A Social Oceanography of Pollution Peter J. Jacques (University of Central Florida)

Evolving MPA monitoring into marine spatial planning: aligning science and policy to conserve marine mammals and their habitats Ellen Hines (San Francisco State University)

College-NGO partnerships in community-based management Chris Petersen (College of the Atlantic)

44.

# Technology & Toxics

Chair: Jennifer Allen

### **Presentations:**

Chemicals Management as a "Wicked Problem": Opportunities for Policy Innovation Jennifer H. Allen (Portland State University)

Development of an Environmental Degradation Index for Potential Hazardous Material Releases Within Berkeley, Charleston, and Dorchester Counties, South Carolina Kathleen Elizabeth Clancy (College of Charleston)

The Environmental Impact of the Retail Photoprocessing Industry in Santa Clara County: 1996 vs. 2006

Benoit Delayeau (San Jose State University)

FRIDAY, 22 JUNE Session D 4:00 - 5:30 pm

# 45. Putting the Public Back in Public Environmental Engagement

**Chair:** Bijan Kimiagar

#### **Discussants:**

Bryce DuBois (City University of New York Graduate Center) Scott Fisher (City University of New York Graduate Center) Laurie Hurson (City University of New York Graduate Center) Hannah Jaicks (City University of New York Graduate Center) Bijan Kimiagar (City University of New York Graduate Center) Do Lee (City University of New York Graduate Center) Mariya Marinova (City University of New York Graduate Center) Jennifer Pipitone (City University of New York Graduate Center)

# Urban Food Systems: History, Theory and Practice

Chair: Kip Curtis

#### **Discussants:**

Matthew Seaman Patrick Hurley Elizabeth Birnbaum William Weinmar Kip Curtis Emily Engel

# Developing Sustainability Program Assessment Rubrics: Proposals from the Roundtable on Environmental Systems and Sustainability

**Chair:** Richard Smardon

### **Presentations:**

Overall structure of the interdisciplinary assessment systems (1) Will Focht (Oklahoma State University)

Overall structure of the interdisciplinary assessment systems (2) Susan Gill (Stroud Water Research Center)

Overall structure of the interdisciplinary assessment systems (3) Richard Smardon (State University of New York)

# Mind the Gap! Strategies to Facilitate Interdisciplinary Learning

Chair: Rose McKenney

### **Presentations:**

Strategic Interdisciplinarity: Theology, Environmental Science, and Current Environmental Issues Steven Kolmes and Russell Butkus (University of Portland)

Objects and Places: New Ontologies for Interdisciplinary Environmental Scholarship James Proctor (Lewis & Clark College)

Preparing Environmental Studies Students for Interdisciplinary Inquiry: A New Course Claire Todd (Pacific Lutheran University)

Teaching Water Scarcity Issues: An Interdisciplinary Approach Henderson Pritchard (Wentworth Institute of Technology)

49

# **Art and Science Collaboration**

Chairs: Patricia Watts and Mark Brest van Kempen

#### **Presentations:**

Art Meets Science in the Real World Mark Brest van Kempen (MBvK Studios)

Work Samples from the Field of Art and Science Collaboration Elizabeth Demaray (Rutgers University)

OPERATION PAYDIRT: A Creative Campaign for Change (a project directed by artist Mel Chin)

Mary Rubin (Operation Paydirt)

San Jose Climate Clock Initiative Mary Rubin and Danielle Siembieda-Gribbon (San Jose Public Art Program)

50.

# **Biodiversity, Endangered Species, and Sustainability Principles**

**Chair:** Daniel Carter

### **Presentations:**

Biodiversity and our Environmental Future Edinam K. Glover (Faculty of Law, University of Helsinki)

What Happens When Private Markets Plan: A Case Study of Forest Fragmentation in the South Cumberland Plateau

Daniel Carter (University of the South at Sewanee)

Biomimicry: Its Critical Role in Defining the Principles of Sustainability and Green Technology

Karim Ahmed (National Council for Science & the Environment)

51.

