

# EnviroNews

Newsletter of the Santa Clara University Environmental Studies Institute

Volume XVII

Winter 2003

## **New Class! ENVS 196: Globalization, Food Systems, and the Environment**

Keith Douglass Warner OFM  
Spring Quarter, Monday evenings

This course is designed to help students become proficient food citizens in an age of global food systems. Nature and society are profoundly intertwined through agriculture and food. The industrial model of agriculture has provided abundant food for many while simultaneously eroding rural societies and degrading the environment. This course will use the modern food system to explore issues of globalization, agroecology and environmental protection, labor and rural society, and social justice.

Keith Douglass Warner OFM is a Franciscan Friar, artist, and geographer living in San Juan Bautista, California, and currently a doctoral candidate in the Environmental Studies Department at UCSC. From 1996 to 1999 he helped lead a popular education campaign about economic justice at St. Anthony Foundation in San Francisco's Tenderloin neighborhood. His research interests include the science and politics of sustainable agriculture, water resources in the West, and the interface between religious traditions and environmental values.

### **Pizza and Advising!**

Thursday, February 6<sup>th</sup>  
5:30-6:30pm, Alumni Science 120

Hear about new classes. Get advice for spring classes, study abroad or summer employment options, and just about anything else you would like.  
Bring a friend!

**Envs Colloquia  
on page 5!!**

### **ENVS 130: Environmental Art**

Prof. Deborah Kennedy  
Mondays 2:15-5:05 pm

Environmental art is a growing and exciting intersection point of creativity, environmental activism, and science. This class provides an intensive introduction to environmental art, and a unique opportunity to work and study directly with an established environmental artist. In this class we will first focus on how contemporary artists are responding to environmental issues. Then we will review key concepts in the field of sustainable development, with special attention to "greening the university" and to inspiring work in both art and science that promise new possibilities for improving our environment. Drawing upon all these resources, students will work in teams to create conceptual-based art installations (a contemporary form of sculpture). All the skills needed to successfully complete these installations--web-based research, creative process, teamwork, fabrication and design--will be taught during the class.

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## Historical Ecology in the Bay Area

by Shana Weber, Ph.D

To the uninitiated, the relevance of looking to history to inform current environmental planning and management efforts may seem unclear. This approach, however, can provide guidance in a number of pressing environmental concerns. By understanding ecological history we can enhance the effectiveness of our human design efforts, reduce long-term costs, and restore ecological value where we live.

The nature of studying historical ecology involves the investigative skills of a wide variety of people from various disciplines. In this effort, tens of thousands of historical materials have been examined at over 100 institutional and personal archives in the nine counties of the Bay Area and in Sacramento, and many are stored and maintained by the San Francisco Estuary Institute (SFEI), a leader in historical ecology analysis.

According to the SFEI, "An understanding of the historical landscape and ecological change is needed to guide emerging plans for species recovery and the sustained ecological health of the Bay Area...Without this historical perspective, policies and prescriptions for the recovery of ecological resources can only be based on highly disturbed and artificial conditions, rather than the natural ecological support functions of the region."

While SFEI examines the broad Bay Area view, the SCU Environmental Studies Institute is poised to host a local archive of historical information through its Santa Clara Valley Historical Ecology Project. In partnership with SFEI and other organizations, we hope to bring together interested parties and contribute to the growing demand for historical and environmental awareness. For more information on historical ecology, visit [www.sfei.org](http://www.sfei.org), or contact ESI.

The Drahnann Center, College of Arts & Sciences, Business School, Engineering School and Career Center are sponsoring the second annual **Major Fair on Wed., February 5th, from 12:00 - 2:30 on the 1st floor of Benson.** The theme of this year's fair is "**Declare Your Passion**". You, particularly freshmen and sophomores, can talk to faculty from a variety of majors in one setting and pick up information to review at leisure. See you there.

### Buy Organic Produce and Fruit!

Join a partnership with AMO Organics Cooperative by subscribing for a weekly or bi-weekly box of organic vegetables. AMO Organics is a cooperative of former farm workers who work together to create a viable farming co-op. The cost is \$23 for a full box (feeds 4) and \$12 for a half (feeds 2), & the boxes are delivered each Wed. to Sobrato.

For more info, contact Desiree at X1192.

