



2011 Annual Meeting
June 23-26
University of Vermont
Burlington, VT

AESS Mission

Association for Environmental Studies and Sciences (AESS) is an independent faculty-and-student-based professional association in higher education, designed to serve the needs of environmental scholars and scientists who value interdisciplinary approaches to research, teaching, and problem-solving. Founded in 2008, the Association seeks to provide its members with the latest environmental information and tools to create better courses, strengthen research, develop more satisfying careers, harness the power of a collective voice for the profession, and enjoy each other's company at national and regional meetings.

A major aim of AESS is to encourage interdisciplinary understanding of environmental science, policy, management, ethics, history, and all of the other vital contributions of traditional disciplines. From its beginning, the Association has been envisioned as a community of environmental scholars and scientists, not a confederation of disciplines. Fundamental to its members' embrace of higher education is the notion that broad advances in environmental knowledge require disciplinary, interdisciplinary, and transdisciplinary approaches to research and learning.

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President	Kimberly Smith
Secretary	David Hassenzahl
Treasurer	Gregory Mohr
Communications	Lyle Birkey

WELCOME

PRESIDENT



Welcome to the AESS Annual Meeting: "Confronting Complexity." This year's meeting should set a new bar for us; we have an unusually rich assortment of panels, workshops and field trips, along with new awards, events and plenty of opportunities for informal conversation.

In keeping with our tradition of recognizing the contribution of the arts to environmental studies and sciences, this conference will feature two film screenings. As always, we will showcase high-quality, important and provocative scholarship that contributes to environmental studies and sciences, improves teaching and administration of ESS programs, and supports our activities as educators, public intellectuals and engaged citizens. This year's meeting will also serve as a memorial for founder and visionary Bill Freudenburg, and we will remember Bill together at the Saturday banquet, where

we will unveil a new award in his honor.

A great deal of work went into organizing this event. I would like to acknowledge the excellent efforts of Stephanie Kaza and Rick Paradis, our local site hosts, and Rich Wallace, program chair, and members of the Program Committee. Thanks to Cam Weimar and the awards committee who created our new lifetime achievement award and managed the student paper award process. The Outreach Committee also deserves thanks for their efforts over the past year in raising the profile of our conference. Thanks also to Lyle Birkey, our skilled administrative assistant, and to NCSE for their support for AESS.

It's been a great honor to serve as your president for the past two years. AESS is blessed with an extraordinarily talented, diverse and energetic membership, and I look forward to being part of its growth and development for many years to come. On behalf of the AESS Council, welcome to Burlington and enjoy the conference!

Kimberly Smith, AESS President

PROGRAM CHAIR



Welcome to the 2011 AESS conference! This is your conference – designed to support the diverse interests of the environmental studies and sciences community. In developing the conference program, the AESS program committee's goal was to help you share, explore, learn, and engage in the disciplinary and interdisciplinary scholarship and practice necessary to maintain our precious natural and social systems.

The conference program also reflects our desire to empower our community. ES&S has existed as a distinct field since the mid-1960s, and yet, until AESS was founded in 2008, no professional organization existed that was explicitly designed to represent and serve our collective interests. The 2011 AESS conference program feeds our need to engage theory and praxis, share our experiences

in pedagogy and program design, and learn how to more effectively achieve our shared goals.

Conference programming is also fun – both to arrange and experience. This year we are delighted to present the Vermont premier of the documentary "Green Fire: Aldo Leopold and a Land Ethic for Our Time" followed by a panel with the filmmakers. As well, we'll feature live music (by AESS members!), the inaugural AESS lifetime achievement award, our annual student award, and sessions on all manner of topics from performing arts to ecology, economics to religion, education to ethics, and much more. We are delighted you are joining us!

Rich Wallace, AESS 2011 Program Chair
on behalf of the 2011 AESS Program Committee

SITE HOSTS



Welcome to our fair campus at University of Vermont –

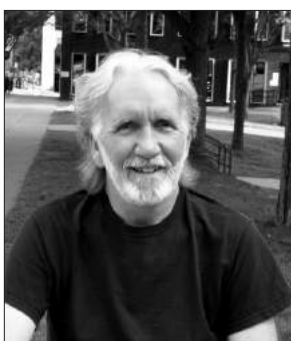
We are pleased to be able to share UVM's green values and green academics with AESS members and participants in the 2011 conference. Your lead host, the UVM Environmental Program, was founded in 1972 with a lofty vision for creative interdisciplinary curriculum and cross campus exchange. For almost 40 years we have been supporting students and faculty in emerging facets of Environmental Studies, doing our best to stay current with the tsunami of environmental issues and information. Along with other programs in Environmental Science, Natural Resources, Community Development, Geography, and Environmental Engineering, as well as a strong Office of Sustainability and many student environmental clubs, UVM offers a rich setting for learning and action inspired by

real world environmental concerns.

It is a great pleasure to host people from around the United States and as far afield as Brazil and South Africa in this gathering of environmental faculty and colleagues. We have much to learn from each other in both formal paper sessions and informal coffee breaks. We hope you will come away from this conference with new ideas, new friends, and a renewed sense of commitment to the good work you are doing in Environmental Studies and Sciences. Many thanks to all those at UVM who helped put this conference together – with special appreciation for Ibit Getchell of the Environmental Program and Maureen Cartier and Nicole Zarrillo of UVM Conference Services.

May our small state with big ideas be your home away from home for a few days, and may you thoroughly enjoy this great gathering we have been planning for you all year. If there is anything we can do to make your visit to UVM and Burlington more comfortable or rewarding, please let us know.

Stephanie Kaza, Director, UVM Environmental Program



Welcome to the Green Mountain State! And green it is indeed. The old adage that the climate here is nine months of winter and three months of damn poor sledding typically doesn't apply to Burlington in June. We've put away our skis and sap buckets and have been busy planning for the AESS 2011 Annual Meeting. We hope you enjoy what we have to offer both in terms of engaging conference programs and Vermont hospitality.

Deserving or not, Vermont is often lauded as a place where the scale and pace of things are more sustainable. Politics tend to be local, new ideas are welcome although scrutinized fervently, and the people exercise an interesting mix of fierce independence and dedicated cooperation. Traditions are reverently held here, not so much for their anachronistic value, but because they are still currently applicable. The state just recently mandated photo driver's licenses and the only reason Vermonters lock their car doors during the summer months is so neighbors don't fill up their back seats with excess zucchini and summer squash.

I personally encourage you to explore what Vermont has to offer, be it the verdant mountain landscapes, the rural countryside mosaic of farms, fields, woodlots, and villages, or the diverse and energized urban scene of downtown Burlington from Church Street to the waterfront on Lake Champlain. And please let us know what you think and how we can help.

Rick Paradis, UVM Environmental Program

CONFERENCE OVERVIEW

Thursday, June 23

7:30	Breakfast
8:30	All-day and morning field trips (depart Davis Center Oval)
9:00-4:30	All-day professional development workshops (Lafayette)
9:00-12:00	Half-day workshops
12:00	Lunch
1:00-4:30	Afternoon workshops, field trips
5:00	Opening reception and welcome, Taste of Vermont buffet (Billings)
7:00	Opening Plenary session (Billings Theater)
	Dr. Heidi Cullen, CEO and Director of Communications, Climate Central

Friday, June 24

7:30	Breakfast
9:00-10:30	Session A (all sessions in Davis Center, Jeffords, Terrill)
10:30	Coffee break
11:00-12:30	Session B
12:45	Lunch, roundtable discussions
2:00-3:30	Session C
3:30	Coffee break
4:00-5:30	Session D
5:45	AESS Business meeting (Livak I)
	<i>Dinner on your own</i>
6:30	ESS Junior Scholars Reception (Brennan's, Davis Center)
7:30	Vermont Premiere, <i>Green Fire</i>, film and discussion (Silver Maple Ballroom)

Saturday, June 25

7:30	Breakfast, roundtable discussions
9:00-10:30	Session E
10:30	Coffee break
11:00-12:30	Session F
12:30	Break, pick up box lunch for field trip
1:00	Field trips (depart Davis Center Oval)
5:30	Break
6:30	Poster session and reception (Livak Fireplace Lounge)
7:30	Evening banquet, awards and entertainment (Silver Maple Ballroom)

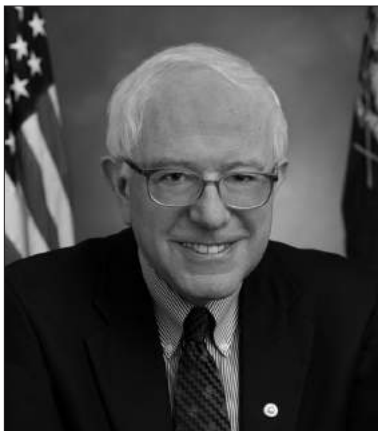
Sunday, June 25

7:30	Breakfast
8:00	AESS Council meeting (Handy Family Room)
9:00-10:30	Session G
	<i>Journey of the Universe</i> film (Sugar Maple Ballroom)
10:30	Coffee and snack break
11:00	Closing plenary event (Sugar Maple Ballroom)
	The Honorable Bernie Sanders, U.S. Senator (I-VT)
12:00	Lunch
1:00	Adjourn



**Dr. Heidi Cullen, CEO and Director of Communications,
Climate Central**

Dr. Heidi Cullen serves as a research scientist and correspondent for Climate Central where she reports on climate and energy issues for programs like PBS NewsHour. Before this Dr. Cullen served as The Weather Channel's first on-air climate expert and helped create Forecast Earth, a weekly television series focused on climate change and environment. Dr. Cullen has worked as a research scientist at the National Center for Atmospheric Research (NCAR) in Boulder, Colorado. She received the NOAA Climate & Global Change Fellowship and spent two years at Columbia University's International Research Institute for Climate and Society, working to apply long-range climate forecasts in Brazil and Paraguay. She is a member of the American Geophysical Union and the American Meteorological Society, and is an Associate Editor of the journal *Weather, Climate, Society*. Dr. Cullen also serves as a member of the NOAA Science Advisory Board. She received a Ph.D. in climatology and ocean-atmosphere dynamics at the Lamont-Doherty Earth Observatory of Columbia University. Dr. Cullen is the author of *The Weather of the Future* (Harper Collins, 2010) and is a Visiting Lecturer at Princeton University.



The Honorable Bernie Sanders, U.S. Senator (I-VT)

Bernie Sanders was elected to the U.S. Senate in 2006 after serving 16 years in the House of Representatives. He is the longest serving independent member of Congress in American history. After graduating from the University of Chicago he moved to Vermont. Elected Mayor of Burlington in 1981, he served four terms. Before his 1990 election as Vermont's at-large member in Congress, Sanders lectured at the John F. Kennedy School of Government at Harvard and at Hamilton College in upstate New York. Senator Sanders has focused on the shrinking middle class and widening income gap in America. His top concerns also include global warming, universal health care, fair trade policies, supporting veterans and preserving family farms. "As the only member of the majority to serve on both the Senate Energy and Natural Resources Committee and the Environment and Public Works Committee, Sanders has played key roles in crafting a successful energy bill that has become law and negotiating a global warming bill that seeks deep reductions in the power plant, factory and automobile emissions that create climate change." (*Burlington Free Press*)

TECHNOLOGY NOTES

Connecting to the Internet

A UVM GuestNet account has been created for you. Conference participants will receive a guest login name and password that will allow access to the Internet and email from a UVM computer or your laptop.

For wireless Internet access while on campus:

1) Join the "UVM Guest" wireless network by opening a web browser and visiting any website. You will be presented with a login form labeled "GuestNet."

2) Enter your guest login name and password then click "Log In." You will be brought to the website you originally requested. You will then be able to visit any other website and use email and most other Internet programs.

Please note: You will need try to visit a website before attempting to do anything else on the Internet. Otherwise your computer may not connect properly.

For IT assistance while on UVM's campus, the UVM Computing Helpline (802-656-2604) is available on Thursday and Friday 8:00 am – 4:30 pm, unavailable Saturday and Sunday.

Library Access

The Bailey/Howe Library hours are: Thursday 8am-10pm; Friday 8am-5pm; Saturday noon-5pm; Sunday closed. The library has over 200 computers for visitor use. You can plug your laptop into the available network jacks in the Cyber Café and on the second floor along the north wall opposite the main staircase. Both color and black-and-white printers are set to print in duplex mode (both sides of a sheet of paper). Print jobs are sent to a centralized server and then picked up at a print station.

Social Networking

You can use #aess11 to share comments on Twitter. Please do share your impressions with those outside the conference!

Technical specs for digital presentations

Each session room will be equipped with a computer, digital projector, and sound system. The presentation computers have internet access and all conference rooms on Friday through Sunday have wireless access. For those of you using PowerPoint or other digital files for your presentation you should have provided your presentation for uploading before the conference. We will ensure that your presentation is loaded onto the computer in your session's room prior to the start of your session. Because of the limited time available for presentations and discussion in each session, please come early to the session to make sure all is in order for your presentation. Professional technical support will be available at all conference locations.

