RM-CESU NEWS & EVENTS

RM-CESU presence at 10th annual Waterton-Glacier Science & History Day

On July 30, three staff from the RM-CESU assisted Glacier National Park and the Crown of the Continent Research Learning Center at the 10th annual Waterton-Glacier Science and History Day held in West Glacier, MT. Lisa Gerloff (Executive Coordinator), Kathy Tonnessen (Research Coordinator, NPS) and Pei-Lin Yu (Cultural Specialist, NPS) attended. Every summer, Waterton-Glacier International Peace Park presents this special all-day program highlighting the parks’ science and history. This event brings together scientists and historians conducting research in Glacier and Waterton Lakes National Parks, giving them an opportunity to share their insights and research results with the general public. The event was free and open to the public.

This year’s offerings included

- a bat inventory that has documented three new species in the peace park
- results of non-invasive hair sampling to estimate grizzly bear populations
- history of the Civilian Public Service Corps in Glacier during World War II
- a behind the scenes look at rehabilitation of the Going-to-the-Sun Road
- growth of alpine vegetation near receding snowfields and glaciers
- what lake sediment cores reveal about the past 13,000 years of local environmental history
- ecological restoration and introduced trout populations
- complex relationships among elk, wolves, aspen, and fire

Pei-Lin Yu served as the moderator for the History Session, which included "The Men Who Maintained Glacier National Park During World War II, Memories from the Civilian Public Service Camp #55 Crew" by Marcella Sherfy Walter, Public Historian, Montana Historical Society, and "Rehabilitation of the Going-to-the-Sun Road, Behind the Scenes" by Jack Gordon, Landscape Architect, Glacier National Park, and Michael Baron, Resident Field Engineer, Glacier National Park, Western Federal Lands Highway Division.

A number of the projects highlighted at this symposium were facilitated through the Rocky Mountains CESU, and presenters included RM-CESU partners from University of Montana, Montana Tech, USGS and Glacier National Park.

**Salish Kootenai Field School at Grant Kohrs Ranch, July 12, 2013**

By Pei-Lin Yu, Rocky Mountains Cooperative Ecosystem Studies Unit Cultural Specialist

On July 12 I visited the Salish Kootenai College (SKC) Archeological Field School at Grant Kohrs Ranch (GRKO) on my personal time. There are two main goals of this unique field school experience. First, Native American and non-Native American students are acquiring a vital field skillset in excavation and sampling that complements their coursework in historic preservation under the SKC’s new Historic Preservation curriculum. Second, GRKO is benefitting through the field school’s archeological exploration of the physical integrity of the Stuart-Menard Homesite and associated features, which were razed in the 1930s by the original owners of the ranch. The results of the pedestrian survey and mapping, as well as test excavations, will be used by the park to assess the eligibility of this archeological site to the National Register of Historic Places, which in turn will guide decision-making about locating a new Visitor Center at this location.

On my site visit I observed students at work mapping, excavating test units, screening for artifacts, discussing possible features uncovered and field-describing and cataloging recovered artifacts. I discussed preliminary results with Principal Investigator Dr. Jeffrey Bendremer and learned that the integrity of the site is better than anticipated. Just below the current ground surface, the team has uncovered two linear slab rock features indicative of a building foundation but located several meters north of the expected house location as described in the historic literature. In addition, there is a probable brick-paved ‘living surface’ that could be interior, and a brick alignment that is a possible chimney feature. The bricks are...
bright red and friable, possibly made at a small brickworks in the vicinity. The most intact discovery is a round, rock-lined well that is in very good condition at about 1 m depth. In addition, artifacts indicate household and farming objects from the period of occupation, c. 1880 through the late 1920s.

The park is really pleased to partner with SKC on this project, and has incorporated the project into its Teacher Ranger Teacher program as well as provided excellent signage for park visitors curious about archeology. GRKO has provided supplies and facilities expertise as well as popsicles to the team. This project is unique in involving Native students from a tribal college in an archeological excavation project: students are learning culturally appropriate and scientifically valid field techniques that will add to skillsets that are directly applicable to careers in historic preservation and cultural heritage within tribal government or beyond. Students were energetic and excited about the discoveries they were documenting. Most of them plan to return as students or as volunteers for a second season of work in summer '14, and two are applying for museum collection internships this coming year.

A project annual report will be provided to the park and RM-CESU in the spring of 2014.