# Summer Study Abroad!!!

## Two Weeks in the Caribbean: Trinidad and Tobago

Two weeks of your summer can be spent hiking through rainforests, studying Leatherback Turtles, and boating through mangrove swamps in the Caribbean while learning about the politics involved in managing two 'developed' islands filled with pristine ecosystems. You can also perfect your tropical drawing skills, and explore a topic of your choice. All of this for credit!

The approximate cost, not including airfare is \$3,300. For this small sum, you can earn up to 19 units, 10 during Spring Quarter in Political Science and Biology, and an additional 9 in the summer in Environmental Studies (*Spring quarter enrollment is mandatory in order to take part in the Trinidad summer portion of the program*). The courses will meet several requirements including World Cultures/Regional, Biology, Studio Art, Environmental Science/Policy, Political Science, and International Studies Minor. New this year is the field drawing course offered by artist Edward Rooks. Approximate dates are June 17 to July 2. For more specific information contact Prof. Edgerly Rooks (x4149) or Prof. Gordon (x4138).

## Iceland

The University of Minnesota is pleased to offer Arctic Biology and Geology of Iceland summer programs in partnership with the Univ. of Iceland.

The U of MN's Geology and Fisheries & Wildlife departments have become the academic home for these two intensive programs which provide a comprehensive examination of arctic biology or the unique geology of Iceland. This year's program dates are: June 15 - July 26, 2003.

<http://www.umabroad.umn.edu/EUROPE/iceland1.html>

For more information, visit International Programs in the Cesar Chavez Commons.

**School for Field Studies** also offers summer programs for most of its sites including Turks and Caicos, Kenya, Costa Rica and Australia. Stop in DS 204 for a catalog.

<http://www.fieldstudies.org/>

## The Bay Area Environmental Safety Group (BAESG)

The Bay Area Environmental Safety Group (BAESG) is a not-for-profit known for communicating current Environmental Health and Safety issues to the EH&S professional.

The BAESG was initially founded as an association of safety professionals working in high technology companies; however as the organization grew it developed a constituency of environmental professionals as well. With a membership in excess of 300, the BAESG provides a forum for networking and gaining new insights on regulations, and issues affecting all EH&S disciplines.

The affordable annual membership fee of \$25 (\$12.50 for full time students) entitles members to the monthly newsletter that provides meeting announcements, as well as an extensive listing of employment opportunities in the Bay Area and across the country. Each monthly luncheon meeting hosts different speakers with topics ranging from the latest on environmental compliance to worker's compensation to OSHA legislative updates and the opportunity to meet with one or two vendors of EH&S supplies and services. During the month of February, the BAESG publishes its Membership Directory, a useful tool for networking.

Additional activities include networking with safety professions from the SJ Chapter of ASSE at the annual joint BAESG-ASSE meeting held each August and the annual BAESG Holiday Party held in December. The BAESG also provides several scholarships to students in environmental and/or safety master's programs.

The BAESG is a healthy organization that continues to grow year after year. A membership certificate will be presented with a copy of the BAESG Directory upon receipt of your paid membership. For more information and a membership application, visit <http://www.baesg.org/>.

## A Bird's Eye View of the Valley

by Elianna Strode '02

Have you ever flown in a four-seater Cessna? It is quite a thrill! Especially because I got to wear a headset with microphone so I could speak with the pilot and other passengers over the engine's roar. I was also able to listen in on the exchange of information between other pilots and flight control towers as we flew in different airport air spaces.

Don Whitebread, our gracious pilot and husband of Prof. Nancy Unger of environmental history and women's studies, guided Prof. Shana Weber and I upon a two-hour airborne excursion over the Bay area. Why did we do this? Well, we really needed a fresh perspective of our area of study for the Environmental Studies Institute's Santa Clara Valley Historical Ecology Project in which both of us are involved. A new perspective is what I received, indeed.

We departed from a small Palo Alto airport in our cozy, winged vehicle and flew a couple of loops over the sloughs and salt ponds that decorate the south end of the San Francisco Bay. We had a fantastic high tide look at vibrant oranges, greens, and browns with underlying shadows of the slough ways beneath. As we edged southward and after I recuperated from the physically depressing force of gravity during a swift change in flight direction (it was what I imagine sinking in quicksand would feel like), I began to notice the scenery below.