Sponsors

Diamond (\$5,000)

Environmental Program, University of Vermont

Platinum (\$3,000)

Marine Mammal Commission

Gold (\$1,500)

Chatham University

Rubenstein School of Environment and Natural Resources, University of Vermont

Springer Verlag Publishers

Silver (\$750)

Middlebury College

Udall Foundation

Ursinus College

Saint Michael's College

Bronze (\$300)

Center for Humans and Nature

Dartmouth College

Island Press

The Aldo Leopold Foundation

Centennial Celebration - Weeks Act

The 2011 AEES conference was made possible by the hard work of many staff and volunteers. Special thanks to:

UVM Environmental Program team:

Stephanie Kaza, lead faculty host

Rick Paradis, lead staff host and Conference Services liaison

Ibit Getchell, field trips and program book assistance

Debbie Krug, field trip logistics

Field trip leaders (we thank all of you on pages 8 and 29-30!)

Student assistants: Alma Arteaga, Julia Breul, Alyssa Bucci, Ben Carlson,

Kathryn Daly, James DeBiasi, Leah Delaney, Phil Fandel, Katherine Fox,

David Manago, Michelle Marion, Nicole Robbins, Naani Sheva, Shaina

Casper, Corrie Wilcox, Hannah Ohlson, Elise Schadler, Kristy Ryan,

Alex Nenopoulos

We are also grateful for assistance from Dr. Saleem Ali, Paddy Shea at Senator Sanders' office, and Michelle Atherton in President Fogel's office.

AEES officers and committee chairs:

Rich Wallace, conference program chair

Kim Smith, AEES president

Lyle Birkey, AEES administrative assistant

Karen Kellogg, sponsors and exhibitors chair

Cam Weimar, awards committee chair

Jim Proctor, 2010 conference host

Phil Camill, 2010 conference program chair

AEES 2011 Program Committee members:

David Cherney, Mary Collins, Janet Fiskio, Katie Purvis-Roberts

Ken Wilkening

UVM Conference and Event Services:

Maureen Cartier, senior conference coordinator

Nicole Zarrillo, conference coordinator

Jeff Warden, web designer and technology coordinator

Donna O'Brien, registration

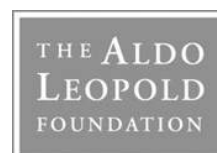
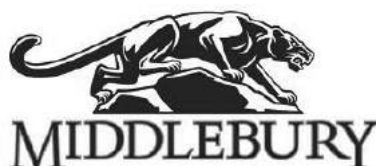
Davis Center staff, general conference support

Program Book Design:

Kate Strotmeyer



Springer



URSINUS



7:30 am: Breakfast

Mount Mansfield Dining Room

8:30 am: Half-Day and All-Day Field Trips

Depart from the Davis Center Oval, entrance to the Davis Center

T-2 Camel's Hump Hike

Carrie Pucko, Ph.D student, Plant Biology (University of Vermont)

T-3 Split-Rock Champlain Wildway Tour

Jim Northup, Executive Director, Northeast Wilderness Trust

Rose Graves, Conservation Director, Northeast Wilderness Trust

T-4 Middlebury College Sustainability Tour

Jack Byrne, Director of Sustainability Integration (Middlebury College)

Nan Jenks Jay, Dean of Environmental Affairs (Middlebury College)

T-5 Cycle the City: Sustainable Burlington

Kevin Rose, Local Motion Trailside Center Manager

T-6 Walk through Centennial Woods Natural Area

Teage O'Connor, Field Naturalist and Lecturer, Environmental Studies (University of Vermont)

9:00 am – 4:30 pm: All-Day Workshops

W-1 Setting up a Sustainability Faculty Fellows Program

Stephanie Kaza, Gioia Thompson, Matt Kolan, and Wendy Verrei-Berenbeck (University of Vermont)

Lafayette L100

This workshop focuses on infusing sustainability across the curriculum through professional development of affiliated faculty fellows. Leaders will provide sample curriculum, readings, exercises, and training activities. Topics include: how to engage a variety of disciplines, the role of systems thinking and sense of place, how to develop partner sponsorship and funding support, how to recruit fellows and conduct program assessment. The goal of such a program is to enable faculty to develop plans and identify resources to infuse sustainability into their teaching through student projects, new units, or new courses.

W-2 Integrating Environmental Health into Existing and New Courses

Caryl Waggett (Allegheny College)

William Sullivan (University of Illinois at Urbana-Champaign)

Lafayette L210

In recent decades, the role of environmental health scientists has grown from providing basic sanitation and hygiene to reducing exposure to harmful substances. At the same time city managers, transportation planners, architects, biotech engineers, advertisers, and food marketers all play a significant role in promoting individual and community health. This workshop will provide an opportunity for faculty to develop a segment of an existing or new course to explicitly address environmental health concepts. We will review foundational concepts in environmental health and systems thinking and address educational strategies for teaching interdisciplinary concepts, including local research and applied projects.

9:00 am – 12:00 pm: Morning Workshops

W-6: Making Green Organizations More Racially Diverse: Debunking Myths about People of Color and the Environment

James Francisco Bonilla (Hamline University School of Business)

Lafayette L200

The future of the environmental movement and the legacy of America's great outdoors will soon be in the hands of a new generation of Americans, one very different from the generation that preceded it. Demographic shifts in the U.S. population point to the inevitable fact that people of color will become the new majority within twenty years. This session developed from research addressing the absence of significant numbers of people of color in traditional outdoor and environmental organizations. We will examine five pervasive myths that inhibit people of color from greater participation and leadership and debunk environmental myths surrounding people of color as well as poor and working class people. We will discuss barriers to fuller participation for people of color in the environmental movement, and explore a range of strategies for colleges and universities to make environmental programs more reflective of a new generation of emerging environmentalists.

W-7 Getting Published: Writing for The AESS Journal & Related Publications

Walter (Tony) Rosenbaum (University of Florida)

Lafayette L107

This will be an interactive session led by AESS Journal Editor-in-Chief and other members of the Journal's Editorial Board. The purpose is to encourage journal submissions from AESS members, to publicize the journal, and to provide support to younger or inexperienced authors. There will be considerable emphasis on "how to." This will involve reviewing examples of manuscripts rated good, acceptable with revisions, not acceptable, and discussing what makes those distinctions.

W-8 Complexity and Creativity: Skills from Improv Artists

Jennifer Joy Pawlitschek, writer, actor, comedian and trainer

Lafayette L111

Environmental scientists are confronted by complexity in many arenas. Addressing ecological problems requires not just answers to difficult technical questions, but also the ability to respond to social and ethical concerns. In order to effectively confront multifaceted environmental problems, people need not only rational and critical thinking tools, but also the ability to embrace complexity and respond with creative solutions. In this cross-disciplinary, highly interactive workshop, participants will be introduced to methods that theatre actors use to train their minds to manage complexity with creativity. Improvisational training offers ways to handle the complexity of the unscripted stage environment, while maintaining character and collaborating effectively with colleagues. The exercises will help participants build collaborative skills, develop a sense of group awareness, and draw upon creativity spontaneously and effectively.

12:00 pm: Lunch

Lafayette/Old Mill Annex foyer

1:00 pm – 4:30 pm: Afternoon Workshops

W-4 Research Ethics and Cultural Competence Training for Community-based Studies

Dianne Quigley (Brown University)

Lafayette, L111

Many environmental research projects take place in communities with diverse cultural groups that have particular histories, traditions, group processes, and research experiences that have not been well served by traditional research ethics and Institutional Review Board (IRB) processes. Native Americans, African-Americans, Asian Americans, and other culturally-diverse, resource-poor communities have experienced forms of exploitation whereby research subjects are recruited through deception, authoritative persuasion or coercion. Economically disadvantaged groups whose decision-making about informed participation in research projects may be impaired by low literacy, a conditioned submission to authority or financial need, are at particular risk for exploitation.

To prepare researchers for engaging with diverse cultural groups, the Northeast Ethics Education Partnership (NEEP), an NSF-funded training initiative between SUNY-ESF and Brown University, has developed training modules combining cultural competence skills with human subjects protections. We will share curriculum for graduate and faculty mentoring programs, examine sample case studies and review training materials. Participants will become aware of how racial stereotypes, ethnocentric approaches and inappropriate communication styles can impede respect for persons and justice. We will look at new approaches to gaining informed consent with cultural groups that account for communal values and oral traditions while meeting the requirements of IRBs.

W-5: Professional Science Master's Degrees: An Opportunity for Environmental Programs

David Blockstein, Council of Environmental Deans and Directors/National Council for Science and the Environment), Carol Lynch (Council of Graduate Schools), Jean Shaake (University of North Texas/National Professional Science Masters Association), Ursula Bechert (Oregon State University), Tolessa Deksis (University of District of Columbia), Eban Goodstein (Bard College)

Time: 2:00 pm – 5:30 pm

Lafayette, L200

Professional Science Master's degrees are one of the fastest growing areas of higher education with more than 200 created in the past decade. A Professional Science Master's (PSM) is an innovative graduate degree that consists of two years of academic training in an emerging or interdisciplinary area of science, mathematics, or technology. The PSM also contains a professional component that usually includes an internship and "cross-training" in business, management, ethics and communications. PSMs can provide a link between environmental education and environmental careers by adding a practical element to traditional education. This workshop will provide an introduction to PSMs, including examples of environmental PSMs and practical steps to forming and sustaining a PSM.

5:00 pm: Opening reception and welcome, *Taste of Vermont* Buffet (Billings)

Welcome, Stephanie Kaza, conference host (University of Vermont)

Welcome, Daniel Mark Fogel, President (University of Vermont)

5:45 pm: Vermont: A Sense of Place

Natural History of Vermont Rick Paradis (UVM Environmental Program)

Sustainable Burlington Tom Hudspeth (UVM Environmental Program)

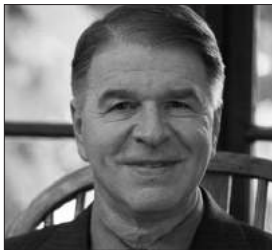
Campus Sustainability at UVM Gioia Thompson (UVM Office of Sustainability)

7:00 pm: Opening Plenary

Film *Flight Paths: Murder of Crows, Murmuration of Starlings*, Dennis Heynsky (Rhode Island School of Design)

Welcome and introduction, Kimberly Smith, AEES President

Plenary address by Dr. Heidi Cullen, CEO, Director of Communications, Climate Central



A Message from UVM President Fogel

Welcome to the University of Vermont. I hope you'll enjoy exploring the University through the many windows that this conference will open for you.

Vermont is distinguished by innovative research and scholarship across all the major fields of study, with special distinction in environmental studies and sciences. Founded by heroes of the American Revolution, the University of Vermont is the fifth oldest university in New England (after Harvard, Yale, Dartmouth, and Brown). Vermont is often known by the initials "UVM," derived from its Latin name, *Universitas viridis montis*, the University of the Green Mountains. The University has a living commitment to the ethical foundations of democracy and to values long associated with the State of Vermont: fairness, social justice, environmental stewardship, openness, independence, lack of pretense, and the achievement of practical results.

Welcome to our campus, our fine city Burlington, and the marvelous natural beauty all around you -- to the east, the Green Mountains and to the west, across the sparkling waters of Lake Champlain, the high peaks of the Adirondacks. I hope you fully enjoy your visit to our campus and community and come back again soon.

– President Daniel Mark Fogel

SESSIONS OVERVIEW

	A (Fri 9:00-10:30)	B (Fri 11:00-12:30)	C (Fri 2:00-3:30)	D (Fri 4:00-5:30)
1	Theor Innovation in ESS Terrill 207	Forests in Complex World Livak 1	Sense Place: Forest & Trees Jeffords 110	Religion, Ethics, Peace Jeffords 110
2	Mass Media & Climate 1 Williams	Complexity: Brazilian Experience Jeffords 110	Complexity in Vermont Jost Foundation	Floods & Water Management Terrill 108
3	Ecological Insights Livak 1	Education for Sust Energy Jeffords 127	Environmental Justice 1 Terrill 108	Communities & Conservation Livak 1
4	Env Collaboration 1 Jost Foundaton	Community Sustainability 1 Terrill 207	Policy & Soc Institutions Williams	Developing Countries Livak 2
5	Green Economics Jeffords 127	Tales of Adirondacks Livak 2	Privilege: Bill Freudenberg Livak 1	Climate Adaptation Jeffords 127
6	Food Systems, part 1 Jeffords 112	eTour Local Lands Jeffords 112	ESS Pedagogical Issues 1 Livak 2	Food Systems 2 Jeffords 112
7	Networks of Sustainability Chittenden Bank Room	Artists & Scientists 1 Chittenden Bank Room	Sust Frontiers 1 Jeffords 127	Artists & Scientists 2 Chittenden Bank Room
8	Interdisciplinary EE & Sust Ed Livak 2	US Marine Mammal Commission Williams	Info Dissem: Green Tools Jeffords 112	Eval of PES Programs Jost Foundation
9	Place for History in ESS 1 Jeffords 110	ESS Prog Design/Assess 1 Terrill 308	Challenges of Multi-X Collab. Terrill 308	Env Info Disclosure Williams
10	Open Source Learning Terrill 308	Urban Env Pedagogies 1 Jost Foundation	Complexity & Concept Maps Terrill 207	
11			Legacies of Leopold Chittenden Bank Room	

