RM-CESU NEWS & EVENTS

2012 Biennial Cooperative Ecosystem Studies Units (CESU) Network National Meeting

The Seventh National Meeting of the Cooperative Ecosystem Studies Units (CESU) Network took place at Howard University Law School in Washington, DC on June 12-14, 2012. The biennial national meeting is a key event for the CESU Network, fostering increased interaction and open exchange of information between CESU partners and development of collaborative approaches that transcend disciplinary, institutional, and geographic boundaries. Participants in the national meeting included agency managers, scientists, and educators from across the federal government, as well as university administrators and faculty, and other conservation professionals who practice and support science-based natural and cultural resource management. This year’s meeting included a focus on cultural resource management and engaging youth in natural and cultural resource stewardship and science in addition to a broad array of topics of general interest to all CESU partners.

http://www.cesu.psu.edu/meetings_of_interest/2012_CESU_National_Meeting/2012_CESU_National_Meeting.htm

RM-CESU Partner Recipient of both 2012 National CESU Award

The two national awards announced at the CESU Biennial Meeting are both affiliated with Colorado State University and the National Park Service through the Rocky Mountains CESU:

Karen Trevino, Director of the National Park Service Natural Sounds Program, and Peter Newman, Associate Professor, Warner College of Natural Resources, Colorado State University. Beginning in 2005, the Natural Sounds Program of the National Park Service (NPS) developed a close working relationship with Dr. Peter Newman at Colorado State University (CSU) by initiating a series of task agreements through the RM-CESU. These agreements served both the NPS and CSU through the creation of a network of scientists that could contribute to research and monitoring of park soundscapes, and help educate the next generation of park managers and scientists to address soundscapes as an emerging park resource.

Through these agreements, the cooperators developed projects conducted in an ever-growing number of parks, including Muir Woods National Monument and Yosemite, Grand Teton, Sequoia, Yellowstone, Denali, Grand Canyon, Bryce Canyon, Zion, and Glacier National Parks. In addition, the NPS and CSU organized a series of national workshops to help guide this program of research and develop collaborative relationships with other agencies and scientists, including the Federal Aviation Administration, Volpe National Transportation Systems Center, Southern Utah University, University of Vermont, University of Montana, and Resource Systems Group.
A major accomplishment of this collaboration was the special issue of Park Science (2010), organized by Karen Trevino and Peter Newman, that showcased the work of NPS staff, CSU students and scientists in understanding and managing soundscapes in national parks. (http://www.nature.nps.gov/parkscience/index.cfm?IssueID=21)

The multifaceted program developed and nurtured over the past six years by Karen Trevino and Peter Newman is an exemplar of the potential of the CESU system to foster a coordinated, collaborative program of research, management, and education that can help land management and environmental agencies address emerging issues and challenges such as the soundscapes of national parks.

**Public Lands History Center at Colorado State University.** The Public Lands History Center provides state-of-the-art research, technical assistance, and education for parks and programs that help them fulfill the NPS mission for effective resource management. The national parks of the Intermountain West region have very diverse research and stewardship needs, and the staff and faculty at the Public Lands History Center leverage park capacities and expertise to accomplish an impressive and diverse array of projects that are implemented through CESU agreements. These include documentation of historic landscapes, analysis of resource use by park visitors, research and authorship of administrative histories for parks and programs, the collection of original data such as oral histories, analysis of the impacts of light on delicate museum objects, development of plans for best stewardship and display of historic furnishings, the creation of exciting 'science minute movies,' and more.

The professionalism of Janet Ore, Mark Fiege, Maren Bzdek, and the other faculty and staff at the Center as well as undergraduate and graduate students is a by-word at the RM-CESU. Products are of the highest quality, they are disseminated in a variety of professional and public venues, and are delivered to parks and programs on time and on -- if not under -- budget. The excellence and diverse scope of the Center's work and products, their consistent incorporation of student energy and talent, and their capacity to deliver to parks and programs in a cost-effective, timely, and collegial manner make a significant contribution to the CESU concept and the Network as a whole. The Center sets a very high standard for CESU partnership and enhances the reputation of the CESU system with parks, the NPS system, and the public. (http://www.cpha.colostate.edu/)
RM-CESU Announces the Annual Competition for Student and Project Team Awards: The Rocky Mountains CESU annually recognizes outstanding students and projects through an awards program.

The **RM-CESU Student Award** recognizes "above and beyond" accomplishments by students involved in Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU) projects. Nominations may be submitted by any representative of the federal agency that sponsored the RM-CESU project, or by the student’s RM-CESU university.