My initial excitement dissipated as we headed towards the Santa Clara Valley. Talk about urban sprawl! I knew this before, but it is painful to view from above. The impact of development is much clearer from bird's eye view. The once abundant rivers and tributaries of the Valley of Heart's Delight are reduced to percolation ponds and diverted and channelized almost to non-existence. Riparian habitat is encroached upon by urban development. There are smoke stacks, massive homes, shopping centers, cars, freeways, interchanges, parking lots, and industry galore. It was hard to pick out remaining waterways, and there is little evidence of how things may have looked 200 years ago.

So, what did I take away from this experience? A need and desire to educate myself and others about the extent to which we, individually and collectively, have molded and distorted the natural functions of the landscape, often to our own detriment. I was further enlightened about the importance of historical ecology. Understanding past ecological conditions will help us learn how far we have pushed the system to deviate from its natural ecological functions. With knowledge of the past, we can make wiser decisions about how to restore ecological functions in the present and future. As urban development continues, it is ever more important to be smart about how we design things. If we look to the past to inform us, then we can live in ecologically sustainable and healthy cities for everyone.

The project I'm working on with ESI will produce maps that show how humans have altered the landscape in recent and far history. If you are interested finding out more about this, or are interested in research, visit DS 204!

# Summer Research

## TNC Summer/Academic Year Interns in Conservation Science and Policy

ESI is seeking student interns for working on problems of interest to The Nature Conservancy. Ideally, the interns will begin working from 6/17 - 9/13, with two weeks off for vacation to be arranged individually. Workweeks are flexible, and could entail only 4 days per week. Primary sponsoring faculty are Dr. Peter Kareiva, Dr. Michelle Marvier, and Dr. Amy Shachter. However, students are encouraged to work with faculty from a wide range of disciplines, including political science, economics, communications, anthropology, and so forth. There will be three components to the internship:

- working as a library and data processing assistant for Dr. Kareiva (approximately 10 hours per week)
- pursuing a group project with 2-3 other students (approximately 10 hours per week)
- pursuing an individual research project of the student's choice (approximately 20 hours per week)

Projects will be arranged in consultation with Dr. Kareiva and other SCU Environmental Studies faculty, and could cover a wide range of topics including: building and analyzing a database on conservation costs depending on social indicators, mapping the loss of unique ecosystems globally, building a database of environmental threats that can be correlated with rates of decline for indicator species, examining the cost-effectiveness of restoration projects, analyzing the patterns of success and failure of public votes for conservation expenditures, and so on. Fieldwork is possible; but to do fieldwork the intern must provide his or her own transportation. The goals are: to learn skills valuable in the practice of conservation, to contribute to conservation work and get exposed to what this type of work entails, and to (with luck) contribute an analysis or report that can be published.

We favor applicants who can continue to work into fall and winter quarters of academic year 2003/2004. TNC will continue to support those students for 10-15 hours per week, with the hope that their projects be converted into published papers.

To apply or if you have questions, contact Christine Dindia ([mdindia@scu.edu](mailto:mdindia@scu.edu)) for an electronic application. Send the completed application and have two short letters of recommendation sent to [pkareiva@tnc.org](mailto:pkareiva@tnc.org) via e-mail.

**The deadline for applications and letters of recommendation is March 14, 2003.**

## HHMI Community of Science Scholars

Our Biology, Physics, & Chemistry departments place an emphasis on individually mentoring students and providing them with research experiences. Twelve undergraduates will be chosen to work in the labs of participating faculty as part of the Community of Science Scholars (CSS) supported by the Howard Hughes Medical Institute (HHMI).

Students will conduct research full-time in a participating lab during a 10-week period beginning in June. Students will attend weekly research meetings to discuss work-in-progress, and attend weekly ethics discussions about the ethical complexities commonly faced in scientific careers. All students will present their research results at an end of the summer symposium.

More information will be provided at the HHMI CSS Open House on February 5<sup>th</sup> in the Alumni Science Commons. Applications will be available there, or afterwards from DS 204.

## Many, Many, Many Other Options

There are a few other places to check for summer work, one of them being the ESI office. We receive an environmental careers newspaper that has 25+ pages filled with job openings. While some of these are over our heads, the most current issue has a bunch of internships in all environmental fields- science, law, communication, etc. Stop by to flip through it. Also, ecojobs.com usually has many positions posted, and the bulletin board on the back side of Daly Science 200 has the current positions that ESI receives. Finally, professors are always happy to discuss various alternatives with you- just pop into their office hours. Happy searching!