	E (Sat 9:00-10:30)	F (Sat 11:00-12:30)	G (Sun 9:00-10:30)
1	Acoustic Disturb MM Livak 1	Acoustic Disturb MM 2 Jeffords 110	Green Job Counseling Jeffords 112
2	Climate Change Intergen Terrill 108	Mass Media & Climate 2 Williams	Invasive Species Williams
3	Soc Resp Renew Energy 1 Jeffords 112	Soc Resp Renew Energy 2 Jeffords 112	Environmental Justice 2 Terrill 108
4	Env Collaboration 2 Jost Foundation	Community Sustainability 2 Terrill 207	GIS & Group Projects Jeffords 127
5	Sustainable Behavior Williams	Env Policy-making 1 Livak 1	Env Policy-making 2 Livak 1
6	ESS, Pedagogical Issues 2 Livak 2	New PhDs in Field Jeffords 127	ESS Pedagogical Issues 3 Livak 2
7	Sust Pedagogy & Practice Jeffords 127	Artists & Scientists 3 Chittenden Bank Room	Artists & Scientists 4 Chittenden Bank Room
8	Different Ways of Knowing 1 Terrill 207	Different Ways of Knowing 2 Terrill 308	<i>Journey of the Universe</i> Sugar Maple Ballroom
9	Place for History in ESS 2 Jeffords 110	ESS Prog Design/Assess 2 Terrill 108	Place for History in ESS 3 Jeffords 110
10	Climate Across Curriculum Chittenden Bank Room	Urban Env Pedagogies 2 Jost Foundation	Urban Env Pedagogies 3 Jost Foundation
11		Student Award Papers Livak 2	

7:30 am: Breakfast

Mount Mansfield Dining Room

9:00 am – 10:30 am: Session A**A-1 Theoretical Innovation in ESS**

Chair: Jonathan Clark

Terrill 207, symposium

The Anthropology of Land and Sea in the California Bight

Jennifer Perry (Pomona College)

The Political Ecology of the (Nonhuman) Body

Jonathan Clark (Ursinus College)

Transcendence in Nature: Measurement and Theory

Nora Davis

How to Protect a Mountain: Theories of Social and Policy

Change in Opposition to Mountaintop Removal Mining

Laura Bozzi (Yale University)

A-2 How Mass Media Confront Complexity When Covering Climate Change, part 1

Chair: Maxwell Boykoff

Williams Family Room, panel

Climate Change: What's the Story?

Thomas Lueck (Ramapo College of New Jersey)

Newspaper Coverage of Climate Change: Foreign Voices in the Context of a Developing Country

Bruno Takahashi, Mark Meisner (SUNY College of Environmental Science and Forestry)

Uncertainty Rhetoric in U.S. Television News Coverage of the Copenhagen Climate Change Conference

Kristine Mattis, Magda Konieczna, Xuan Liang, Jiun-Yi Tsai, Sharon Dunwoody (University of Wisconsin–Madison)

A-3 Ecological Insights: Pushing the Boundaries

Chair: Phil Camill

Livak 1, symposium

Counting a Species that Won't Sit Still: Effectiveness of Population Counts on the New Zealand Fur Seal (*Arctocephalus forsteri*).

Jenipher Cate (University of Canterbury)

Raising Whales: Recent Advances in Cetacean Ecology

Joe Roman (University of Vermont)

Systems Biology, Multi-Level Hierarchies and Evolutionary Theory: The Ecosystem as a Unit of Natural Selection

A. Karim Ahmed (National Council for Science and the Environment)

An Overview of Conservation Medicine

Basil Tangredi (Green Mountain College)

A-4 Environmental Collaboration Outside the Classroom, part 1

Chair: Michael Berger

Jost Foundation Room, panel

Campus-Community Partnerships for a Sustainable Future: Connecting to the Community via Service-Learning Courses

Tom Hudspeth (University of Vermont)

Understanding, Teaching, and Influencing Campus

Sustainability from a Systems Perspective

Stephen Posner, Ralph Stuart (University of Vermont)

Use of Project-Based Learning within an Environmental Health Laboratory Course

Michelle Homan (Gannon University)

Engaging Non-Environmental Science Majors in

Sustainability through a Transformative, Action-Based, Experiential Learning Challenge

Michael Berger, Judah Axe, Elizabeth Scott (Simmons College)

A-5 Green Economics: Theory and Practice

Chair: Benjamin Weil

Jeffords 127, symposium

Green Water, Gray Economy

Marya Czech (Lourdes College)

A Market Model Based Financial Benchmark Required to Access Finance for Renewable Energy Projects in South Africa

Umesh Kumar (SUNY Canton), John Fay (University of Cape Town)

Green Jobs: How Green and For Whom?

Benjamin Weil (University of Massachusetts-Amherst)

A-6 Food Systems: Theory & Practice, part 1

Chair: David Blockstein

Jeffords 112, panel

**Meat and Meanings: Adult-Onset Hunters' Discursive
Constructions of the Hunt**

Tovar Cerulli (University of Massachusetts-Amherst)

**A Continuum of Exchange: Gifts, Commodities and
Community Supported Agriculture (CSA)**

Signe Porteshawver (Tufts University)

**Conventional Food Plot Management in an Organic
Coffee Cooperative: Explaining the Paradox**

Katlyn Morris (University of Vermont)

**Integrating Complex Systems for the Green Economy:
Can Diversified Farming and Biobased Chemicals meet?**

Alastair Iles (University of California at Berkeley)

A-7 Networks of Sustainability: Examining & Opening Up the Politics of Power System Transitions

Chairs: Eve Vogel and Darrin Magee

Chittenden Bank Room, panel

**Electric-Social Revolutions in the Pacific Northwest from
1890 to the Present: The Punctuated Politics of Expansion,
Integration, Inclusion and Sustainability**

Eve Vogel (University of Massachusetts - Amherst)

**The Life and Death of a Nuclear Power Plant: Examining
the News and Public Discourse around Re-Licensing
Vermont Yankee**

Richard Watts (University of Vermont)

**Scaled Policy Disarticulation Undermines Energy
Transition Networks: An Analysis of Federal to Local
Energy Policy and Wind Power Development**

J. Anthony Abbott (Stetson University)

**Global Capital, National Development, and Transnational
Environmental Activism: The Conflict over the Three
Gorges Dam on the Yangtze River in China**

Yuen-ching Bellette Lee (University of Chicago)

Power Sector Reforms and Decision Politics in China

Darrin Magee (Hobart and William Smith Colleges)

A-8 Interdisciplinary Environmental Education and Sustainability Education Degree Programs: Transitions and Transformations

Chair: Nicholas Smith-Sebasto

Livak 2, panel

Education for a Sustainable Society

Shirley Vincent (National Council for Science and the
Environment)

**Enabling Sustainable Thinking in an Undergraduate
Environmental Studies Program**

Dave Gosselin (University of Nebraska-Lincoln)

**Evolution of an Environmental Studies Degree Program
to Reflect more Sustainability Learning Outcomes: A
Case Study in Transitioning from Environmental Education
Toward Sustainability Education**

Rod Parnell (Northern Arizona University)

**Creating a New B.S. in Sustainability Science Degree: A
Case Study of Kean University**

Nicholas Smith-Sebasto (Kean University)

A-9 A Place for History in Environmental Studies, part 1

Chair: Eric Mogren

Jeffords 110, symposium

A Place for History in an Environmental Studies Program

Eric Mogren (Northern Illinois University), Jill Mudgett
(University of Massachusetts, Amherst) Sarah Frohardt-Lane
(University of Illinois)

**History as a Link Between Environmentalism and
Regionalism in Vermont**

Jill Mudgett (Independent historian)

**World War II and the Stigmatization of Public
Transportation**

Sarah Frohardt-Lane (University of Illinois)

**Crooked Waters: A History of Riparian Conflict and
Common Law in the Kayaderosseras Watershed, NY**

Karen Kellogg (Skidmore College)

A-10 Open Source Learning

Chair: Eban Goodstein

Terrill 308, panel

Campus to Congress: From Avatars to Candidates

Eban Goodstein (Bard College Center for Environmental Policy)

A Case for Open-Source Learning

Jon Isham (Middlebury College)

10:30 am: Coffee and snack break

Livak Fireplace Lounge

11:00 am – 12:30 pm: Session B**B-1 Forests: Their Multiple Dimensions in a Complex World**

Chair: Gerald Marten

Livak 1, panel

Facilitating Carbon Market Participation for Small Scale and Community-Based Forestry Projects

Cecilia Danks (University of Vermont), Rachael Beddoe (University of Vermont), Elise Schadler (University of Vermont), Jennifer Wright, (Green Mountain National Forest)

Understanding the Role of Domestic Urban Forestry in Voluntary Carbon Markets

Elise Schadler, Cecilia Danks (University of Vermont)

Going Local with Carbon Offsets? Potential for Local Markets for Forest Carbon Mitigation

Cecilia Danks (University of Vermont), Charles Kerchner (AgRefresh), Laury Saligman (Conservation Collaboratives)

Carbon Pools in Coffee Agroforests and Dry Tropical Forests in the Western Highlands of Guatemala

Mikaela Schmitt-Harsh (Indiana University)

EcoTipping Points: Reversing Tropical Deforestation and Associated Carbon Dioxide Emissions

Gerald Marten (University of Hawaii)

B-2 Confronting Complexity: The Brazilian Experience

Chair: Ajibola Badiru

Jeffords 110, panel

REDD+ Press Coverage in Brazil from 2005-2009: A Media Analysis

Peter May (Federal Rural University of Rio de Janeiro), Bruno Calixto, (Amigos da Terra), Maria Fernanda Gebara (Federal Rural University of Rio de Janeiro)

What's Causing People to Conserve Forests? - A Comparative Analysis of Private Forest Conservation and Reforestation in the United States and Brazil

Tatyana Ruseva (Appalachian State University), Catherine Tucker (Indiana University), Juliana Farinaci (University of Campinas)

Comparing the Urban Configuration of São Paulo with Great Metropolitan Cities

Ajibola Badiru (Instituto de Pesquisas Energéticas e Nucleares), Ayobami Badiru (CEFET- PB), Maria Aparecida Pires (Instituto de Pesquisas Energéticas e Nucleares)

Non-geomorphologic Complexity in Water Sectors: Case of Alto Tiete Hydrographic Region (URGHI-6) Sao Paulo, Brazil

Ajibola Badiru (Instituto de Pesquisas Energéticas e Nucleares), Ayobami Badiru (CEFET- PB), Maria Aparecida Pires (Instituto de Pesquisas Energéticas e Nucleares)

Avoided Costs from Carbon Sequestration in Remnants of Atlantic Forest and Cerrado Biomes, Sao Joao del Rei Region, Brazil

Eneida Campos, Vanessa Barbosa (Federal University of São João del Rei)

B-3 Education for Sustainable Energy

Chair: David Feldman

Jeffords 127, panel

Numbers not Adjectives — Helping Students Understand Energy

David Feldman (College of the Atlantic)

The Use of Systems and Statistical Modeling in General Education Environmental Science Classes

Mick Womersley (Unity College)

Energy Education in ESS: It Can (and Should) Be Done!

John Perkins (National Council for Science and the Environment)

Energy Education: The Boy Scout Energy Merit Badge

Dennis Showers (SUNY Geneseo)

Rewards and Challenges of Hands-on Renewable Energy Projects for College Students

Anna Demeo (College of the Atlantic)

B-4 Community Sustainability, part 1

Chair: Eban Goodstein

Terrill 207, panel

Social Capital and Walkability: Measureable Components of a Sustainable Community?

Shannon Rogers, Kevin Gardner, Cynthia Carlson (University of New Hampshire)

Characteristics of Communities in the Vicinity of Wind Farms

Soraya Cardenas, Kurt Holzhausen (University of Maine at Fort Kent)

Alternatives to an Overdrawn Edwards Aquifer Groundwater Source: Is Inland Desalination Powered by Waste Fuels a Solution?