The **RM-CESU Project Team Award** program was established as a way for a Project Team (the academic institution and the federal agency) involved in Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU) projects to be recognized for their outstanding accomplishments.

**Nominations for both Student Award and Project Award are due August 1, 2012.** The Award winners will receive a citation and give a presentation on their project results at annual RM-CESU Fall Meeting in October. For nomination instructions, go to the RM-CESU web site at: [http://www.cfc.umt.edu/cesu/NEWCESU/WhatsNew/default.htm](http://www.cfc.umt.edu/cesu/NEWCESU/WhatsNew/default.htm). For more information contact Lisa Gerloff, RM-CESU Executive Coordinator, at 406-243-5346, lisa.gerloff@umontana.edu

---

**2012 BioBlitz in Rocky Mountain National Park**

On August 24 and 25, 2012, the sixth in the series of National Park Service-National Geographic Society BioBlitzes is scheduled to take place in Rocky Mountain National Park. The event is being held each year leading up to the National Park Service Centennial in 2016.

Hundreds of scientists, students, teachers, and volunteers will gather to participate in this event, a two-day celebration of biodiversity which centers on a 24-hour discovery of species. Teams of experts and volunteers will explore the park’s majestic mountains, meadows, lakes, streams, forests and tundra to have as many personal species discoveries as possible.

Another wonderful part of the event is a two-day, family friendly biodiversity festival, featuring fun activities, engaging speakers, information booths, and scientific demonstrations. The festival will be held at the Estes Park Fairgrounds in Stanley Park.


**Glacier National Park Ice Patch Archeology Short Video Now on Youtube:** This short video explains how this project is seeking to protect ancient perishable cultural and natural items from loss due to exposure from melting ice, and also the unique collaboration that is making this work possible. The project is funded by the NPS Climate Change Response Program and facilitated through the Rocky Mountains CESU. [http://youtube.be/ifmdf2RHSk8](http://youtube.be/ifmdf2RHSk8)
Phase I of Visitor Center National Register Archeology: Remote Sensing

On June 21, 2012, Rocky Mountains CESU Cultural Specialist Pei-Lin Yu worked with Geophysicist Steve Sheriff from the University of Montana on a remote sensing project at Grant-Kohrs Ranch National Historic Site. Grant-Kohrs Ranch is scoping a new Visitor Center, and needs to conduct research to determine if the preferred construction site (the location of the old Stuart-Menard homesite) contains archeological materials. The house was constructed by Thomas Stuart around 1880, occupied by the Thomas family and then the Menard family, and burned and demolished in the 1930s by the ranch owners. Remote sensing allows for a non-ground disturbing way to assess the areas where archeological items and features are most likely to occur, and select areas for future excavation. The park has requested technical assistance for a Determination of Eligibility (DOE) of the Stuart-Menard homesite to the National Register of Historic Places, and Dr. Yu also assisted with drafting the scope of work for the first phase of remote sensing, located expertise for remote sensing and archeological excavations, helped to facilitate the RM-CESU agreement for the first phase of work, and will write the archeology portion of the DOE. Yu will also assist with development of the scope of work for archeological testing in FY 13.

On June 21 the project was fortunate to have the help of a Youth Conservation Corps high school student crew Annie Lombardi, Shawna Kimerly, Amber Gill, Parker Dippold, Jacob Duerr, and Sean Wells. At the request of Park Superintendent Laura Rotegard and Chief of Integrated Resources Chris Ford, Drs. Sheriff and Yu gave a short talk about remote sensing and archeology, discussed careers in the sciences, then took students out to the visitor center proposed site to show them how remote sensing is done in the field. Students established a grid, and took turns walking transects with the magnetometer to
detect sub-surface changes in magnetic field. There are two large 'hot spots' at either end of the locality that may indicate buried metal pipe or trash. Dr. Sheriff then used ground-penetrating radar (GPR), which measures changes in sub-surface density, over the hot spots to cross-check the magnetic results.

Dr. Yu did an informal pedestrian walkover of the site to assess the surface integrity of archeological materials and located hundreds of artifacts concentrated in the central portion. Found objects include fragments of medicine bottles, beer and Coca Cola bottles, teacups and saucers, a small gold rimmed bowl or coffee cup, windowpane glass, a small red seed bead of the type used for Native American fine work on leather, two crystals of the type that hang from lamps or chandeliers, a watch or clock gear, a key for turning up flame on kerosene or gas lamps, a metal pencil eraser clamp, and cast iron pieces (door hinge, stove fragments, and others). The artifacts, which have been trampled, burned, and impacted by grazing, indicate a lifestyle of modest comfort to be expected from a ranch hand's family in that time period.