# Oil Spills, Pipelines, and Crises: A Literary and Humanistic Approach

Chair: Eric Siegel

#### **Presentations:**

Framing Environmental Crises: Comparing the Social Constructions of the 1969 Santa Barbara and 2010 Deepwater Horizon Oil Spills

Jeremy Schmidt (University of Northern British Columbia)

Against Eco-Dystopia: Towards A Solution-Based Environmental Pedagogy in the Humanities

Michael V. Perez (Embry-Riddle Aeronautical University)

Reading the Public Comment: The Keystone XL Pipeline Public Comments as Mapping the Future of Environmental Writing Eric Siegel (University of Iowa)

# Connecting Students with the Real World: Interdisciplinary Innovations in **Teaching**

Chair: John Farnsworth

### **Presentations:**

The Lone Ranger: Integrating the Environmental Humanities into a Science-focused Department

John Farnsworth (Santa Clara University)

Online, Interactive, Open-Access Learning in ENVS Jeanine Marie Pfeiffer (San Jose State University)

Behind the scenes: Revealing the creative process behind interdisciplinary environmental research

Amanda Cravens (Stanford University)

Connecting Environmental Studies Students with their Professional Futures: Use of Project Proposals and Interview Reports in an Environmental Writing Course LeeAnne (Elizabeth) Kryder (University of California at Santa Barbara)

# Oceans: U.S. West Coast Practice and Policy

**Chair:** Zdravka Tzankova

### **Presentations:**

Collaborative Governance for Solving Complex Marine Problems: An evaluation of Salmon Recovery in Puget Sound

Julianna Mandler (University of Washington, Bothell)

Success and Failure in Endangered Species Recovery: Lessons from the First Southern (California) Sea Otter Recovery Plan

# Richard L. Wallace (Ursinus College)

The Rise of Toxoplasma gondii: Implications for Southern (California) Sea Otter Mortality and Management Regan L Dohm (Ursinus College)

Public-private interactions along the coast: winners and losers under a future of sea level rise

Zdravka Tzankova (University of California, Santa Cruz)

54.

# Sustainable Lifestyles: Individual and Collective

Chair: Bruno Takahashi

# **Presentations:**

Environmental Sustainability in the Context of Transportation Ellie Fini (North Carolina A&T State University), Faisal I. Awadallah (Birzeit University), and Godfrey Uzochukwu (North Carolina A&T State University)

Sustainable Living and Satisfaction: Exploring needs satisfaction in sustainable lifestyle practices using narrative analysis
Anna Melnik (University of Victoria)

Integrating perspectives on pro-environmental behaviors: The role of environmental attitudes, community satisfaction, and community attachment
Bruno Takahashi (State University of New York College of Environmental Science and Forestry)

# FRIDAY, 22 JUNE AESS BUSINESS MEETING 5:45 – 6:30 pm

FRIDAY, 22 JUNE ARTISTS' RECEPTION 5:30 – 7:00 pm

FRIDAY, 22 JUNE AN EVENING PERFORMANCE "Dance and Theatre: Eco-Inspired" 8:00 pm

An evening of dance and theatre

featuring Jennifer Joy's *The Physics of Love* and NaKa Dance Theatre's *Atlacualco* (w/José Navarrete in collaboration with Violeta Luna)

# The Physics of Love written and performed by Jennifer Joy

In this hilarious one-woman show, "Lisa", a junior high science teacher, uses the ecological "Universe Story" to make sense of life and love. Filled with quirky characters, and currently on a college tour, this show makes science fun and immediately understandable, and ecology deeply human and relatable.

"(a) powerhouse performer, Jennifer Joy Pawlitschek has written and performs a multimedia piece. Not only is Ms. Pawlitschek strikingly beautiful in her tall bearing, she's highly articulate and bright, and puts on a captivating show." (Mark Mardon, Bay Area Reporter)

# ATLACUALO (The Ceasing of Water) conceived and performed by Jose Navarrete/Naka Dance Theatre in collaboration with Violeta Luna

Atlacualo reinterprets ancient Mexican mythology and iconography to explore universal ecological issues of our time, particularly around water and water rights. Atlacualo is an evening length, multi-disciplinary work that marries dance, performance and visual arts.