## Environmental Activities / Colloquia on Campus @ Winter Quarter 2003

### Regular Events / Meetings

- GREEN! meetings Wednesday nights at 8:00 pm in Sobrato 31.
- Renewable Energy Seminar Series (Mechanical Engineering) Wednesdays, 4:00-5:00 pm in Room EC 326 in the Engring Center
- ESF Saturday Hikes (Feb. 8, 15, and 22; Mar. 1 and 8)
- Ulistac Natural Area Planting and Weeding Sessions (Saturdays Feb. and March 22)  
10am-2pm Stop in DS 204 for more details and directions

### Campus Events/ Colloquia

- Jan. 29 Globalization Event "Markets and the Environment: Friends or Foes?"  
5:30 p.m. Brass Rail
- Jan. 29 Mechanical Engring Renewable Energy Seminar "Ethanol from Biomass and Other Alternative 'Fuels'"  
Dr. Candace S. Wheeler, Staff Research Scientist, GM Research & Development Center  
4:00-5:00 pm in Room EC 326
- Feb. 1(Sat) GREEN! be carpooling (and possibly bike riding) to the Bay Area Veg Fair here at the SCI Convention Center for free food, fun, lectures, book signings, cooking demos and more! This is an informative and fun free event from 9am to 6pm. We'll probably leave campus around 10am and spend a few hours there (however long we all want). All are invited--veggies, vegans, and carnies.
- Feb. 2 (Sun.) An art-meditation activity integrating spirituality and the environment on Sunday, Feb 2nd 1-3 in Sobrato commons; led by the Brazilian artist Lucila Machado Assumpcao.
- Feb. 5 An open forum in Sobrato Commons 3 -5 p.m. with Machado Assumpcao and John Keith Wood, both of whom run a sustainable agriculture project in Brazil. They will describe the project, how and why it was conceived, obstacles encountered along the way, what they learned, where things stand now, plans for the future, and how it fits into other areas of life. They will have materials and photos available and there will be a q& a session. This is an informal event and all interested campus people are welcome to attend.
- Feb. 5 Mechanical Engring Renewable Energy Seminar "MEMS Enabled Portable Power Generation"  
Dr. David Walther, Research Engineer, Berkeley Sensor and Actuator Center  
4:00-5:00 pm in Room EC 326
- Feb. 6 Globalization Event "Globalization and Disease-or Health?",  
7 p.m. Recital Hall
- Feb. 11 Globalization Event "Globalization and Human Rights"  
7 p.m. Mayer Theatre
- Feb. 12 Mechanical Engring Renewable Energy Seminar "Geothermal Energy—Its Role as a Renewable Energy Source"  
Paul Brophy, President and Principal Geologist, EGS Inc.  
4:00-5:00 pm in Room EC 326

**\*\*\* To receive credit, after you attend, send Christine Dindia an email- [mdindia@scu.edu](mailto:mdindia@scu.edu) with a few sentences describing the event. There will not be a sign-in.\*\*\***

## Environmental Activities/ Colloquia (cont'd)

- Feb. 19 Mechanical Engring Renewable Energy Seminar “Cutting Edge Energy Technologies for the Digital Economy”  
Justin Bradley; TBD, Intel; TBD, Electric Power Research Institute  
4:00-5:00 pm in Room EC 326
- Feb. 26 Mechanical Engring Renewable Energy Seminar “Renewable Energy”  
Dr. Michel Saad, Professor, Santa Clara University  
4:00-5:00 pm in Room EC 326
- Mar. 1 Mechanical Engring Renewable Energy Seminar “Internal Combustion—Is There A Future?”  
Dr. Christopher Edwards, Assoc. & Deputy Director of Global Climate & Energy Proj., Stanford Univ.  
4:00-5:00 pm in Room EC 326
- Mar. 13 Historical Ecology, Dr. Alan Brown, National Park Service, Public lecture SCU campus  
7:30-8:45 pm (Location TBA)

**\*\*\* To receive credit, after you attend, send Christine Dindia an email- [mdindia@scu.edu](mailto:mdindia@scu.edu) with a few sentences describing the event. There will not be a sign-in.\*\*\***

Environmental Studies Institute Daly Science 204 Santa Clara University 500 El Camino Real Santa Clara, CA 95053	Phone: (408) 551-7086 Fax: (408) 554-2312 ESI Email: <a href="mailto:ashachter@scu.edu">ashachter@scu.edu</a> <a href="http://www.scu.edu/envs">www.scu.edu/envs</a>	
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