PARTNER NEWS & EVENTS
Announcements:
University of Montana
College of Forestry and Conservation helps Glacier National Park monitor visitor use CFC's Wayne Freimund and a team of students have been systematically monitoring visitor use of Going-to-the-Sun Road since 2005, with a particular emphasis on how parking areas were used before and after the park's shuttle system was put in place in 2007. They're also trying to better understand the relationship between the volume of cars and shuttles traveling the road and the increased use of connecting trails along the corridor. Read more here: http://missoulian.com/news/local/glacier-park-seeks-a-balance-of-access-preservation-on-going/article_c6658ece-b83a-11e1-8756-001a4bcf887a.html

US Geological Survey
U.S. Geological Survey Details Effects of Climate Change on Water Availability in 14 Local Basins Nationwide change projections indicate a steady increase in temperature progressing through the 21st century, generally resulting in snowpack reductions, changes to the timing of snowmelt, altered stream flows, and reductions in soil moisture, all of which could affect water management, agriculture, recreation, hazard mitigation, and ecosystems across the nation. Despite some widespread similarities in climate change trends, climate change will affect specific water basins in the U.S. differently, based on the particular hydrologic and geologic conditions in that area. The U.S. Geological Survey (USGS) has released a
study projecting changes in water availability due to climate change at the local level. So far, the USGS has applied these models to fourteen basins including South Fork of the Flathead River, Montana. To view study visit: http://www.usgs.gov/newsroom/article.asp?ID=3205#.T75N67DLyI4

Calendar of Events:


September 24-27, 2012: Pathways to Success Conference & Training: Integrating Human Dimensions into Fish and Wildlife Management, Breckenridge, CO. The intent of this conference is to provide a forum where scientists and practitioners can address a wide variety of topics that are critical to the state of the human dimensions of fish and wildlife profession. http://www.hdfwconference.org/

October 1-2, 2012: Pacific Northwest Climate Science Conference, Boise, ID. This conference provides an annual forum to exchange scientific results and policy and management options related to climate change and climate impacts research focused on the Pacific Northwest. The conference attracts a wide range of interested participants, including policymakers, resource managers, public agency staff, NGO personnel, and agency and university scientists. http://pnwclimateconference.org/

October 11-12, 2012: 2012 Montana Water Conference, Fairmont Hot Springs, MT. The conference is titled Montana’s Water Resources: Water Management in the Face of Uncertainty. A pre-conference field trip will be held in the area on Wednesday, October 10. Organized by Montana AWRA and MSU’s Montana Water Center. The submission deadline is Friday, June 22. http://water.montana.edu/awra/

March 11-15, 2013: 2013 George Wright Society Meeting, Denver, CO. Every two years, the George Wright Society organizes the USA’s premier interdisciplinary professional meeting on parks, protected areas, and cultural sites. Call for Proposals due October 1, 2012. http://www.georgewright.org/gws2013

STUDENT OPPORTUNITIES

Call for Proposals for the Whitebark Pine Student Research Grant The mission of the Whitebark Pine Ecosystem Foundation (WPEF) is to “promote the conservation of whitebark pine and other high elevation five needle white pine ecosystems through education, restoration, management, and research.” In support of this mission, the WPEF will be offering a research grant of $1000 to an undergraduate (writing an undergraduate thesis) or graduate student (MS or PhD) conducting research on whitebark pine. Relevant areas of research include, but are not limited to: threats to whitebark pine, including mountain pine beetle, white pine blister rust, successional replacement, and climate change (only in whitebark ecosystems); interactions with wildlife, such as Clark’s nutcracker or other birds, red squirrels and grizzly bears; restoration strategies for whitebark pine, including both field operations and nursery seedling production; and ecosystem level impacts of whitebark pine die off. Application materials due 8/31/2012. http://www.cfc.umt.edu/CESU/NEWCESU/Assets/Postings/2012/Whitebark%20Pine%20Student%20Research%20Grant.pdf
TRAINING AND COURSE OPPORTUNITIES