Robert Larson, Ronald Stephenson (Texas State University-San Marcos)

B-5 Tales of the Adirondacks: Cooperation and Conflict in Protected Area Land Management

Chair: Ann Ruzow Holland

Livak 2, symposium

Participatory Planning for a Promised Land: Citizen-Led, Comprehensive Land Use Planning in New York's Adirondack Park

Ann Ruzow Holland (Independent Community Planner; and SUNY Plattsburgh)

Narratives of Place, Class and Conflict in the Adirondack Park

Eric Holmlund (Paul Smith's College)

Effects of Exurban Development on Wildlife in the Adirondacks

Michale Glennon, Heidi Kretser (Wildlife Conservation Society)

Divergent Views: Understanding Resident Attitudes about Private Land Development, Recreational Activities, and Environmental Issues Affecting the Adirondack Park

Stacy Rosenberg (SUNY Potsdam)

A Window of Opportunity: Examining the Creation of the Adirondack Park Agency within John Kingdon's Multiple Streams Model

Erica Morin (Purdue University)

B-6 eTour of Local Lands: An Interdisciplinary Tool to Connect Students and Place-based Research

Chair: John Harris

Jeffords 112, symposium

Incorporating eTour in Student Assignments and Wetland Research

John Harris, Catherine Koning (Franklin Pierce University)

Expanding eTour to Include Documentary Films on Environmental and Community-Based Topics

Melinda Jette (Franklin Pierce University)

Using eTour to Highlight the Work of the Monadnock Archaeological Project

Robert Goodby (Franklin Pierce University)

Using eTour to Showcase Student Sustainability Efforts on the Rindge Campus

Michelle Comeau (Franklin Pierce University)

Using eTour to Highlight Adventure Recreation

Opportunities in the Monadnock Region and Beyond

Doug Carty (Franklin Pierce University)

B-7 Artists and Environmental Scientists: Opportunities for Skill-Sharing and Collaborations, part 1

Chair: Jennifer Joy Pawlitschek

Chittenden Bank Room, panel

"The Physics of Love": Using Theatre to Spread Environmental Knowledge and Motivate Change

Jennifer Joy (Independent Performing Artist and Writer)

Ecomusicology: Prospects for Interdisciplinary Collaboration

Aaron Allen (University of North Carolina at Greensboro)

Collaborations between Artists and Engineers at Alfred University

Diane Cox (New York State College of Ceramics at Alfred University)

Spirit of Place

Lamont Hempel (University of Redlands)

B-8 Agency Perspectives: The U.S. Marine Mammal Commission

Chair: Richard L. Wallace

Williams Family Room, symposium

Conservation in the Face of Crisis

Timothy J. Ragen (Executive Director, Marine Mammal Commission)

Discussants: Susan G. Clark (Yale University) and Richard L. Wallace (Ursinus College)

B-9 ESS Program Design and Assessment, part 1

Chair: Jeff Ayres

Terrill 308, panel

Starting an Interdisciplinary Program at a Liberal Arts College in Vermont: Environmental Studies at Saint Michael's College

Valerie Banschbach, Jeff Ayres, Greg Delanty, Bret Findley, Richard Kujawa (Saint Michael's College)

Environmental Science at Dalhousie University, an Evolving Curriculum

Tarah Wright, Katja Munroe Belfry, Susan Gass (Dalhousie University)

Navigating Interdisciplinary Waters: Resources and Workshops for Interdisciplinary Scholars

Helen Doyle (Stanford University)

B-10 Urban Environmental Pedagogies: Bringing Theory to Practice, part 1

Chair: Patrick Hurley

Jost Foundation Room, panel

A Tale of Two Cities: Urban-Placed Pedagogies in Roxbury and Detroit

Richard Peterson (University of New England)

Beyond a Trip to the Aquarium

Alison Glassie (University of Rhode Island)

Diversity and Engagement in Alternative Food Practice: Community Gardens in Vancouver, BC

Darlene Seto (University of British Columbia)

12:45 pm: Lunch & Roundtable Discussions

Mount Mansfield Dining Room

Roundtable descriptions begin on p.18.

What is a Roundtable?

Roundtables are open discussions to which all conference attendees are welcome. They are largely informal discussions around a theme and occur during mealtimes in a relaxed setting. They offer a chance to generate ideas, learn about new topics, and meet people with shared interests. Tables will be marked clearly in the meal area and dialogue will be facilitated by the host listed in the program book. Please feel free to join any of these discussions, whether or not you are participating in the meal.



URSINUS

**Ursinus College Congratulates
AESS Conference Presenters**

Martina Dzuna 2011

Vinny Dombay 2011

Julia Bull 2012

R-1 Easing Work-life Complexity at AESS: How do we Support Parents and other Caregivers at Environmental Conferences?

Coordinator: Eve Vogel (University of Massachusetts, Amherst)

An increasing number of academics and environmental professionals are primary caregivers of children, elderly parents, or others. How can AESS support people who face significant work-life complexity in order to attend? This roundtable will be a brainstorming and initial planning discussion about how to build a support system for conference attendees who are also care-givers with limited budgets and time. Are child-friendly field trips a possibility? Should we encourage AESS and other associations to subsidize caregivers' extra costs? Come with your ideas, experiences and knowledge, and be prepared to think about what small but significant support we can begin to put together.

R-2 A Discussion of Environmental Leadership

Coordinator: Deborah Rigling Gallagher (Duke Environmental Leadership Program, Nicholas School of the Environment, Duke University)

What is environmental leadership? How can it be applied to address intractable problems such as climate change, to confront complex management challenges such as developing a hydrogen economy, or to remedy injustices such as environmental refugees? Deb Gallagher is the editor of the forthcoming SAGE Reference Handbook on Environmental Leadership.

R-3 The U.S. Flood Control Program at 75

Coordinator: Peter Black (SUNY College of Environmental Science and Forestry)

Recent, recurring, and increased magnitude floods challenge long-held and erroneous concepts of flood control. This discussion focuses on the environmental issues related to the U.S. Riverine Flood Control Program. For the past 75 years, United States floods have caused increasing property damage with growing fiscal loss. Reasons include inattention to fundamental principles of physics, hydrology, and ecology. Existing programs encourage and enable investment in flood plains while violating a variety of natural principles. An alternative approach is presented that would enable and celebrate natural floods, managing their ecological and hydrological values and not attempting to control them.

R-4 Endangered Species Protection in the U.S.

Coordinator: Joe Roman (University of Vermont)

The first listed species to make headlines after the Endangered Species Act was passed in 1973 was the snail darter, a three-inch fish that stood in the way of a massive dam on the Little Tennessee River. When the Supreme Court sided with the darter, Congress changed the rules. The dam was built, the river stopped flowing, and the snail darter went extinct on the Little Tennessee, though it survived in other waterways. A lot has changed since the 1970s. This roundtable discussion will cover the history of U.S. endangered species protection and the people working to save threatened species. The discussion will be based on Joe Roman's book *Listed: Dispatches from America's Endangered Species Act*. Roman explains how preserving biodiversity can help economies and communities both thrive.

R-5 Launching our ESS students Toward Meaningful Livelihoods

Coordinator: Ibit Getchell (University of Vermont)

College offers students knowledge, experience, and skills through courses, study abroad, service learning, and extracurricular activities. Crossing the threshold to the world beyond college is daunting, with so many directions ESS students can go and high unemployment rates in all sectors. What can we do programatically and as advisors to support students out the door and into rewarding lives and work? This discussion will offer a chance to share ideas and approaches for counseling today's ESS graduates entering the work force in challenging times.

2:00 pm: Session C**C-1 Pedagogy of Place: Seeing the Forest for More Than its Trees**

Chair: Sue Van Hook

Jeffords 110, symposium

Introduction to the North Woods at Skidmore College

Sue Van Hook (Skidmore College)

Helping Students See the Forest for the Trees

Josh Ness (Skidmore College)

The Pedagogy of Place: Literature for the Northwoods

Michael Marx (Skidmore College)

C-2 Confronting Complexity in Vermont

Chair: Carrie Pucko

Jost Foundation Room, panel

The Synergistic Effects of Multiple Anthropogenic Forces on the Forests of the Green Mountains, Vermont

Carrie Pucko, Brian Beckage (University of Vermont)

Confronting the Complexity of Sharing Land Information:

A Vermont Neighbor Network Sharing Land Stories

Keith McDade (Green Mountain College)

Vermont Climate Change Indicators

Alan Betts (Atmospheric Research)

Climate Change and Environmental Issues in the Media: a Vermont Strategy

Alan Betts (Atmospheric Research)

C-3 Environmental Justice: Ethics, Race, Rights, part 1

Chair: Kimberly Smith

Terrill 108, symposium

Bringing Race into Environmental Ethics

Kimberly Smith (Carleton College)

Environmental Justice, Hybrid Knowledge Systems, and the Restoration of Bio-cultural Diversity in North America

David Tomblin (Virginia Tech)

Green Infrastructure Implementation as an Alleviation of Environmental Injustices?: A Case Study of Syracuse, NY

April Baptiste (Colgate University)

C-4 Confronting Complexity through the Policy Perspective

Chair: Chad McGuire

Williams Family Room, symposium

Confronting Complexity through the Policy Perspective:

What shapes and drives our social institutions when change is the norm—legal considerations

Chad McGuire (University of Massachusetts, Dartmouth)

Confronting Complexity through the Policy Perspective:

What shapes and drives our social institutions when change is the norm—social considerations

Michael Goodman (University of Massachusetts, Dartmouth)

Confronting Complexity through the Policy Perspective:

What shapes and drives our social institutions when change is the norm—economic considerations

Devon Lynch (University of Massachusetts, Dartmouth)

C-5 A Role for Privilege in Complexity Theory: The Contributions of William Freudenburg

Chair: Debra Davidson

Livak 1, symposium

Privileged Goods: Towards a Synthesis of Commoditization Theory and Freudenburg's "Double-Diversion"

Jack Manno (SUNY College of Environmental Science and Forestry)

The Said and the Unsaid: Disproportionality and How it is Supported through Discourse

Debra Davidson (University of Alberta)

Environmental Justice and Disproportionality: Exploring a Freudenburgian Perspective

Mary Collins (University of California, Santa Barbara)

Attitudes and the Three Fixes for Environmental Problems

Thomas Heberlein (University of Wisconsin—Madison)

C-6 ESS Pedagogical Issues, part 1

Chair: Richard L. Wallace

Livak 2, panel

Teaching Interdisciplinary Critical Thinking in

Environmental Studies: Lessons from Carson and Leopold

Richard L. Wallace (Ursinus College)

Environmental Science Curricula in a Complex World

Richard Shearman (Rochester Institute of Technology)

Bringing Real World Relevance into Environmental Science Education

Mara Chen (Salisbury University)

Out of the Classroom into the Community: Farmers, Farming and The Food System in Eleuthera

Sarah Gardner (Williams College)

Simulations and Video of Landfill Construction, Operation, and the Removal of Contaminants by Plants

Robert Beauchamp (University of Maryland University College)

C-7 Sustainability Frontiers: Models, Meanings, Manipulations, part 1

Chair: Glenn Weinberg

Jeffords 127, symposium

Contested Meanings, Applications, and Aspirations of Sustainability

Curt Gervich (SUNY Plattsburgh)

Impostors of Sustainability

Glenn Weinberg (City University of New York)

EcoTipping Points: Sharing Lessons from Success Stories to Teach Systems Thinking for Sustainability

Gerald Marten (University of Hawaii)

NRC Committee on Incorporating Sustainability into the US Environmental Protection Agency

Bernard D. Goldstein (University of Pittsburgh Graduate School of Public Health)

C-8 Information Dissemination: Developing Green Tools

Chair: Jon Isham

Jeffords 112, panel

Eco Heroes and Eco Villains: An Archetypal Analysis of Characters in Environmental Films, 1950-2010

Susan Stein, Candice Roberts (Drexel University)

Plants, Darwin, and Sustainability

Mary Stark (Central College)

As Seen from Space: Satellite Imaging and Environmental Perception

Matthew Bower (University of North Texas)

Virtual Energy Submetering: Measuring Energy Use, Assessing Strategies for Conservation

Glen Stevens, Chekka Lash (Ferrum College)

C-9 Overcoming the Challenges of Multi-X Collaborations

Chair: Jeff Frolik

Terrill 308, panel

Multi-University Systems Education (MUSE)

Jeff Frolik (University of Vermont), Paul Flikkema (Northern Arizona University), Donna Rizzo (University of Vermont)

The Colleges of the Fenway's Environmental Science and Sustainability Collaboration: Overcoming Challenges and Celebrating Successes in Year Eight

Henderson Pritchard, Jack Duggan (Wentworth Institute of Technology)

Complex Learning: Foundations in ESS

Janelle Schwartz, Joelle Underwood (Loyola University New Orleans)

The Role of Translational Activities in Promoting Multi-X Collaborations

Mark Brunson (Utah State University)

A Case for Integration: The Deepwater Horizon Oil Spill

Andrew Guswa, Elisabeth Armstrong, Michael Barresi, Ann Leone, Catherine McCune (Smith College)

C-10 Confronting Complexity with Concept Maps

Chair: Jim Proctor

Terrill 207, panel

The Bard Concept Mapping Experience: Where We Are, and Where We Go from Here

Gautam Sethi, Caroline Ramaley (Bard College Center for Environmental Policy)

Confronting Interdisciplinarity in Environmental Studies via Concept Maps

Jim Proctor (Lewis & Clark College)

Evaluating Concept Mapping: Results of an Empirical

Assessment

Jennifer Bernstein (Montana State University), Jim Proctor
(Lewis & Clark College)

C-11 The Legacies of Aldo Leopold: Confronting the Ethical and Spritual Complexities of the Land Ethic

Chair: Jane Caputi

Chittenden Bank Room, symposium

Feeding Green Fire

Jane Caputi (Florida Atlantic University)

Dramatizing Ecology: Aldo Leopold's Green Fire Narrative

Gavin Van Horn (Center for Humans and Nature)

"Thinking like a Mystic": The Unacknowledged Legacy of P.D. Ouspensky's *Tertium Organum* on the Development of Leopold's "Thinking Like a Mountain"

Ashley Pryor (University of Toledo)

Re-Experiencing the Land Ethic: Beyond Eco- and Anthropocentrism

Bryan Bannon (Wesleyan University)

3:30 pm: Coffee and snack break

Livak Fireplace Lounge

4:00 pm: Session D

D-1 Religion, Ethics, Peace: A Golden Braid

Chair: Kit Anderson

Jeffords 110, symposium

The Environment as an Bridge to Peace in the Middle East

Michael M. Cohen (Arava Institute for Environmental
Studies)

The Relevance of Metaphysics to Animal Liberation and EcoFeminism

Jennifer McErlean (Siena College)

Two Not-Much-Discussed Problems about Ethics & Eating

Tyler Doggett (University of Vermont)

