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where humans & the environment come together

ESRM PROGRAM E-NEWS
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Fire continues to be one of the most challenging issues for resource managers in the wildland interface. In this photo taken by Steven Norris (Biology) in December 2006, residents of University Glen watch anxiously as Round Mountain burns.

ESRM STUDENT PROFILE

Araceli Dominguez currently lives in Los Angeles and works with California State Parks in the Malibu area as an Interpretive Specialist. She has always been passionate about the marine environment and focused her capstone project on low frequency active sonar impact on whale migration along the Southern California Bight. As a result, Araceli also works with the National Oceanic and Atmospheric Administration as a MERITO academy assistant. MERITO (Multicultural Education for Research Issues Threatening Oceans) is the new multicultural education program at the Channel Islands National Marine Sanctuary. This program delivers bilingual ocean conservation products and services to students (4th-7th grade), teachers, adults, and families living near the Santa Barbara Channel. It targets Hispanic citizens (37% of the population of Santa Barbara and Ventura counties), and includes Hispanic-Adult Outreach, Community Events, Professional Development, Field Activities, Internships and Scholarships, and Production of Bilingual Outreach Products. Araceli organizes a number of community events in the area like the California Coastal Cleanup, and is always on the lookout for interested CSUCI students that want to volunteer. You can reach Araceli by email at aracelidmngz@yahoo.com.

FACULTY ACTIVITIES

Don Rodriguez, associate professor of Environmental Science & Resource Management, worked this summer on developing a planning process for negotiating compromise regarding appropriate land use practices on and around boundaries of natural areas. The process he and a colleague developed was used to address a stalemate in the Forest Planning Process involving elected officials and land managers. His research involved working with local governments in the Rocky Mountain region to develop a multi-jurisdictional collaborative planning process for resolving cross-boundary issues between six mountain communities and the National Forest Service. Rodriguez spent much of his time documenting the implementation of the planning process in Summit County, Coloado.

Sean Anderson, assistant professor of Environmental Science & Resource Management, has spent much of this past year continuing to design and implement the first-ever ecological restoration effort in eastern Turkey. This multinational project involves colleagues from Stanford University and Turkey's Kafkas University as well as students from across the U.S., Europe, and Turkey. His last trip this fall was a whirlwind tour wherein his group met with various village chiefs, government ministers, mayors, and a governor to secure high-level commitments to preserving their Kuyucuk Lake site. Related work from California was presented at Oxford University in an invited presentation on the knock-on effects of Climate Change. Additionally, local wetland restoration and sustainable seafood projects are keeping Dr. Anderson busy.

FACULTY PROFILE

Christopher Cogan has recently joined the CSUCI faculty from the Alfred Wegener Institute for Polar and Marine Research in Germany. While in Germany, Dr. Cogan led research teams studying Arctic coastal biodiversity and developed science guidelines to prioritize long-term interdisciplinary coastal research. He was awarded a Ph.D. in Environmental Studies from UC Santa Cruz where he worked on biodiversity analysis for land-use and reserve system planning. His Masters work was completed at UC Santa Barbara where he received a degree in Geography while working with geographic information systems (GIS) and remote sensing studies on the endangered California condor. Dr. Cogan has also worked at the University of Idaho on GAP Analysis for national reserve system planning, and with the U.S. Fish and Wildlife Service. His key research interests are biodiversity, interdisciplinary science, environmental GIS applications and data synthesis.

RECENT STUDENT ACCOMPLISHMENTS

Kahler, Christopher. 2007. Shoreline Survey of Coastal Birds in Ventura County. Poster presented at the Southern California Conference for Undergraduate Research. California State University Los Angeles. November 17.

Sierra Kelso, Christy Brigham, Jolene Pucci, John Tiszler and Randy Philips. (2006). Visual Cues to Seed Viablilty in Poison Hemlock and Harding Grass (California). Ecological Restoration, 24 (4). December.

Miyata, Kenji. 2007. American Planning Association National Scholarship recipient.

Rodriguez, Donald A., **Carolyn Casavan, Amy Spandrio,,** and **Samuel Bennett,** (2006). Revolon Slough water monitoring project final report. U.C. Hansen Trust. Division of Agriculture and Natural Resources. 62pp. December.

Wilson, Jesse. 2007. Quantitative Method for selecting the best subspecies of Channel Island fox for a mainland captive breeding program. Poster presented at the Southern California Conference for Undergraduate Research. California State University Los Angeles. November 17.

RECENT FACULTY ACCOMPLISHMENTS

Anderson, Sean. 2007. Maximus Award, CSUCI Faculty Member of the Year.

Anderson, Sean. 2007. Seasonal Rhinitis and Invaded Landscapes: Sub-lethal Costs of a Changing Environment. Oxford University Roundtable on Climate Change. Oxford University, August 11-17, 2007.