The University of Montana’s NRSM 405 Managing the Wilderness Resource (4 credits Undergraduate)/NRSM 561 Managing Wilderness Ecosystems (4 credits Graduate) will be offered online with a facilitated discussion group led by instructor Kari Gunderson. Invited guest instructors may include Carhart Wilderness Training Center staffs, academics, and working wilderness managers. The online format enables students to work through the course efficiently while benefiting from discussion with other students, agency managers, and academics. In this course you will study ecosystem characteristics and basic principles of wilderness management. Separate chapters discuss management of specific wilderness resources such as fire, wildlife, cultural and historical sites, etc.; managing non-conforming uses such as grazing, mining, and motorized vehicles and equipment and mechanical transport. Also discusses the use of primitive means to achieve management objectives, use of the minimum tool, and no-trace camping methods. Dates: October 1, 2012 thru January 22, 2013 (The course runs for 16 weeks). Registration deadline: Friday, September 21, 2012. The course will be capped at 16 students. For more information (course objectives, costs, books), please see announcement at http://wmdep.wilderness.net/405_561.htm

Wetland Restoration Course: Planning for Success The Montana Water Center will offer a three day course, Wetland Restoration and Management with a Focus on Monitoring for Success, at MSU Bozeman on September 18-20, 2012. Visit the Montana Water Center website, http://watercenter.montana.edu/training/wetlands/default.htm, for more information about this course and registration options as it becomes available.

August 6-10, 2012: Sediment Transport in Stream Assessment and Design, Logan, UT. Cost: $1850 ($1600 Early Bird Special if Registered Before June 1st). This course is intended for those who wish to understand and apply the principles of sediment transport to alluvial channel assessment and design. Principles of open channel flow and sediment transport are combined with watershed-scale, hydrologic and sediment source analysis to place channel assessment and design in the appropriate context. Threshold and alluvial channel design methods are presented along with guidelines for assessing and incorporating uncertainty. The course balances advance reading, lecture, field work, and hands-on exercises for estimating sediment supply, calculating sediment transport rates, and forecasting channel response to water and sediment supply. This course is intended for participants who are familiar with basic principles of river geomorphology. https://cnr.usu.edu/streamrestoration/htm/course-information

October 23-25, 2012: Partnering with Beaver in Restoration Design Workshop, Logan, UT. Cost: $1,000. This 3-day workshop is intended for resource managers, restoration practitioners, researchers and others interested in the use of beaver for restoring rivers and/or streams. Participants will come away with a) an appreciation of beaver ecology and the complex feedbacks between beaver activity, hydrogeomorphic responses, riparian vegetation and fish ecology; b) knowledge of past and ongoing restoration projects using beaver; c) a working understanding of considerations in restoration designs using beaver; d) an introduction of how to develop dynamic designs utilizing beaver; and e) how to manage public expectations regarding potential restoration responses involving beaver. The workshop will include field trips to a number of active local beaver colonies, hands-on design exercises, and some interactive lectures and discussions. https://cnr.usu.edu/streamrestoration/htm/course-information/#beaver
RESEARCH/FUNDING OPPORTUNITIES

The FY2012 Landscape Conservation Cooperatives (LCC) national funding opportunity has been posted on Grants.gov under Funding Opportunity Number F12AS00218. The closing date for applications is 7/15/2012. Under this funding opportunity, financial assistance from the USFWS will be awarded for projects that address the following priority theme areas: Synthesis Products to Advance National LCC Network Coordination and Function; Addressing Existing Needs Identified by National or Large-scale Conservation Efforts; Development of Performance Measures for Landscape Conservation and the LCCs; Enhancing Landscape Planning and Ensuring Compatible Landscape Planning across the National LCC Network; and LCC Network-wide Data Integration and Dissemination. Projects that address these themes will provide critical science, information, or tools that have wide utility to multiple LCCs or the LCC Network and will increase the capacity of the LCCs and the associated partner organizations to conduct landscape conservation. View announcement call here: http://www.cfc.umt.edu/CESU/NEWCESU/Assets/Postings/2012/lcc_osa_notice_of_funding_opportunity_and_application_instructions_061412-ct-bst.pdf

NPS Now Accepting Applications for your Community’s Recreation & Conservation Projects

The National Park Service helps partners plan successful locally-led outdoor recreation and natural resource conservation projects. Rivers, Trails & Conservation Assistance (RTCA) staff help with partnership-building to achieve community-set goals, organizational development, assessing resources, developing concept plans, public education and participation, and identifying potential sources of funding. Information is available online about our current efforts in the Intermountain states.

Who may Apply: The project applicant may be a state or local agency, tribe, non-profit organization, or citizens’ group. Federal agencies may apply in partnership with a local organization.

How to Apply: Download the 2012 application and guidelines on the RTCA website - http://www.nps.gov/ncrc/programs/rtca/contactus/cu_apply.html. Applicants are strongly encouraged to discuss their project with RTCA staff before sending in an application.