D-2 Floods and Water Management

Chair: Robert Mason

Terrill 108, symposium

Using Rental Properties to Better Understand the Subjective Risks of Flooding

James Meldrum (University of Colorado at Boulder)

Floods, Drought, Flexible Flows, and Climate

Contingencies on the Delaware River

Robert Mason, Lynn Mandarano (Temple University)

Confronting Complexity in Water Resources Management through Paradigm Change: Regional Water Transfer or Ecosystem Based Management? An Analysis of Interlinking of River Project in India

Nidhi Pasi, Richard Smardon (SUNY College of
Environmental Science and Forestry)

Designing a Surface-water Allocation Policy that Meets Stakeholder Needs

Emily Schieffer (Duke University)

D-3 Communities & Conservation: Leadership and Engagement

Chair: David Cherney

Livak 1, symposium

Environmental Saviors? The Effectiveness of Nonprofit Organizations in Greater Yellowstone

David Cherney (University of Colorado–Boulder)

Restorative Leadership: Remembering the Primacy of Nature in Corporate Responsibility

Seana Steffan (The Restorative Leadership Institute)

Community-Based Wood Biomass Energy: Decision Support through Participatory Research and Service Learning

Cecilia Danks, Kimberly DePasquale, Lini Wollenberg, Matt
Peters, Susannah McCandless (University of Vermont)

Groundwater in the Desert: Phoenician Policy, Growth, and Land Fragmentation

Abigail York, Sainan Zhang, Christopher Boone (Arizona
State University)

D-4 Dealing with Complexity: Perspectives from Developing Countries

Chair: Maria Aileen Leah Guzman

Livak 2, panel

Renewable Energy in the Philippines: A Means to Achieving

Sustainable Development in the Philippines

Jude Estiva, Maria Guzman (Aparri Engineering LLC)

2009 Floods of Metro Manila: A Showcase of Man's Conflict with the Environment

Maria Aileen Leah Guzman (Aparri Engineering LLC)

Governance Structures in Transboundary Conservation: How Institutional Structure and Evolution Influences Cross-Border Response in the Face of Complexity

Michael Schoon (Arizona State University)

Dealing with Complexity: Formulating, Adapting and Evaluating Peace Education Concepts and Practices in the Context of Natural Resources in Ghana

Sarah Darkwa (University of Cape Coast, Ghana)

Waste Management Potentials in Enugu-Nigeria for Environmental Sciences and Studies

Godfrey Uzochukwu (North Carolina A&T State University)

D-5 Climate Change in Communities: Mitigation, Adaptation, Resilience

Chair: David Hassenzehl

Jeffords 127, panel

Society Knowledge, Assumptions and Preferences Regarding Climate Change in Nevada

William Smith, Zhongwei Liu, Ahmad Safi (University of Nevada, Las Vegas)

Preparing Communities for an Uncertain Future in Light of a Changing Landscape and Climate: A Multidisciplinary Approach to Effective Adaptation

Michael Simpson (Antioch University New England), James Gruber (Antioch University New England), Latham Stack (Syntectic International, LLC), Robert Roseen (University of New Hampshire Stormwater Center), Thomas Crosslin (Climate Techniques, LLC)

Creating a Learning Community for Solutions to Climate Change (CAMEL)

David Hassenzehl, Ginny Brown (National Council for Science & the Environment)

D-6 Food Systems: Theory and Practice, part 2

Chair: Tom Hudspeth

Jeffords 112, panel

The Edible Campus: An Employee-centric Food System

Jeanine Kopaska Broek, Steve Fortenberry (Goodness Grows, Inc.)

From Fair Trade to Food Justice: Action Research Results and Strategies to Move from Hunger Towards Sustainable Livelihoods in Nicaragua

Christopher Bacon (Santa Clara University)

Accessing Local, Organic Food in Burlington, Vermont, and Havana, Cuba

Tom Hudspeth (University of Vermont)

Women's Sense of Farming: An Ethnographic Study of Ecofeminism in Sustainable Farming and Local Food

Tatiana Abatemarco (University of Vermont)

D-7 Artists and Environmental Scientists: Opportunities for Skill-Sharing and Collaborations, part 2

Chair: Jennifer Joy Pawlitschek

Chittenden Bank Room, panel

Eco-Plays and the Green Theater Revolution

Jeremy Pickard (Superhero Clubhouse)

Positive Feedback: Art and Climate Change

Lisa Phillips (Columbia University)

Emerging and Hybrid Art Forms: Collaboration in the Arts and Sciences

Julia Christensen (Oberlin College)

Uniting Art and Biology to Conserve Our Coral Reefs

Courtney Mattison (Brown University)

D-8 Taking Stock: An Evaluation of PES Programs

Chair: Gautam Sethi

Jost Foundation Room, panel

Forest Conservation and Slippage: Evidence from Mexico's National Payments for Ecosystem Services Program

Jennifer Alix-Garcia (University of Wisconsin), Elizabeth Shapiro (Duke University), Katharine Sims (Amherst College)

Reconciling Scarcity and Indigenous Values

Guatam Sethi (Bard College Center for Environmental Policy)

New Strategies for Managing the Environment in Oaxaca, Mexico: the Foro Oaxaqueño del Agua

Monique Segarra (Bard College Center for Environmental Policy)

Mandates, Management or Money? Comparing Alternative Approaches to Conservation

Kathy Baylis (University of Illinois), Jordi Honey-Roses (University of Illinois), Maria Isabel Ramirez, (UNAM-Morelia)

D-9 Coming Clean: Environmental Information Disclosure in the United States

Chair: Michael Kraft

Williams Family Room, symposium

Coming Clean: Environmental Information Disclosure in the United States

Michael Kraft (University of Wisconsin-Green Bay)

Coming Clean in the Classroom

Walter A. Rosenbaum (University of Florida)

Nanoremediation: Are There Equity Concerns?

Mary Collins (University of California, Santa Barbara)

US Citizens Acceptance (or Rejection) of the Scientific

Consensus on Climate Change: Is more Scientific Knowledge the Answer?

Rose Njoroge (Florida State University)

Massey Energy Company in Education: Building Pro-Coal Attitudes in a Coal-Devastated Region

Heather Farley, Michael Cook, Russell Crawford (Northern Arizona University)

5:45 pm: AESS Business Meeting

Chair: Kimberly Smith, AESS President

Livak 1

6:30 pm: ESS Junior Scholars Reception

Brennan's (Davis Center first floor)

A gathering for undergraduate and graduate students and emerging scholars in the fields of ESS.

6:30 pm: Dinner on your own or an optional dinner buffet

Across from the Marketplace, second floor

7:30 pm: Vermont Film Premier *Green Fire: Aldo Leopold and a Land Ethic for Our Time*

Hosts: Curt Meine, Director of Conservation Biology and History (Center for Humans and Nature), Gary K. Meffe, Wildlife Ecology and Conservation (University of Florida), Steve Dunsky (film director)

Silver Maple Ballroom



Green Fire, the first full-length, high-definition documentary film ever made about legendary environmentalist Aldo Leopold, highlights Leopold's extraordinary career, tracing how he shaped and influenced the modern environmental movement. The film seeks to provide viewers with a basic historical biography of Aldo Leopold while simultaneously surveying the contemporary relevance and creative evolution of the conservation ethic that Leopold defined.

The film will be followed by a panel discussion featuring on-screen narrator and Leopold biographer Curt Meine, *Green Fire* co-director Steven Dunsky, and conservation biologist and author Gary Meffe.

7:30 am: Breakfast

Mount Mansfield Dining Room

8:00 am: JESS Editorial Board Meeting

Handy Family Room

8:00 am: Poster Session Set-up

Livak Fireplace Lounge and Sugar Maple Ballroom

8:00 am: Roundtable Discussions

Mount Mansfield Dining Room

R-6 Confronting Complexity Together: Promoting Research Collaboration among AESS Members

Coordinator: Jessica J. Kelly (Millersville University)

Increasingly, multi-disciplinary and multi-institutional research teams are confronting the complexity of major issues in environmental studies and sciences. The benefits of such collaboration include: maximizing individual talents and training, contributing to a rapidly growing body of knowledge, and fostering scholarship opportunities among the junior members of our organization. We invite junior and senior scholars interested in networking and brainstorming research topics for confronting complexity in environmental studies and sciences.

R-7 The Louisiana Gulf Coast Region and Estuaries Experience Tragedy

Coordinator: Martha A. Madden, Former Secretary of the Louisiana Department of Environmental Quality

Natural wetland loss is occurring among Louisiana's nine hydrologic basins, ranging from 64 acres per year in the Atchafalaya Basin to 7,104 acres per year in the Barataria Basin. Four processes inhibit wetland restoration and recovery: human-induced impacts, weather-induced impacts, commercial-induced impacts, and economic impacts. Months after the U.S. government declared the waters in the Gulf of Mexico safe, thick layers of oil have been found along Louisiana coastal marshes. We will discuss current actions and barriers to progress in wetland recovery after the Deepwater Horizon oil spill.

R-8 Teaching Social Science Research in Environmental Studies and Sciences

Coordinator: Tania Schusler (Antioch University New England)

Social science research offers essential tools for understanding environmental problems and examining possibilities for solving them. Yet many ESS curricula offer only research training in the ecological and physical sciences. The purpose of this roundtable is to discuss teaching social research methods in ESS. We will encourage participants to describe their experiences teaching social science research to graduate and undergraduate students, discuss challenges encountered and how to overcome them, and share specific teaching strategies, tools, and resources.

R-9 The Role of the Humanities in Environmental Studies

Coordinator: Adrian Ivakhiv (University of Vermont)

For those who work in the environmental humanities, the question about whether there's a role for the humanities in environmental studies is (to put it gently) a "no-brainer." It's surprising how often the case has to be made, however; for others. This discussion is intended both for those who already do environmentally relevant work in one of the humanities fields (philosophy, history, religious studies, literary and cultural studies, the arts, etc.) and for those who would like to incorporate more humanities content in their teaching, research, or programs.

9:00-10:30 Session E

E-1 Population-Level Effects of Acoustic Disturbance on Marine Mammals, Part 1

Chair: Erica Fleishman

Livak 1, symposium

Integrating Conceptual and Practical Approaches to

Assessment of Disturbance

Erica Fleishman (University of California, Davis), Bill Streever (BP Exploration [Alaska] Inc.)

A Conceptual Framework for Evaluating the Effects of Sound on Marine Mammal Populations

John Harwood (University of St Andrews), Erica Fleishman, Daniel Costa (University of California Santa Cruz), Peter Tyack (Woods Hole Oceanographic Institution), Michael Weise (U.S. Office of Naval Research)

Translating Conceptual to Parameterized Models for Multiple Taxonomic Groups

Len Thomas (University of St Andrews), Rob Schick (Duke University), James Clark (Duke University), John Harwood (University of St Andrews)

Foraging and Vital Rates of Elephant Seals in Different Scenarios of Natural and Human Disturbance

Daniel Costa, Jen Maresh, Patrick Robinson, Lisa Schwarz (University of California, Santa Cruz)

E-2 Climate Change Perspectives: The International and Inter-generational

Chair: Paul Harris

Terrill 108, panel

Climate and Communities in Crisis: Ecological and Cultural Complexities in the Monarch Butterfly Biosphere Reserve, Michoacan, Mexico

Laci Gerhart (University of Kansas)

Solar Radiation Management, Geoengineering, and International Law: The Implications of Intergenerational Equity

William Burns (Monterey Institute of International Studies, Middlebury College)

What Members of the General Public Prefer to Call "Climate Change"

Karen Akerlof, Edward Muibach (George Mason University)
Climate Justice and Energy Problems: Intergenerational Concerns

Edward Abplanalp (Illinois Central College)

The Failed Politics of Climate Change: Fundamental Sources and Practical Alternatives

Paul Harris (Hong Kong Institute of Education)

E-3 Social Responses to New Renewable Energy Technologies and Infrastructure, part 1

Chair: Stewart Fast

Jeffords 112, panel

Responses to New Renewable Energy Technologies in the "Land o' Lakes" Region of Eastern Ontario

Stewart Fast (University of Ottawa)

Constructing Sustainable Biofuels: Governance of the Emerging Biofuel Economy

Rob Bailis (Yale School of Forestry and Environmental Studies)

Governance of Wind Energy in the Marine Environment: the Massachusetts Experience

Enid Kumin (Antioch University New England)

Learning from Public Responses to Wind Power Development in New England

Cameron Weimar (Catholic University of America)

E-4 Environmental Collaboration Outside the Classroom, part 2

Chair: Debra Davidson

Jost Foundation Room, panel

Packaging Research: A College Class Advocates for Safe and Sustainable Foods and Food Packaging

Nancy Ross (Unity College)

Applying Sustainability to the Complexities of Concrete Design

Jack Duggan (Wentworth Institute of Technology)

Linking Learning to Action: Translating Student Research into Policy Implementation

Leon-C Malan, Laura Alexander, Jennifer White, (Colby-Sawyer College)

Universities in Service of the Community: Experiences in

New York City

Hildegard Link, Jessica Miller, Yehuda Klein (City University of New York)

E-5 Sustainable Behavior: Psychological and Environmental Impacts

Chair: Beth Karlin

Williams Family Room, symposium

National Trends in Public Concern about Coastal and Ocean Environments

Thomas Safford (University of New Hampshire)