If you would like to know more about the SKC Field School at Grant Kohrs Ranch, read the Indian Country Today article on the SKC archeology project at http://indiancountrytodaymedianetwork.com/2013/08/01/students-get-down-and-dirty-learning-archaeology-summer-150671

PARTNER NEWS & EVENTS

Announcements:

**University of Colorado Boulder**: CU-Boulder video nominated for Emmy  
CUB is thrilled that “Water: A Zero Sum Game” has been nominated by the Heartland Chapter of the National Academy of Television Arts and Sciences for an Emmy Award in the "Environment: Program/Feature" category! In the nominated five-minute video, CU-Boulder professor Mark Williams explains how Colorado’s snowpack affects its water supply. Read more: http://learnmoreaboutclimate.colorado.edu/blog/view/id/186/cu-boulder-video-nominated-for-emmy

**Montana State University**: NSF releases videos highlighting MSU research on wildfire effects  
The National Science Foundation is giving national exposure to a series of video podcasts that spotlight how international teams of scientists are studying the impact of fire on ecosystems around the world.

Through its online education site, Science360/The Knowledge Network, and other means, NSF is highlighting the efforts of scientists supported by an NSF Partnership for International Research and Education grant (WildFIRE PIRE) led by Montana State University.

WildFIRE PIRE is focused on understanding fire’s role on the planet by studying the causes and consequences of fire in the past, present and future in different locations.

The project involves scientists, graduate students and undergraduates from MSU, Salish Kootenai College, the U.S. Forest Service’s Rocky Mountain Research Center, the University of Colorado, the University of Idaho, the University of Tasmania and Australian National University in Australia and Landcare Research and the University of Auckland in New Zealand. The team is studying the temperate forests of the northern and southern hemispheres to try to understand the effects of humans and climate change on fire activity. Read more: http://www.montana.edu/news/12026/nsf-releases-videos-highlighting-msu-research-on-wildfire-effects
**Rocky Mountain Research Station: Science You Can Use Bulletin: New Tools for Mapping & Understanding Fire Severity** Issue 6: July/August 2013 describes five tools being developed as part of the Fire Severity Mapping Project (FIRESEV) that can help managers in all phases of fire management including real-time forecasts and assessments in wildfire situations, wildfire rehabilitation efforts, and long-term planning. 


**University of Montana: UM Professor Honored with Prestigious 2013 Aldo Leopold Award** The American Society of Mammalogists recently awarded UM Wildlife Biology Professor and Craighead Chair Joel Berger the 2013 Aldo Leopold Conservation Award. The award honors well-established individuals who have made lasting contributions to the conservation of mammals and their habitats.

Berger has addressed research questions about mammalian ecology and conservation in natural systems at wide-ranging geographic scales namely in Asia, Africa and North America. This award recognizes his broad scope of work, which includes social behavior and ecology of wild horses; behavioral and demographic consequences of horn removal in African rhinos; effects of predator reintroduction on the ecology of prey species and on the structure of vertebrate communities; long-distance migration by mammals and conservation of their migration corridors; effects of climate change in the Arctic on demography and persistence of musk ox; and conservation of large mammals in Bhutan, Tibet and Mongolia. Read more: [http://news.umt.edu/2013/07/071613berg.aspx](http://news.umt.edu/2013/07/071613berg.aspx)

**Calendar of Events:**

**August 15-16, 2013:** Clyde Martz Summer Conference - Arizona v. California at 50: The Legacy and Future of Governance, Reserved Rights, and Water Transfers, University of Colorado School of Law, Boulder, CO. The 50th anniversary of the Supreme Court’s historic decision in Arizona v. California arrives next summer. While the case was an important landmark in the still-evolving relationship between these two Lower Basin states, it remains most salient today by the way it codified federal rights and responsibilities, especially in the areas of federal (including tribal) reserved rights, the role of the Interior Secretary in Lower Basin water management, and the ability of Congress to allocate/reallocate water. It also modified the Upper Basin/Lower Basin relationship in important ways, especially regarding the treatment of Lower Basin tributaries. Moving forward, several types of potential management innovations in areas such as governance and water transfers will hinge on the framework outlined, in part, by this decision.  [http://www.colorado.edu/law/research/gwc/events](http://www.colorado.edu/law/research/gwc/events)

**August 22-23, 2013:** Montana EPSCoR/Institute on Ecosystems Annual Science Summit, Helena, MT. The 2013 MT EPSCoR IoE Annual Science Summit is providing a premier, science-based gathering where participants will share their knowledge gained through research and broader engagement activities, as well as providing a forum to discuss possible solutions necessary for tackling the pressing environmental challenges facing mountains and high plains ecosystems and their communities. [http://www.umt.edu/ce/cps/ioesummit/](http://www.umt.edu/ce/cps/ioesummit/)

**September 15-18, 2014:** MtnClim 2014, CIRMOUNT’s 7th biennial climate conference, Midway, UT. Department of Geography at the University of Utah joins the CIRMOUNT coordinators to co-host this event.  [http://www.fs.fed.us/psw/cirmount/meetings/mtnclim.shtml](http://www.fs.fed.us/psw/cirmount/meetings/mtnclim.shtml)