Due Date: Applications are due by August 1, 2012 for assistance beginning the following fiscal year (October 1 through September 30).

JOB OPPORTUNITIES

Assistant Professor of Human Dimensions of Natural Resources, Warner College of Natural Resources, Colorado State University, Fort Collins, CO (Applications must be submitted by 10/1/2012; The position will begin in August 2013)

Assistant or Associate Professor, Natural Resources & Environmental Law, University of Montana, Missoula, MT (screening begins 9/15/2012)

Wildlife Biologist, MT Fish Wildlife, & Parks, Bozeman, MT (closes 8/10/2012)

Dean, College of Letters and Science, Montana State University, Bozeman, MT (For full consideration, materials should be provided by 8/1/2012)

Staff Curator (Museum Management), National Park Service, Omaha, NE (closes 7/23/2012)

Forester, Clearwater National Forest, Lochsa Ranger District, Kooskia, ID (closes 7/18/2012)
Archeologist, Bureau of Reclamation, Loveland, CO (7/16/2012)

Rangeland Management Specialist, Beaverhead-Deerlodge National Forest, Jefferson Ranger District, Whitehall, MT (closes 7/13/2012)


Geologist, Bureau of Land Management, Ely, NV (closes 7/10/2012)

Fire Ecologist, NPS Fairbanks Administrative Center, Fairbanks, AK (closes 7/9/2012)

For details on all opportunities visit http://www.cfc.umt.edu/CESU/NEWCESU/Postings/default.htm and click on “Jobs”.

MEETINGS OF INTEREST

July 12-13, 2012: Fourth International Conference on Climate Change: Impacts and Responses, University of WA, Seattle, WA. This interdisciplinary conference is for scholars, teachers, and practitioners from any professional discipline who share an interest in-and concern for-the societal impacts of climate change. Within this broad context, this year's conference theme emphasizes local and regional responses to global issues of climate change and impact. Proposals for paper presentations, workshops, posters/exhibits, or colloquia are invited. http://www.Climate-Conference.com

July 15-18, 2012: North America Congress for Conservation Biology - Bridging the Gap: Connecting People, Nature, & Climate, Oakland, CA. This Congress will feature numerous symposia, concurrent sessions, workshops, short courses and field trips. Symposia topics will include such diverse topics as: protected area planning for climate change resilience; Landscape Conservation Cooperatives; freshwater conservation; bridging the implementation gap; decision support tools for policy evaluation; employing traditional ecological knowledge; and marine protected area planning. The mascot for NACCB is the Stoney the Pika. There will be a symposium titled Pikas in Peril? - Distribution, Population Trends, and Resilience of the American Pika (Ochotona princeps). http://www.scbnacongress.org/


August 19-23, 2012: Annual Meeting of the American Fisheries Society, St. Paul, MN. The 2012 AFS Annual Meeting will bring professionals together to network and share knowledge in fisheries science and management. Speakers will present a broad range of Fisheries topics at the plenary session, technical symposia and poster session as well as in continuing education courses. http://afs2012.org/

September 24-28, 2012: Aerosol and Atmospheric Optics: Visibility and Air Pollution Conference, Whitefish, MT. This international conference will provide a technical forum on advances in the scientific understanding of the effects of aerosol on urban, regional, continental and global scale haze and radiation balance. The conference will specifically address: emission sources, atmospheric conditions and aerosol characteristics associated with haze and aerosol urban visibility; regional haze; climate forcing; innovative aerosol, haze and radiation balance monitoring assessments and modeling methods; and urban and regional haze and aerosol climate forcing policy, regulatory, and economic issues related to implementation of U.S. EPA standards and rules, including the adopted emissions controls in state and EPA permits, rules, and
implementation plans for the Regional Haze Rule and the expected impact of the anticipated PM Visibility and SO2/NOx Secondary Standards.  http://visibility.awma.org/


October 1-2, 2012: 3rd Annual Pacific Northwest Climate Science Conference, Boise, ID. http://pnwclimateconference.org/call-for-special-sessions.html


November 17-19, 2012: 4th International Conference on Science in Society, University of California, Berkeley. This conference addresses the social impacts, values, pedagogies, politics and economics of science. It is an inclusive forum that welcomes a breadth of perspectives on science from practitioners, teachers and researchers representing a wide range of academic disciplines. http://science-society.com/conference-2012/


If you would like to post an announcement in the next RM-CESU Newsletter or on the website, please contact the RM-CESU Coordinator at rmcesu@cfc.umt.edu.