Nature Relatedness: Human-Nature Connections and the Happy Path to Sustainable Behavior

Elizabeth Nisbet (Carleton University)

Confronting Complexity in Energy Conservation: Differences between Exposure, Actions, and Impacts

Beth Karlin, Katrin Escobar (University of California, Irvine)

Using the Theory of Planned Behavior to Explore Energy Conservation in a University Setting

Katherine McComas, Mary Beth Deline (Cornell University)

E-6 ESS Pedagogical Issues, part 2

Chair: Michelle McCauley

Livak 2, panel

Avoiding the Downer Class when Teaching Environmental Psychology

Michelle McCauley (Middlebury College)

Pass It On: Empowering Students to Educate Others on Climate Science Basics

Leah Joseph (Ursinus College)

Taming the Beast: Imposing Theoretical Frameworks on Broad Environmental Science Survey Courses

Syma Ebbin (Connecticut Sea Grant/University of Connecticut)

Using Systems Simulations for Discovery Learning about Accumulations

Krystyna Stave (University of Nevada–Las Vegas)

Teaching Supradisciplinarily: Complexity Enhancement versus Disciplinary Integration

Will Focht (Oklahoma State University)

E-7 Sustainability Pedagogy & Practice

Chair: Catherine Kleier

Jeffords 127, panel

Modeling Sustainability: A Perfect Storm of Culture Change, General Education, and Action

Catherine Kleier (Regis University)

Developing Sustainability Leaders that Embrace Complexity: Applying a Sustainability Leadership Framework at the University of Michigan

Mike Shriberg (University of Michigan)

Building Green Leadership through Campus Sustainability Project Teams: Green Structures for Linking Students, Faculty, and Staff

David Whiteman (University of South Carolina)

Calculation of Personal Consumption of Water, Energy, and Carbon Footprint

Orin Gelderloos (University of Michigan–Dearborn)

E-8 Complexifying the Vision: Increasing Hospitality toward Different Ways of Knowing in ESS, part 1

Chair: Nancy Rich

Terrill 207, symposium

Restoring Relationships: Interviews with Faculty and Elders on Bringing Indigenous Ways of Knowing into Undergraduate Environment-related Education.

Nancy Rich (Antioch University New England)

Communication for Sustainability Educators

Adrienne Cachelin, Karen Paisley, Edward Ruddell (University of Utah)

American Rural Communities and Sustainability Studies

Martha Vanderwolk (Goddard College)

E-9 A Place for History in Environmental Studies, part 2

Chair: Eric Mogren

Jeffords 110, symposium

Engaging the Environment and One Another: The Role of the Program Study and Discussion Division of the USDA in Addressing Complex Issues

Timothy Shaffer (Cornell University)

Wind Energy: Harnessing History to Meet Demand

Daniel Sholler (University of Pennsylvania)

“White Coal”: Alpine Water and Power in Europe, 1880-1955

Marc Landry (Georgetown University)

E-10 Teaching Climate Change Across the Curriculum Within and Outside of the Classroom

Chair: Janet Fiskio

Chittenden Bank Room, symposium

Using Real-time Feedback on Resource Flows in the Built Environment to Engage, Educate, Motivate and Empower Climate Stewardship

John Petersen (Oberlin College)

Integration of Climate Change using Different Pedagogical Tools in Environmental Studies Courses at Oberlin

Md Shammin (Oberlin College)

A Wayfinding Course in Climate Change

Elizabeth Davey (Tulane University)

Ethics, Equity, Narratives: Teaching Climate Change through the Humanities

Janet Fiskio (Oberlin College)

10:30 am: Coffee and snack break

Livak Fireplace Lounge

11:00 am – 12:30 pm: Session F

F-1 Population-Level Effects of Acoustic Disturbance on Marine Mammals, Part 2

Chair: Erica Fleishman

Jeffords 110, symposium

Potential Effects of Acoustic Disturbance on Foraging Behavior, Body Condition, and Demography in North Atlantic Right Whales

Robert Schick (Duke University), Scott Kraus (New England Aquarium), Rosalind Rolland (New England Aquarium), Peter Corkeron (New England Aquarium), Philip Hamilton (New England Aquarium)

Long-term Population Monitoring of Blainville's Beaked

Whales (*Mesoplodon densirostris*) using Passive Acoustics

David Moretti, Elena McCarthy, Nancy DiMarzio, Susan Jarvis, Jessica Ward (Naval Undersea Warfare Center)

Potential Application of the PCAD Approach by Management and Regulatory Agencies

Michael Weise (U.S. Office of Naval Research), Sam Simmons (Marine Mammal Commission)

F-2 How Mass Media Confront Complexity When Covering Climate Change, part 2

Chair: Maxwell Boykoff

Williams Family Room, panel

Explanation and Value Judgments in Media Communication of Climate Model Science

Karen Akerlof, Katherine E. Rowan, Dennis Fitzgerald, Andrew Y. Cedeno (George Mason University)

Lost in Translation: Eliminating Uncertainty from Climate Science

Syma Ebbin (Connecticut Sea Grant/University of Connecticut)

Effective Media Reporting of Sea Level Rise Projections: 1989–2009

Ursula Rick (American Geological Institute), Maxwell Boykoff (University of Colorado–Boulder), Roger Pielke, Jr. (University of Colorado–Boulder)

F-3 Social Responses to New Renewable Energy Technologies and Infrastructure, part 2

Chair: Stewart Fast

Jeffords 112, panel

Is Concern for Global Warming Positively Related to Support for Wave Energy Development: A Case Study from Oregon

Maria Petrova Stefanovich (Oregon State University)

The Importance of Public Attitudes as a Barometer for Sustainable Energy Design and Deployment

Elizabeth Graffy (University of Wisconsin-Madison)

Not In My Back... Fort? Wind Energy and the Rural Movement: An Ontario, Canada Case Study

James Knott, Stephen Hill (Trent University)

F-4 Community Sustainability, part 2

Chair: Shirley Vincent

Terrill 207, panel

The Presence of Diversity in Campus Sustainability Assessments

Andrea Webster (SUNY College of Environmental Science and Forestry)

EcoTipping Points: Turning Urban Decline to Restoration

Gerald Marten (University of Hawaii)

Localization: A Response to Environmental Limits with Embedded Benefits

Raymond De Young (University of Michigan)

F-5 The World of Environmental Policy-Making, part 1

Chair: Hugh Miller

Livak 1, symposium

Linearity to Complexity: A New Paradigm for Regulatory Policy

Martha Richmond, John Berg (Suffolk University)

Conflict and Cooperation: Environmental Decision-Making in Local Implementation of Agenda 21

Peter Klein (Brown University)

Evolving Concepts of Sustainability in Environmental Policy

Monty Hempel (University of Redlands)

At Environmental Agencies It's Politics All the Way Down

Hugh Miller (Florida Atlantic University)

F-6 Reports from the Field: Newly-Minted PhDs Relay the Real Deal

Chair: Kate Darby

Jeffords 127, panel

Outside of Academia: Fellowships in the Federal Arena

Jennifer Riddell (American Association for the Advancement of Science)

Piecing Together a Career: Reflections by One Half of a Dual-Career Couple

Mark Neff (Allegheny College)

Sharing the Passion: Strategies for Obtaining Effective

Mentoring during the Early Career

Jessica Kelly (Millersville University)

Navigating Transitions: An Early Career Perspective on Academia

Patrick Hurley (Ursinus College)

A Department Chair's Perspective on Working with New PhDs

Terrence Bensel (Allegheny College)

F-7 Artists and Environmental Scientists: Opportunities for Skill-Sharing and Collaborations, part 3

Chair: Jennifer Joy Pawlitschek

Chittenden Bank Room, panel

Using Art to Frame Environmental Discussions: The

Purchase College Experiment

Ryan Taylor (SUNY Purchase College), Heather Saunders (University of Toronto)

Art, Ecology and Community

Cameron Davis (University of Vermont)

Interpreting Science through Environmental Film and Art

Dyanna Smith (Antioch University New England/Red Eft Project)

Fine Grain: Visual Immersion in the Food System

Abram Kaplan (Denison University)

F-8 Complexifying the Vision: Increasing Hospitality toward Different Ways of Knowing in ESS, part 2

Chair: Nancy Rich

Terrill 308, symposium

One World, Many Views: Teaching Cultural Complexity in Environmental Studies

Katharine Anderson (University of Vermont)

Borlaug, Hernández Xolocotzi, and the Role of Scientific and Indigenous Knowledge in Mexican Agriculture

Maxine Ewankow (Antioch University New England)

Experimenting Toward an All-encompassing "We"

Sabrina Fu (University of Maryland, University College)

Indigenous Knowledge, Environmental Perceptions, and Mapping

Yulanda Hwang, Sharon Moran (SUNY College of Environmental Science and Forestry)

F-9 ESS Program Design and Assessment, part 2

Chair: Ken Wilkening

Terrill 108, panel

When Planning and Serendipity Collide: Delights and Challenges of a New Environmental Studies Program

Kaye Savage, John Lane, Terry Ferguson (Wofford College)

Overcoming the Institutional Challenges of Merging an Academic Department and Interdisciplinary Environmental Science Program

Ronald Sundell, John Anderton (Northern Michigan University)

Authentic Assessment in a Professional Masters of Arts in Environmental Science Education

Kelly McConaughay, Michelle Edgcomb, Sherri Morris, Wayne Evens (Bradley University)

Environmental Studies Meets Global Studies: Creating a Confluence of Synergies

Ken Wilkening (University of Northern British Columbia)

F-10 Urban Environmental Pedagogies: Bringing Theory to Practice, part 2

Chair: Patrick Hurley

Jost Foundation Room, panel

Outdoor Classrooms: Collaborating with a City Elementary School to Foster Urban Ecologists

Susan Mooney (Stonehill College)

Bridging the Human-Nature Gap by Teaching Environmental Methodology in an Urban Watershed

Rose McKenney, William Teska, Micheal Behrens, Rebekah Mergenthal, Kevin O'Brien (Pacific Lutheran University)

Home of the Green Gear Shift

Michael Perez (Embry-Riddle Aeronautical University)

Developing and Sustaining Edible Urban Landscapes

Karin Warren (Randolph College)

F-11 Student Award Presentations

Chair: Cameron Weimar

Livak 2, symposium

Adaptation to Floods and Droughts in the Afram Plains, Ghana

Lucy Kafui Aku Adzoyi-Atidoh (Lincoln University), Samuel Nii Ardey Codjoe (Regional Institute for Population Studies)

Defunct Models of Pollution: Ocean Plastics and Body Burdens

Max Liboiron (New York University)

Exploring Market Based Incentives to Address

Environmental Risk in Sub-Saharan Africa

John Fay (University of Cape Town Graduate School of Business)

Diversity and Engagement in Alternative Food Practice: Community Gardens in Vancouver, BC

Darlene Seto (University of British Columbia)

"We are not an Insurance:" Insurance as an Adaptation to

Climate Threats in Poor, Urban, Informal South Africa

Moliehi Shale (University of Cape Town, Centre of Criminology)

12:30 pm: Break

Pick up box lunch for field trip at Davis Center entrance

1:00 pm – 5:30 pm: Field Trips

All trips leave from the Davis Center Oval. Vehicles and group leaders will be in numerical order.

S-1 Shelburne Farms Tour

Jen Cirillo, Director of Professional Development (Shelburne Farms)

S-2 Sustainable Food Production

Linda Berlin, Director, Center for Sustainable Agriculture (University of Vermont)

S-3 Ecotourism Development in Stowe, Vermont

Todd Comen, Professor of Hospitality and Tourism (Johnson State College)

S-4 Lake Champlain Aquatic Ecology

Ellen Marsden, Professor, Fisheries (University of Vermont)

S-5 UVM LEED Buildings Walking Tour

Michele Smith, Administrative Coordinator, Capital Planning

(University of Vermont)

S-6 Sustainability Walking Tour of Burlington

Ed Antczak, Economic Development Specialist (City of Burlington)

S-7 Lower Winooski River Ecology and Conservation

Erin DeVries, Watershed Alliance Outreach Coordinator (University of Vermont/Sea Grant)
Lisa Dunn, Education Director, Winooski Valley Park District

S-8 Green Forestry at Jericho Research Forest

Bill Keeton, Associate Professor, Forestry (University of Vermont)

S-9 Shelburne Pond Canoe Trip

Alicia Daniel and Heather Fitzgerald, Field Naturalists and Lecturers, Environmental Studies (University of Vermont)

S-10 Ecology and Conservation of Vermont's Floodplain and Clayplain Forests

Rose Paul, Director of Science and Stewardship, Vermont Office of The Nature Conservancy

S-11 Geology of the Lake Champlain Basin

Char Mehrtens, Professor and Stephen Wright, Senior Lecturer, Geology (University of Vermont)

S-12 Aerial Field Trips of Lake Champlain Basin

Ian Worley, Professor Emeritus of Environmental Studies (University of Vermont)

S-13 Environmental Justice Tour

Brian Tokar, Lecturer, Environmental Studies (University of Vermont)

S-14 Exploring Burlington's Intervale

Tom Hudspeth, Professor, Environmental Studies and Natural Resources (University of Vermont)
Joyce Cellers, Development Coordinator, Intervale Center

S-15 Conserving Farms and Forests

Steve Libby, Executive Director, Vermont Rivers Conservancy, and Lecturer (University of Vermont)

S-16 Environmental Art Tour

Cami Davis, Artist, Lecturer, Art and Environmental Studies (University of Vermont)

S-17 Green Energy Tour

Richard Watts, Assistant Professor, Transportation Research Center, Community Development (University of Vermont)

S-18 Leadership in Burlington's Green Business

Ashley Orgain, Sustainability Manager, Seventh Generation

5:30 pm: Break

6:30 pm: Poster Session and Reception

Livak Fireplace Lounge (see pp. 31-32 for descriptions)

7:30 pm: Evening Banquet

Silver Maple Ballroom

AESS awards presentation



Tribute to William Freudenburg

William R. Freudenburg, Ph.D., Dehlsen Professor of Environmental Studies at UC Santa Barbara, was an internationally known environmental sociologist, author, and lecturer.