Anderson, Sean, J. Lambrinos, T. Huggins, B. Prigge, T. Gillespie, G. Schrott, and J. Malone. 2006. Resilience of an urban coastal sage scrub remnant to wildfire fuel. 91st Annual Ecological Society of American Meeting, August 6-11. Memphis, Tennessee.

Cogan, Christopher B. 2007. Environmental science challenges and the expanding need for geographic information systems (GIS). Paper presented at the GIS Day Annual Conference for Santa Barbara and Ventura Counties. Ventura College, Ventura, CA. 16 November 2007.

Cogan, Christopher B. 2007. International Arctic Science Committeee (IASC) Arctic Coastal Biodiversity (ACBio) Working Group Report. http://www.arcticportal.org/iasc/

Cogan, Christopher B. (Chairperson) 2007. Second International Conference on Arctic Research Planning (ICARP II) Science Plan on Arctic Coastal Processes. In: Arctic Research: A Global Responsibility. http://arcticportal.org/iasc/science-development/icarp

Hennig, Benjamin D., **Christopher B. Cogan**, Inka Bartsch, and Christian Hass. 2007. Hyperspectral remote sensing and analysis of intertidal zones: A contribution to monitor coastal biodiversity. Proceedings of the 19th Conference and Exhibition on Applied Geoinformatics (AGIT 2007), Salzburg, Austria.

Rodriguez, Donald A., Angela Chapman, Greg Sanders, Christopher Kahler, and Garrick Thomsen. 2008. A comparison of current and historical shorebird populations in Ventura County, CA. Poster presented at the 7th California Islands Symposium. February 5-7 Mandalay Embassy Suites Hotel, Oxnard CA.

Rodriguez, Donald A. and George N. Wallace. 2007. A multi-jurisdictional collaborative planning process for resolving cross-boundary issues. Paper presented at the George Wright Society Biennial Conference on Parks, Protected Areas, and Cultural Sites: Rethinking Protected Areas in a Changing World. St. Paul, Minnesota, April 16-20, 2007.

Rodriguez, Donald A. and Phinney, Carolyn. 2007. Diversifying the environmental movement: What the research tells us. Paper presented at Summit 2007: Diverse Partners for Environmental Progress national conference. University of North Carolina, Charlotte. Oct. 8-10.

PROGRAM ACCOMPLISHMENTS

ESRM is collaborating with researchers from elsewhere in California (Stanford University) and Turkey (Kafkas University) to document and conserve the extant biological communities of eastern Turkey in and around the province of Kars. In particular we are focused on conserving increasingly rare wetland communities. Rather than simply protecting these regions, we hope to put a tangible monetary value upon them (by making them ecotourism destinations) as an inducement for their continued conservation. Eastern Turkey is smack dab in the middle of the biannual flyway for birds migrating between northern Europe and equatorial Africa and so harbors a tremendous diversity and density of migratory and semi-resident birds. In addition to documenting these wetland communities, setting up Turkey's first bird banding stations (staffed with American, Polish, and Turkish volunteers and students), characterizing the overall state of affairs of the biological resources throughout the region, and restoring wetland functioning, we are working on the permanent protection of select areas and training of the first generation of Turkish conservation biologists.

IN THE NEWS

Knowledge of the status of populations of shorebirds serves as a sensitive and integrative metric of the health of coastal communities in general and potentially as an indicator of human disturbances (such as oil spills, harassment from pets or recreation activities, and pipeline beach construction). Don Rodriguez (ESRM) is collaborating with Angela Chapman (Biology) in a study that will improve our understanding of the effects of human activities on the coastal environment.

The motivation for this study is continuing the development of a long term data set of coastal bird observations in the areas adjacent to offshore oil and gas operations. Such a data set allows surrounding management agencies such as the National Park Service (NPS), Minerals Management Service (MMS), and the National Oceanic and Atmospheric Administration (NOAA) to perform rigorous analyses on any potential effects of offshore operations on the sensitive coastal shorebirds that inhabit the region. Seabirds and shorebirds have long been recognized as among the most vulnerable fauna in case of oil spills and as sensitive harbingers of the health of the coastal marine ecosystem because of their biology and ecology coupled with generally long life. The past decade has also seen major physical and climatic changes along the California Coast caused by major El Nino events, global climate change with shifting temperatures related to the Pacific Decadal Oscillation (PDO), and increasing urbanization of the coast. All these factors make it even more imperative that a long term data set of shorebird populations be established and continued in order to allow more spatially and temporally limited changes in coastal populations (that may be triggered by human induced impacts) from those that are more global in nature and therefore detectable only over longer temporal and spatial scales. Recent ESRM graduate Chris Kahler and ESRM senior Garrick Thomsen (pictured in the article) are working as research associates to investigate and characterize the shorebird species and their seasonal populations along the Ventura County coastline. The research should be able to detect geographic and temporal variability in abundance and composition of the shorebird community.

View the original article and video from the Ventura County Star online here.