"Atlacualo is divided into distinct episodes, with Luna taking the lead in evoking a holistic perspective of nature with slow-paced but tightly controlled images of birthing and growth through sacred practices. Navarrete is a motor-mouthed huckster of "agua mágica" – the product of multinational greed. He also beautifully segues into a transformation from an oil-slicked subhuman into a dying fish who dreams of clean water." (Rita Felciano, Bay Guardian)

# SATURDAY, 23 JUNE Breakfast Roundtables 7:30 - 9:00 am

# 55. How to get paid internships

Coordinator: Greg Mohr (Retired Environmental Specialist and Planner, Santa Barbara County, CA)

#### Abstract:

Securing a first job or internship is a combination of effort, talent and blind good luck. This discussion will focus on how to maximize the effectiveness of your efforts, best put forth your talents, and thereby remove the scales from Blind Good Luck's eyes and tip those scales in your favor. Not to mix any metaphors...

# 56. Talking about controversial topics--Climate literacy

**Coordinator:** Mark McCaffrey

Abstract: TBA

# 57. Teaching ESS: Practical problems and solutions

**Coordinator:** Kim Smith (Carleton College)

#### **Abstract:**

Interdisciplinary programs can pose a range of special pedagogical challenges. We may have to venture into contested political terrain, teach students who have little background in our subject area, organize complex civic engagement projects, or collaborate with faculty in different disciplines. This roundtable is an opportunity to for us to share our experiences: to pose problems and receive suggestions for solutions from the group. The discussion will be relatively unstructured, but we can aim to generate a list of common problems that could serve as the beginning of an online discussion forum or similar strategy for continuing the conversation.

> SATURDAY, 23 JUNE Session E 9:00 - 10:30 am

# **Sustainability Cultural Indicators**

Chair: John Callewaert

### **Discussants:**

John Callewaert (University of Michigan) Leon-C. Malan (Colby-Sawyer College) Roslynn Brain (Utah State University) Sarah Darkwa (University of Cape Coast, Ghana)

<u>59</u>

# **Instructing Research Methods in Environmental Studies and Sciences**

Chair: Rick Paradis

### **Discussants:**

Rick Paradis Kit Anderson Laurie Kutner Jim Proctor George Vrtis

60

# **Evaluating Our Environment Through a Cross Media Lens**

Chair: Lauretta Joseph

#### **Presentations:**

EPA Needs to Comply with FIFRA and Improve Its Oversight of Exported Never-Registered Pesticides

Jerri Dorsey (US Environmental Protection Agency, Office of Inspector General)

EPA's Voluntary Chemical Evaluation Program Did Not Achieve Children's Health Protection Goals

Jee Kim (US Environmental Protection Agency, Office of Inspector General)

ENERGY STAR Label Needs to Assure Superior Energy Conservation Performance Laurie Adams (US Environmental Protection Agency, Office of Inspector General)

EPA Needs a Comprehensive Research Plan and Policies to Fulfill its Emerging Climate Change Role

Kalpana Ramakrishnan and Lauretta Joseph (US Environmental Protection Agency, Office of Inspector General)

61.

# South American environmental governance, policies, and practices

Chair: Bruno Takahashi

### **Presentations:**

Defining complexity in the context of an uncertain future: Discourses of climate change in the Peruvian Congress

Bruno Takahashi (State University of New York)

Re-doubling best practices in Chilean environmental regulatory politics Javiera Barandiaran (University of California, Berkeley)

Sustainability's Story?: Narratives of resistance and institutional accommodation in the salmon farming of southern Chile (1980-2009)

Andrew Gerhart (Stanford University)

62

**Campus Sustainability: Overviews** 

Chair: Shana Weber

#### **Presentations:**

Bridging the Research and Implementation Gap in the Sustainability Field Shana Weber (Princeton University)

Performing Sustainability at American Colleges and Universities J. Anthony Abbott (Stetson University)

Environmental Sustainability: Moving Beyond Recycling and Energy Conservation Godfrey Uzochukwu (North Carolina A&T State University)