He spoke passionately for protection of rural communities and worked in the areas of risk, disaster, and natural resource development. Freudenburg was instrumental in founding the Association for Environmental Studies and Sciences and has left the organization a legacy of sharp insight, gentle humor, and humble compassion regarding the state of the earth.

Nature's Grace: Locally-Grown Music from the Vermont Composers Project (Amity Baker, Artistic Director)

Social Band is a lively group of 20 singers based in Burlington, Vermont, known for its strong voices and joyful, high-quality performances. This year's repertoire features specially commissioned choral pieces setting Vermont poetry to music by Vermont composers. The year 2011 has been declared as "the year of the composer" by Governor Peter Shumlin, recognizing that "local composers create music that is central to Vermont's individuality."

Poster Sessions

P-1 From Legal Conflict to Common Ground: Environmental NGOs and the U.S. Navy Share Their Perceptions of Engagement Efforts

Eleni Gesch-Karamanlidis (University of Rhode Island)

P-2 Alarmed but Not Acting: An Examination of the Inconsistency Between Beliefs and Behavior in Response to Climate Change

Kathryn Doherty (Antioch University New England)

P-3 Tuna-Dolphin-Bird Feeding Assemblages in the Galapagos Islands and Their Response to the Physical Characteristics of the Upper Water Column

Michelle Johnston, Julia O'Hern, Douglas Biggs (Texas A&M University), Edwin Pinto (Instituto Oceanografico de la Armada del Ecuador)

P-4 Ground Beetles as Indicators of Biodiversity

Robert Browne, Sarah Maveety, Katherine Riley (Wake Forest University)

P-5 Predicting Conflict over Scarce Resources: Chimpanzees (*Pan troglodytes verus*) and Fulbe Pastoralists

Brooke Massa (Duke University)

P-6 The Underrepresented Student's Access to Sustainability in the Post-Secondary Education Experience

Andrea Webster (SUNY College of Environmental Science and Forestry)

P-7 Restoration Ethics: The Cutthroat Truth

Alexander Lee (University of Colorado–Boulder)

P-8 Impacts of Non-Point Source Nutrient Pollution and Water Turbidity Pulses on Threatened *Acropora palmata* (Elkhorn coral) Populations in Vega Baja, Puerto Rico

Jesyka Meléndez-Rosa (University of Puerto Rico–Cayey), Edwin A. Hernández-Delgado (University of Puerto Rico, Center for Applied Ecology and Conservation, Coral Reef Research Group), Alejandra H. Alvarado (University of Puerto Rico–Rico Piedras), Ricardo Laureano (Vegabajeños Impulsando Desarrollo Ambiental Sostenible)

P-9 Communicating the Complexity of Biodiversity Associated with Agroecosystems

John Quinn (University of Nebraska-Lincoln), James Brandle (University of Nebraska-Lincoln), Ron Johnson (Clemson University)

P-10 Greasing a Solution to a Complex Problem: A College-Municipal Community Effort to Turn Used French Fry Oil into Biodiesel Fuel

Richard Bowden (Allegheny College), Joe Chriest (City of Meadville, PA), Christoffer Soff (City of Meadville, PA), Alessandra Trunzo, Sandra Wayman, Krystle Castillo, Samuel Elliot, Katie Flood, Lynette Gardner, Justin Gaudi, Peter Grella, Sarah Kane, Isis Lawson, Jessica Longobardo, Xi Lu, Kelsey Minto, Chas Moore-Seymore, Daniel Roth (Allegheny College)

P-11 Promoting Sustainable Communities: The Randolph College Permaculture Program

Karin Warren (Randolph College)

P-12 Enhancing Information Sharing and Decision-making Partnerships to Foster Multi-scale Capacity Building and Integration of Environmental Data for Stakeholders within the Lake Superior Basin

Ronald Sundell (Northern Michigan University), Robert Stewart (Lakehead University), Hilarie Sorenson (Lakehead University), Mike Michalek (Northern Michigan University)

P-13 Forging Partnerships between Municipalities, Environmental Agencies, and Undergraduate Institutions in Environmental Assessment and Remediation Projects: A Case Study of the Martins Pond Partnership

Jonathan Lyon (Merrimack College), Janet Nicosia (Martins Pond Association)

P-14 Improving Climate Education: A Geoscientific and Psychological Collaboration

Paul Hackett (Emerson College), Julio Sepúlveda (Massachusetts Institute of Technology)

P-15 Community Garden Connections: Strengthening Community Resilience through Partnerships

Susan Baron, Libby McCann, Tania Schusler, Libby Weiland, Robin Colt (Antioch University New England)

P-16 Integrating Student Research into an Advanced GIS Course: Using a GIS Model to Determine the Natural Resource Value of Land in the Siena-Hudson Greenway

Katherine Meierdiercks, Rami AlyGad, Julian Carney, Jeni Casinelli, Nicholas DiRoma (Siena College)

P-17 The Co-Evolution of Sustainability Courses with a Campus Sustainability Program at University of Vermont

Ralph Stuart, Michelle Smith, Gioia Thompson, Stephanie Kaza (University of Vermont)

P-18 Sustainable Campus Development: Challenges and Opportunities

Jessica Mooney (Chatham University)

P-19 Analyzing Storm Surge and Sea Level Rise to Determine Coastal Vulnerability in Brunswick and Harpswell, Maine

Leah Wang, Phil Camill, Melissa Anson, Krista Bahm, Maryellen Hearn (Bowdoin College)

P-20 College Students' Awareness of Endangered Species in the New York Capital Region: Prior Knowledge and Willingness to Take Action

Emily Merritt, Jean Mangun, Katherine Meierdiercks (Siena College)

P-21 Analysis of Suburban Forest Species Composition in Land-use Policies in Montgomery County, Pennsylvania

Vinnie Dombay (Ursinus College)

P-22 Suburban NTFP Gathering in the Philadelphia Metropolitan Area: Practices and Perspectives of Land Managers in Public Parks and Private Natural Areas

Martina Dzuna (Ursinus College)

P-23 Demonstration of a Discovery Learning Systems Simulation to Teach about Accumulations

Krystyna Stave, Heather Skaza, Ben Jurand (University of Nevada, Las Vegas)

P-24 Effects of Experiential Education in Environmental Sociology

Adelle Montebianco, Joyce Nielsen (University of Colorado–Boulder)

P-25 The Importance of Campus Farming

Julia Bull (Ursinus College)

P-26 A Solar Thermal Energy Storage System for Rural Communities in India

Hufsa Ahmad, Jennifer Lee, Allie McDonnell, Andrew Xue (Harvey Mudd College), Julie Lapidus, (Scripps College) Nigir Washington (Pomona College)

P-27 Dealing with Increasing Complexity: Does Postgraduate Distance Learning Assist the Environmental Professional?

Russell Soucek (Doane College)

7:30 am: Breakfast

Mount Mansfield Dining Room

8:00 am: AESS Executive Council Meeting

Handy Family Room

9:00 am: Session G

G-1 Career Advising in ESS: Demystifying Green Job Counseling

Chair: Mark O’Gorman

Jeffords 112, panel

The Role of Academic Advising in Career Counseling for ESS Students

Kim Marsalla (Skidmore College)

Social Media Tools, the Internet, and Green Jobs

Keely Maxwell (Franklin and Marshall College)

Practicum and Green Jobs: A Student’s First Step into Environmental Careers

Mark O’Gorman (Maryville College)

G-2 Perspectives on Invasive Species

Chair: Glenn Sandiford

Williams Family Room, panel

Exploring the Sustainability of the Funding Network for Aquatic Invasive Species in the Lake Champlain Basin

Casey Binggeli, Curtis Buker, Timothy Warren, Curt Gervich (SUNY Plattsburgh)

Ethnoecology of Aquatic Invasive Species: Conflicting Perspectives on Watershed Management in Upstate NY

Michael C. Ennis-McMillan, Karen Kellogg, Molley Bergen, Leah Wohl Pollack (Skidmore College)

“A Dominant Consideration”: How Native Fishes

Changed from Trash to Treasure

Anders Halverson

Two Centuries of Carp Rhetoric: Celebrities Aren’t the Only Ones Getting Makeovers

Glenn Sandiford (University of Illinois Urbana-Champaign)

When Science Speaks: Examining the Rhetoric of Invasive Species

John Epifanio (Illinois Natural History Survey)

G-3 Environmental Justice: Ethics, Race, Rights, part 2

Chair: Kimberly Smith

Terrill 108, symposium

Social Aspects of Energy Use in India: The Gap between the Haves and Have Nots – Can it be Closed through Technological Means?

Sudhakara Reddy (Indira Gandhi Institute of Development Research)

Urban Forests in Transition: Urban Environmental Planning, Green Infrastructure, and Environmental Justice in Lancaster, Pennsylvania

Jessica Kelly (Millersville University)

G-4 Integrating Community-based Projects into GIS Courses: Preparing students for Interdisciplinary Group Projects

Chair: Eileen Johnson

Jeffords 127, panel

Developing and Supporting GIS-Based Service-Learning Projects at Green Mountain College, Vermont

John Van Hoesen (Green Mountain College)

Using Community Based Courses to Build Capacity for Agricultural Conservation Planning

Eileen Johnson (Bowdoin College)

Community Based Learning and GIS: A Student’s Perspective

Leah Wang, Eileen Johnson (Bowdoin College)

G-5 The World of Environmental Policy-Making, part 2

Chair: Cassandra Hemphill

Livak 1, symposium

Toward Watershed-based Governance along the Hudson River

Riobart Breen (Siena College)

Prospecting the Solar Frontier: Decarbonization, ‘Sputnik Moments,’ and the Political Ecology of the Green New Deal

Dustin Mulvaney (University of California, Berkeley)

Diffusion of Stewardship Contracting within the U.S.

Forest Service: Results from the Pilot Case Study

Cassandra J. Hemphill (University of Montana)

“Here’s What I Think”: The People’s Voice in Strategic Environmental Assessments

Reeve Gutsell, James Gruber (Antioch University New England)

G-6 ESS – Pedagogical Issues, part 3

Chair: Leah Joseph

Livak 2, panel

Connecting Environmental Science with Hands-on Business Applications in the Classroom

Vikki Rodgers (Babson College)

Improving Students’ Critical Thinking Skills in the Context of Environmental Ethics

Courtney Quinn, Mark Burbach, Gina Matkin, (University of Nebraska - Lincoln)

Reading the Urban Landscape: The Case of a Campus Tour at York University, Ontario, Canada

Adrina Bardekjian, Michael Classens, L. Anders Sandberg (York University)

Internet Resource for Global Protected Area Study and Research

Peter Rogers (University of Buffalo)

G-7 Artists and Environmental Scientists: Opportunities for Skill-Sharing and Collaborations, part 4

Chair: Jennifer Joy Pawlitschek

Chittenden Bank Room, panel

Human-Powered Art: Internalizing Awareness of External Systems

Maria Michails (TreiaStudios/Eyebcam Art + Technology Center)

Immersing the Arts: Funding Coastal and Marine Themed Artistic Endeavors at CT Sea Grant

Syma Ebbin (Connecticut Sea Grant/University of Connecticut)

Art and Science Collaborations in Addressing the New Needs of Natural Life Forms

Elizabeth Demaray (Rutgers University)

G-8 Journey of the Universe (film)

Chairs: Mary Evelyn Tucker and John Grim (Yale University)

Sugar Maple Ballroom



This documentary film on the nature of the universe was produced and co-written by AESS award winner Mary Evelyn Tucker, cosmologist Brian Swimme, and John Grim, who also co-directs the Yale Forum on Religion and Ecology with Tucker. Premiered in March 2011, the film tells the earth’s evolutionary story as a grand epic, weaving together the history of the universe with the history of humanity. *Journey of the Universe* is the culmination of over 20 years of conversation and research by the film’s creative team. This story is indebted to Thomas Berry, a eco-theologian and scholar of world religions. Tucker and Grim will host the showing and lead a discussion following the film.