<u>63</u>

**Energy: From Philosophy to Outer Space** 

**Chair:** Ned Farquhar

#### **Presentations:**

Interconnectivity, Mindfulness, and Natural Gas: Re-thinking Environmental Relationships

Pamela White (Texas Woman's University)

Energy studies for undergraduates: Improving awareness of what we use, where we get it, and how we use it

Ned Farquhar (US Department of the Interior)

Green Skies and Rusty Beaches: The Connection Between Geo-engineering and Environmental Aesthetics

Katherine Robinson (University of South Carolina)

EC2LIPSE: An interdisciplinary study of space-based geoengineering by solar radiation management using a Sun-Earth L1-located shield Jeroen Cappaert (International Space University)

64

# Scrutinizing the Green Economy

Chair: Gregory Simon

### **Presentations:**

Green Growth, Religion or Reality?

Mark Huberty (University of California, Berkeley)

Green Economy: Race, Class, Gender and Ethnicity
Marlene L Bryant (Bryant & Stratton College - Syracuse Campus)

Environmental Evaluations of Products and Companies: The Role of Academia Graham Bullock (Davidson College)

From Consumption to Production: On the Capitalist Accumulation of Waste Michelle Yates (University of California, Davis)

An REI shopper camps in the woods. Does anyone notice? Ethical consumerism and the trouble with 'Leave No Trace' Gregory Simon (University of Colorado, Denver)

65

# Environmental Psychology, Theology, and Ethics

Chair: Jeff Sinn

### **Presentations:**

Brain, Stomach and Soul: Interdisciplinary Adventures in Sustainability Pedagogy Cara Anthony and Elise Amel (University of St. Thomas)

The different moralities of liberals and conservatives: Implications for addressing the consequences of climate change
Jeff Sinn (Winthrop University)

Conservation Psychology in Germany Bridgette Loraine Kelly (University of St. Thomas)

66.

# History and our Environmental Future (1)

Chair: Eric Mogren

### **Presentations:**

Echoes from the Past: Global Environmental Near Misses in Retrospect

Bertrand Guillaume (Dartmouth College)

Environmentalism and Science: the Cold War Case of Holistic Ecology and

**Environmental Critique** 

Brian Lindseth (University of California, San Diego)

<u>67.</u>

# Student Award Presentations

Chair: Rod Parnell

### **Presentations:**

Bridgette L. Kelly

Conservation Psychology in Germany

Michelle Yates

From Consumption to Production: On the Capitalist Accumulation of Waste

Devin Judge-Lord

Politics in Environmental Market Design: Interest group participation in water quality trading negotiations

Tiffany Wise-West

Community-scale wind energy in the United States

Lauren Hanneman

The Effectiveness of Experiential Environmental Education in Connecting Youth to Nature: A Case Study on the O'Neill Sea Odyssey Program

SATURDAY, 23 JUNE Session F 11:00 am – 12:30 pm

68.

Are we preparing students for our environmental future with GIS?

Chair: Laura Alexander

#### **Discussants:**

Laura Alexander (Colby-Sawyer College)

Eileen Johnson (Bowdoin College) Katherine Meierdierks (Siena College)

69

# From Option to Obligation: A Model for Preparing All Undergraduates for a Globally Engaged and Sustainable Future

Chair: Harvey Charles

#### **Discussants:**

Harvey Charles (Northern Arizona University) Roderic Parnell (Northern Arizona University) Blas Scarnati (Northern Arizona University)

70.

# Using Semester-Long Case Studies in Introductory Environmental Science courses: Lessons Learned

Chair: Karen Berger

#### **Discussants:**

Karen Berger (University of Rochester) Karin Warren (Randolph College) Susan Clark (Yale School of Forestry & Environmental Studies) Patricia Mynster (University of Nevada Las Vegas)

71.

# Ethics of Place in Urban Areas

**Chair:** Gavin Van Horn

#### **Presentations:**

Gathering at the River: Waterfront Revitalization and the Ethics of Place Bruce Jennings (Center for Humans and Nature)

Exploring the Chicago River: Ethics, Sustainability, and a Sense of Place Mike Bryson (Roosevelt University)

The Practice of Civic Agriculture in Chicago Gavin Van Horn (Center for Humans and Nature)

Space in not without meaning Anja Claus (Center for Humans and Nature)

72.

# Land Protection and Tribes

Chair: Jessica Owley

#### **Presentations:**

Jessica Owley (State University of New York, Buffalo)

Burdening to Protect: Encumbering Tribal Lands with Conservation Easements

Senate Bill 18 Turns Eight

Beth Rose Middleton (University of California, Davis)

The Role of Traditional Knowledge in Historical Ecology: Carving Out a Niche for Tribes in Off-Reservation Resource Planning and Restoration Chuck Stripling (San Francisco Estuary Institute)

Renewable Energy Future and the California Desert: Discovering and Attempting to Protect Cultural Resources and Endangered Species Amy Morris (Aspen Environmental Group)

73

# Challenges for Environmental Policies in a Changing Climate

Chair: Daniel Press

#### **Presentations:**

Evergreen Economies: Institutions, Industries, and Issues in the Green Economy Laurie Kaye Nijaki (University of Southern California)

An assessment of voluntary water conservation efforts in Southern California Elena Maggioni (University of Southern California)

Emissions Markets, Power Markets and Market Power: Regulatory Mechanisms and Policy Approaches
Noah Dormady (University of Southern California)

74. Campus Sustainability: Case Studies

Chair: Sherry Booth

### **Presentations:**

How to Build a Campus-Specific Carbon Footprint Calculator: A report from the "Bronco Hoofprint" team at Santa Clara University Samantha Juda, Christina Lesnick, and Tim Vierengel (Santa Clara University)

Creating the Next Generation of Environmentalists: An Enterprise of Hope Sherry Booth (Santa Clara University)

Funding campus sustainability: The rousing success of the University of Northern British Columbia's Green Fund

Ken Wilkening (University of Northern British Columbia)

75.

Energy: The Small Scale

Chair: Maria Petrova

### **Presentations:**

Main streaming energy access: A business and policy framework Sudhakara Reddy (Indira Gandhi Institute of Development Research)

Community-Scale Wind Energy as a Test of the Discriminating Alignment Theory Tiffany Wise-West (University of California, Santa Cruz)

The GEPSE view on NIMBYism Maria Petrova (Tufts University)

<u>76.</u>

Environmental Ethics: Guideposts for a Sustainable Future

Chair: David Hassenzahl

#### **Presentations:**

Leopold In Love

Ashley Pryor (University of Toledo)

Rachel Carson's Lessons from Silent Spring at 50: An Environmental Ethic for the 21st century

David Hassenzahl for Patricia M DeMarco (Chatham University, Rachel Carson Institute)

Toward a Policy of Cooperation: A Discussion of Moral Pluralism and Moral Monism in Environmental Ethics

McKenzie Southworth (Lewis and Clark College)

Photos of "Others": An ethical dilemma in Environmental Studies teaching Krystyna Stave (University of Nevada, Las Vegas)

77

History and our Environmental Future (2)

Chair: Eric Mogren

#### **Presentations:**

If that would have happened: Memory, race, and the environmental history of BASF in South Carolina

Michael Finewood (Chatham University)

Energizing a Borderland: Brasiguayos, Labor, and Development at Itaipú Jacob Blanc (University of Wisconsin, Madison)

78.

Transportation: Integrated highway and environmental planning

Chair: Shari Schaftlein

### **Presentations:**

Trends in Environmental Research Needs for DOTs Shari Schaftlein (U.S. Federal Highway Administration)

Advancing the Eco-logical Approach to Transportation Planning and Mitigation Andrea N. Williams (California Department of Transportation)

Results of Pilot Efforts to Integrate Conservation Planning, Highway Planning, and Environmental Review
Fraser Shilling (University of California, Davis)

SATURDAY, 23 JUNE AFTERNOON FIELD TRIPS see Registration Website for Information

# SATURDAY, 23 JUNE POSTER SESSION 5:30 – 7:00 pm

# **Hydroponic Urban Agriculture and Sustainability Education**

Margaret H. Kane and Jameson Chace (Salve Regina University)