G-9 A Place for History in Environmental Studies, part 3

Chair: Eric Mogren

Jeffords 110, symposium

The Complexity-Energy Relationship

Philip Barnes (University of Delaware)

Allen Chamberlain, the Appalachian Mountain Club, and the Progressive Conservation Movement

Elizabeth Mills (University of Vermont)

Tradition, Innovation, and Organization: A Helpful History of New York City Waste Management

Thomas Harrington (Stevens Cooperative School),
Hildegard Link (City University of New York Graduate Center)

G-10 Urban Environmental Pedagogies: Bringing Theory to Practice, part 3

Chair: Patrick Hurley

Jost Foundation Room, panel

Urban Greening: The Role of Student-Led Oral History in Assessing Urban Tree Connections in the Haddington Neighborhood of West Philadelphia

Patrick Hurley (Ursinus College)

Planning for Climate Change in the Public Realm: An

Urban Environmental Planning Studio

Cameron Weimar (Catholic University of America)

A Case for Place-Based, Experiential Education: The University of Oregon Urban Farm Case Study

Harper Keeler (University of Oregon)

10:30 am: Coffee and Snack Break

Livak Fireplace Lounge

11:00 am: Closing Plenary, The Honorable Bernie Sanders, U.S. Senator (I-VT)

Introduction – Phil Camill, incoming AEES president

Sugar Maple Ballroom

12:00 pm: Lunch

Mount Mansfield Dining Room

1:00 pm: Conference Adjourns

SAVE THE DATE

June 21-24, 2012

AEES 2012 Annual Meeting

Santa Clara University

California



**The Association of Environmental Studies and Sciences
invites you to join us for the next AEES Annual Meeting
in California June 21-24, 2012.**

CALL FOR PAPERS

The AEES Annual Meeting is an interdisciplinary event for those interested in research, teaching and outreach around environmental studies and sciences. We welcome presentations from scholars, practitioners and students. Look for the call for papers next fall. See our website www.aess.info for updates and information.

Santa Clara University is a Catholic, Jesuit University in the Heart of Silicon Valley in San Francisco's south bay area. One of our core missions as an institution is to provide leadership in developing a more just, humane and sustainable world.

For further information, contact Leslie C. Gray, lcgray@scu.edu, Environmental Studies Institute, Santa Clara University.

EXHIBITOR LIST

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In 2008, Chatham University received a singular gift from the Eden Hall Foundation – a 388-acre farm just 20 miles north of its historic Shadyside Campus. Inspired by the legacy of alumna Rachel Carson, Class of 1929, the University established the School of Sustainability & the Environment (SSE) in 2009 to provide innovative, interdisciplinary education and research opportunities for undergraduate, graduate and professional students.

The University engaged the award-winning firms of BNIM of Kansas City and Andropogon Associates of Philadelphia to create the campus master plan. Planning for the first phase of construction is now underway with Mithūn, another world-renowned firm from Seattle. We are charting a new frontier in sustainability for higher education by building the first sustainable university campus from the ground up.

Eden Hall Campus will transform how Chatham occupies the land, designs buildings, and interacts with the environment and others. We will create a net-zero energy campus that integrates, studies, and teaches sustainability, and even serves as a member of the faculty itself. Eden Hall Campus will become a foundation for transdisciplinary education, and a model for sustainable living in the 22nd century.

We are also searching for the inaugural Sigo Falk Chair in Social Justice and Sustainability.

Established by Trustee Sigo Falk, the Falk Chair will bring a philosophical perspective and expertise in the areas of sustainability and the environment. The Falk Chair will be able to integrate sustainability and other disciplines through an ethical perspective, and thereby drive the discussions around humanities issues in sustainability and the environment.

The Falk Chair will not simply lend a humanistic perspective to the University community, but will ensure that SSE will maintain questions of ethics, social justice, and philosophy at its core. Through courses, research, publications and lectures, the Falk Chair will be dedicated to the philosophical issues raised by sustainability challenges. This is an incredible opportunity for the right individual, and I hope you can help us find the perfect candidate.

The Falk Chair will join faculty who are setting the foundation for a distinctive curriculum. Our Master of Arts in Food Studies program has admitted two cohorts of highly qualified students who already are helping transform how food is produced, distributed, and consumed in this region. Applications are now being accepted for our new Master of Sustainability Studies and online Certificate of Sustainable Management, both of which will launch in fall 2012. Eventually, SSE will provide sustainability programming from the undergraduate to the doctoral level, along with life-long learning and outreach opportunities.

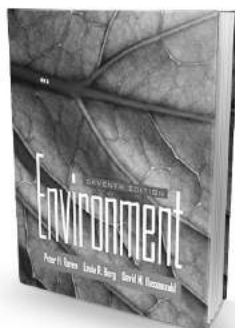
All of the faculty of the School are AESS members, and many of us are at the conference. Please introduce yourself if you get the chance. I hope you will take the opportunity to visit Eden Hall Campus soon, either online or on the ground, and experience the evolution of this distinctive learning environment.

Sincerely,

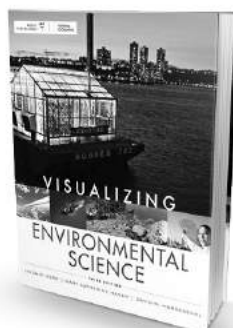
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The Marine Mammal Commission is an independent agency of the U.S. Government, established under Title II of the Act to provide independent oversight of the marine mammal conservation policies and programs being carried out by federal regulatory agencies. The Commission is charged with the following seven duties:

1. undertake a review and study of the activities of the United States pursuant to existing laws and international conventions relating to marine mammals, including, but not limited to, the International Convention for the Regulation of Whaling, the Whaling Convention Act of 1949, the Interim Convention on the Conservation of North Pacific Fur Seals and the Fur Seal Act of 1966;
2. conduct a continuing review of the condition of the stocks of marine mammals, of methods for their protection and conservation, of humane means of taking marine mammals, of research programs conducted or proposed to be conducted under the authority of this Act, and of all applications for permits for scientific research, public display, or enhancing the survival or recovery of a species or stock;
3. undertake or cause to be undertaken such other studies as it deems necessary or desirable in connection with its assigned duties as to the protection and conservation of marine mammals;
4. recommend to the Secretary and to other federal officials such steps as it deems necessary or desirable for the protection and conservation of marine mammals;
5. recommend to the Secretary of State appropriate policies regarding existing international arrangements for the protection and conservation of marine mammals and suggest appropriate international arrangements for the protection and conservation of marine mammals;
6. recommend to the Secretary such revisions of the endangered species list and threatened species list published pursuant to section 4(c)(1) of the Endangered Species Act of 1973 as may be appropriate with regard to marine mammals; and
7. recommend to the Secretary, other appropriate federal officials, and Congress such additional measures as it deems necessary or desirable to further the policies of this Act, including provisions for the protection of the Indians, Eskimos, and Aleuts whose livelihood may be adversely affected by actions taken pursuant to this Act.

To fulfill its responsibilities, the Commission—

- oversees the domestic and international activities of federal agencies affecting marine mammals;
- provides informed and objective advice to the executive and legislative branches of the federal government on measures needed to achieve the goals of the Marine Mammal Protection Act;
- promotes consultations with the scientific community, state agencies, local authorities, and public interest groups to help identify mutually acceptable ways to resolve issues of concern;
- coordinates federal, state, and local efforts to achieve the Act's stated purposes of conservation of marine mammal species, population stocks, and the ecosystems upon which they depend;
- formulates and promotes implementation of long-term policies to ensure the conservation of marine mammals and other components of the marine ecosystem; and
- carries out a directed research program to inform and guide marine mammal conservation measures at local, regional, national, and international levels.

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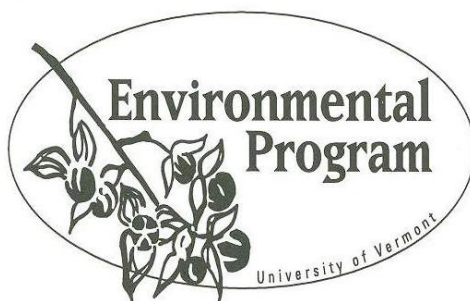
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The Environmental Program at University of Vermont was established in 1972 as a campus-wide program serving students in four colleges across the university. We offer an interdisciplinary undergraduate major in Environmental Studies (ENVS), available to students in UVM's College of Arts and Sciences, College of Agriculture and Life Sciences, and the Rubenstein School of Environment and Natural Resources. We currently serve over 450 majors pursuing interests as diverse as environmental education, international development, sustainable agriculture, environmental law and policy, religion and ecology, ecopsychology, and landscape restoration. Students can minor in ENVS from any college or school within the university.

Drawing from many disciplines, from the arts and humanities to the social, basic and applied sciences, the Program provides students with an interdisciplinary liberal education, drawing upon the resources of the campus as well as local and global communities. We encourage community engagement through internships and service learning and we support student activism and political awareness. The Environmental Program community is a lively hub of activity, addressing local and global issues with equal concern. We believe in collaborative problem-solving and the power of human imagination to create a more sustainable future. We intend our Program to be a beacon of hope amidst the very challenging environmental dilemmas that face humanity.

ENVS Concentrations

- Ecology and Conservation
- Food, Land and Community
- Environmental Policy and Development
- Nature, Culture and Justice
- Sustainability Studies
- Environment and Health
- Individual Design

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- Thesis/Project/Creative Arts Project
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"I chose to be an ENVS major because I want to make a difference in our world, to help bring about positive change in our communities for the environment and society." ~ Seth Levin, 2011

"Everything I have accomplished during my UVM years involved the skills I gained in environmental studies courses. I have pursued much more than I ever expected. My courses inspired me to take my own action and change my lifestyle to better fit my environmental ethics." ~ Jessica Fefer, 2011

"After graduation I am certain my ENVS degree will serve me in my career, but more importantly in my conscience; it is the foundation with which I now make decisions." ~ Naani Sheva, 2011

Contact us:

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The Association for Environmental Studies and Sciences (AESS) was created in 2008 to provide professional identity, collective voice, and continuing education for academics in environmental fields of study. The first Environmental Studies and Sciences (ESS) programs in the 1970s and earlier aimed to open doors between disciplines to encourage discoveries about the interdependencies of Earth and humanity that could not be made otherwise. Today this community consists of thousands of faculty members from diverse backgrounds associated with the nearly 1,500 ESS programs and departments in American higher education.

AESS encourages excellence in research, teaching, and practice in environmental studies and science. It assists members in discovering like-minded colleagues at other campuses. It also facilitates encounters with other colleagues who hold different viewpoints and professional orientations. Enlarging and strengthening the community of scholars and scientists with whom we interact is arguably the most important benefit the Association offers.

AESS serves these important purposes:

- * enlarging our capacity for cross-campus collaboration, mentoring, and shared scholarship;
- * creating a collegial process for speaking, networking, publishing, and conference development;
- * developing professional and accreditation standards;
- * supporting the career development of members, especially junior faculty;
- * providing professional advice on important matters of environmental policy and management.

Environmental scholars and scientists inevitably discover that the challenges we face transcend the disciplinary fields in which many of us practice. They require humility about what we know and don't know, both as individuals and as representatives of disciplines. We believe that it is only through learning communities of the type we hope to foster at AESS that we can achieve "whole system" environmental education and creative synthesis of knowledge that promotes a healthier Earth.

Association for Environmental Studies and Sciences

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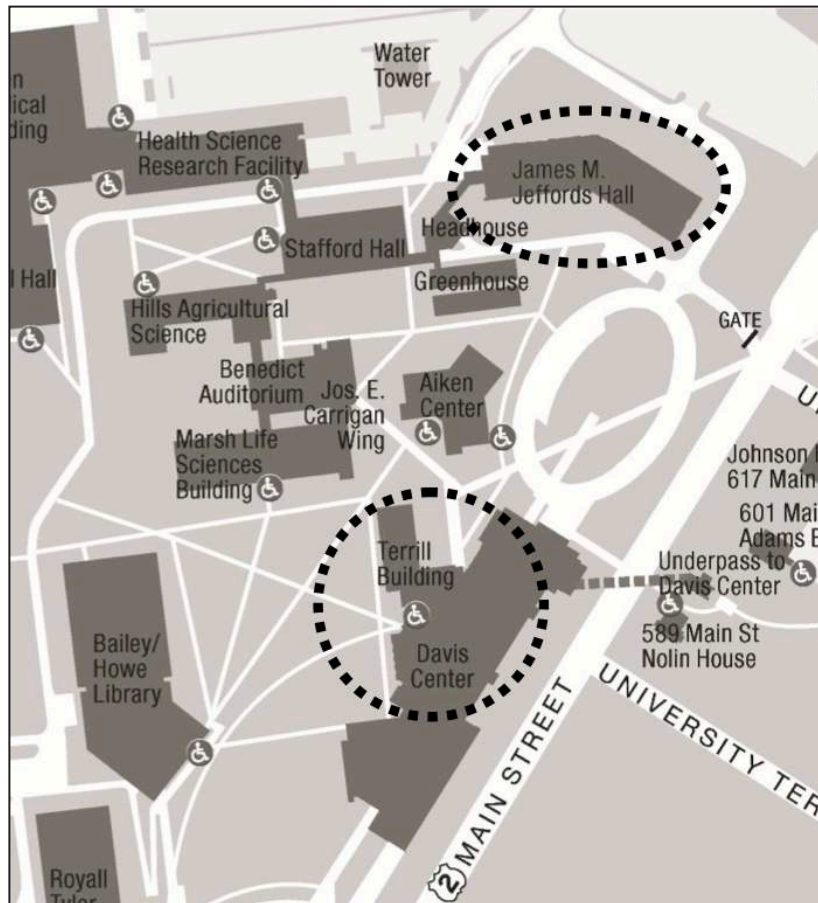
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