# Seeing, doing, analyzing: developing an interdisciplinary and hands-on food systems course

Katie Monsen (New Roots Institute / University of California, Santa Cruz)

# Energy awareness and education: Increasing campus-wide energy conservation through technology and outreach.

Glen Stevens (Ferrum College)

# The carbon economy: Exploring the science, policy, and economics of campus carbon neutrality in an undergraduate ESS course

Katherine O'Neill (Roanoke College)

# Teaching people to 'like' science: using Facebook to promote scientific discovery and exploration

Yiwei Wang (University of California, Santa Cruz)

# A Case Study on Climate Change: Impact of Growing Urbanization on Land Cover Change

Shobha Sriharan (Virginia State University)

# Adaptive capacity to water shortages in the Santa Clara Valley Water District Elissa Olimpi (University of California, Santa Cruz)

# Does it pay to be green? Exploring the relationship between sustainability and profitability in Fortune 500 companies

Martin Robert Saunders (Santa Clara University)

# **Biodiesel Project Offers Multiple Research and Educational Opportunities to Community**

Michelle Homan (Gannon University)

# Are We Barking Up the Wrong Tree? Promotion, Action and Impact in Energy Conservation

Alexander Truong (University of California, Irvine)

# Assessing Contention: Nuclear Waste Management Activism in the U.S. and Canada

# Becky Rubenstrunk

# Solar Energy Development on Public Lands: Policy-Making Processes in California's New Gold Rush

Patrick Donnelly-Shores (University of California, Berkeley)

# Interdisciplinary Environmental Science Communication: How do we help our students sell themselves and their educations on the job market?

Kathleen Phillips (Stanford University)

# Keeping it real: Promoting professional development through client-based GIS projects in an undergraduate Environmental Studies course

Katherine O'Neill (Roanoke College)

# Integrating ecology, geology, and human-environment relationships in the classroom

John Sakulich (Regis University)

# An Environmental History of the Lan Su Chinese Garden: The Creation of a Prestige Ecosystem

Zachary Holz (Lewis & Clark College)

# Development of New Technology for the Advancement of a Citizen Science Project: Clean Marine Smartphone App

Dylan Murphy (South Carolina Sea Grant Consortium)

# Establishing Behavioral Diagnostic Criteria for Domoic Acid Intoxication in Zalophus californianus

Christiana Wittmaack (Nova Southeastern University Oceanographic Center)

# An Automated 3-Vessel Formation For Oil Skimming

Michael Neumann (Santa Clara University)

# Can grazing control nitrogen-facilitated invasive grasses as smog-derived nitrogen accumulates in serpentine grasslands?

Jae Pasari (University of California, Davis)

# **Initial Development of Gradient-Based Navigation Techniques using Robots**

Thomas Adamek (Santa Clara University)

Understanding Toxic Cyanobacterial Blooms: Theoretical Estimation of Aqueous pKas of Thiols

Nora E. Hunter and Paul G. Seybold (Wright State University)

# BANQUET 7:30 pm

# SUNDAY, 24 JUNE AESS COUNCIL MEETING 8:00 – 9:00 am

# SUNDAY, 24 JUNE Session G 9:00– 10:30 am

<u>79.</u>

# Sustainability Tracking, Assessment, and Rating System (STARS) - insights from four STARS-rated institutions

Chair: Lindsey Cromwell Kalkbrenner

#### **Discussants:**

Lindsey Cromwell Kalkbrenner (Santa Clara University) Jiffy Vermylen (Stanford University) Richard Smardon (State University of New York) Christine Cooley (Pacific Lutheran University)

80

# **Environmental Education and our Environmental Future**

**Chair:** Courtney Hughes

#### **Presentations:**

Achieving Success in Conservation through Environmental Education Courtney Hughes (University of Alberta and Ministry of Environment and Water)

Development, Implementation, and Evaluation of an Environmental Education Program Teddie Phillipson-Mower (University of Louisville)

The Ethics of Privatized Responsibility Christopher Schlottmann (New York University)

81

# Using Participatory Action Research Methods to Enable Sustainable Community Environments: Current & Future Research

Chair: Semra Aytur and Cynthia Carlson

### **Presentations:**

Building Capacity for Resilience in Diverse Communities Using Participatory Action Research (PAR)

Semra Aytur (University of New Hampshire)

Walking and Talking: Increasing Interdisciplinary Communication to Impact Personal and Environmental Health at the Neighborhood Level.

Cynthia Carlson (New England College)

82

# Agriculture and Food: Local, National, and Global Change

Chair: Peter Jacques

### **Presentations:**

Growing Sustainably: Bringing Students and Community Together Through Urban Agriculture

Hilary Nixon (San Jose State University)

The Shifting Fruit of Civilization: Changing Climate, Changing Food Peter J. Jacques and Jessica Racine Jacques (University of Central Florida)

An Agricultural and Environmental History of Three Valleys in Mexico: Implications for Assessing Agricultural Sustainability

Maxine Ewankow (Antioch University New England)

An EcoTipping Points story from Andhra Pradesh (India): Using ecological insect control to leverage escape from the pesticide trap Gerald Marten (East-West Center)

83

# Urban and Community Planning and Leadership

Chair: John Duggan

### **Presentations:**

Refining Bioregional Urbanism: An Emerging Method for Combining Regional Human and Natural Systems From An Interdisciplinary Perspective and Preliminary Applications in Boston, MA

Ninian R Stein (San Jose State University)

Sustainable Futures: Cultivating Resilience through Restorative Leadership Seana Steffen (Restorative Leadership Institute)

Complexities in Sustainability at the Municipal Level: Confronting Sustainable Design in a Planning Course

John W. Duggan (Wentworth Institute of Technology)

Building Greener Communities: The Energy - Water Nexus

Yehuda L. Klein (City University of New York Graduate Center)

Resilience Values as Drivers of Bicycle Culture Stephanie Kaza (University of Vermont)

84.

# Forests for the World: Management, Learning, Communication

Chair: Keith McDade

#### **Presentations:**

Obstacles to a Conceptual Framework for Sustainable Forest Management under REDD in Central Africa: A Two-Country Analysis Richard Mbatu (Philadelphia University)

Introducing the agroforestry production system through a Payment for Ecosystem Services (PES) scheme in consortium, So Joo del Rei region, Brazil Eneida Campos (Federal University of Sao Joao del Rei)

Learning about Managing Land on the Internet?: Perceptions of credibility and usefulness of on-line peer-to-peer videos addressing land management issues in Vermont Keith McDade (Green Mountain College)

Explaining enforcement mechanism in the forest commons: Case study of Van Panchayats in the Indian Himalayas Divya Gupta (Ohio State University)

85.

# Challenges in the Developing World: Pointing Toward Solutions

Chair: Michael Kevane

# **Presentations:**

From "flush and forget" to eco-san and source separation: Prospects for sustainable sanitation in developed nations Ed Brands (University of Minnesota)

The Linkage of Rural Women status and child nutrition Mesfin Mesfin Getaneh Woldemichael (Mercy Corps Ethiopia)

Water Governance in the Era of Neoliberalism: A Look Beyond the Public-Private Debate

Ellis Adams (Michigan State University)

Robustness of climate as an instrumental variable to estimate effect of GDP change on political change in Africa

#### 86

# U.S. Energy and Climate Policy after the 2012 Election?

Chair: Wil Burns

### **Presentations:**

When All Else Fails: Why the U.S. Should Pursue an Aggressive Research Program on Air Capture Geoengineering

Wil Burns (Johns Hopkins University)

Beyond Carbon Carte Blanche: Navigating the energy politics of 2012 and pursuing sustainable power for the people Dustin Mulvaney (San Jose State University)

Batteries Not Included: Policy framework for the rapid introduction of electric vehicles in the marketplace

Constantine Hadjilambrinos and Diane Thiel (University of New Mexico)

SUNDAY, 24 JUNE CLOSING KEYNOTE ADDRESS (TBA) 11:00 am