October 24–25, 2013: 3rd annual conference of the Sociology of Development section of the American Sociological Association, University of Utah, Salt Lake City, UT. The conference theme will be "The Future of Development," focusing on current research that provides foundation and direction for promising lines of future scientific inquiry on Development, with an emphasis on works that crosscut social, economic, political, and ecological spheres. [http://soc.utah.edu/graduate/development-conference.php](http://soc.utah.edu/graduate/development-conference.php)

**TRAINING AND COURSE OPPORTUNITIES**

September 17–19, 2013: Monitoring and Assessment of Wetland and Riparian Restoration Sites, Montana State University, Bozeman, MT. The Montana Water Center and the Montana Department of Environmental Quality have initiated a series of annual training courses to build professional capacity regarding wetland science and regulation in Montana. For more information see the Montana Water Center web site: [http://watercenter.montana.edu/training/wetlands/](http://watercenter.montana.edu/training/wetlands/). Inquire at water@montana.edu. Registration opens September 2, 2013.

**STUDENT OPPORTUNITIES**

Call for Proposals for the 2013 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 who is writing an undergraduate thesis or graduate student (MS or PhD) conducting research on whitebark pine. Application materials must be submitted by August 31st, 2013. [http://www.cfc.umt.edu/cesu/files/Announcements/13WPEF_student_research_grant.pdf](http://www.cfc.umt.edu/cesu/files/Announcements/13WPEF_student_research_grant.pdf)

**FUNDING OPPORTUNITIES**

The Gulf Coastal Plains & Ozarks Landscape Conservation Cooperative (GCPO LCC) issues a Research Request for Proposals. The GCPO LCC is soliciting proposals from interested groups and individuals that address high priority knowledge gaps associated with the science need themes identified in its Integrated Science Agenda, developed by the GCPO LCC’s technical Adaptation Science Management Team:

1. Linking habitat and population objectives and integrating multidisciplinary conservation goals.
2. Quantification and Evaluation of Relationships between Species and Landscape Endpoints for Priority Systems
3. Characterization of Flow
5. Targeting Science Need Themes in the GCPO LCC’s Integrated Science Agenda

Up to $350,000 is available to fund 2-year projects in each of 5 topic areas ($1.75 million total). Additional details on the format and timetable for submitting proposals can be found in the full RFP announcement. We encourage broad participation from groups and individuals concerned with natural and cultural resource issues in the GCPO region. Individuals from federal, state, tribal, local, commercial, non-profit, and educational organizations are eligible for funding as investigators or cooperators. Cost share or in-kind match is encouraged but not required. Proposals due: August 30, 2013
**2013 Mountain West Migratory Bird Habitat Conservation Fund Request of Proposals**
The National Fish and Wildlife Foundation supports projects to conserve migratory bird habitat in Wyoming, Utah, Nevada, and Oregon. The Fund will focus on habitat protection, restoration and long-term management of lands for the benefit of migratory birds. Funded projects will also enhance, manage and improve migratory bird habitat. Application due date: August 15, 2013. [http://www.nfwf.org/Pages/migratorybird/2013rfp.aspx#Uff70qzi-PU](http://www.nfwf.org/Pages/migratorybird/2013rfp.aspx#Uff70qzi-PU)

**JOB OPPORTUNITIES**

**Assistant or Associate Professor - Medical or Health Geographer** specializing in disease ecology, spatial epidemiology, public health, or population health, Department of Geography at the University of Utah, Salt Lake City, UT (screening begins 10/1/2013)

**Assistant or Associate Professor - GIS**, Department of Geography at the University of Utah, Salt Lake City, UT (screening begins 10/1/2013)

**Research Assistant Professor - Hydroinformatics**, Utah Water Research Laboratory (UWRL), Utah State University, Logan, UT (screening begins 9/15/2013)

**Department Head, Watershed Sciences**, College of Natural Resources, Utah State University, Logan, UT (screening begins 9/9/2013)

**Assistant or Associate Professor of Natural Resources Policy and Planning**, College of Natural Resources, University of Wisconsin-Stevens Point (screening begins 9/4/2013)

**Postdoctoral Fellow - AIRIE Program - CHRONOS (2 Positions)**, Department of Geosciences, Colorado State University, Fort Collins, CO (closes 9/2/2013)

**Associate Dean for Outreach, Extension, and Extramural Grants**, College of Natural Resources, University of Wisconsin-Stevens Point (screening begins 9/1/2013)

**Interdisciplinary Field Coordinator**, National Park Service Rocky Mountain I&M Network, Fort Collins, CO (closes 8/14/2013)

**Nursery Manager**, Colorado State Forest Service, Fort Collins, CO (screening begins 8/1/2013)

For details on job opportunities visit [http://www.cfc.umt.edu/cesu/Postings/Jobs.php](http://www.cfc.umt.edu/cesu/Postings/Jobs.php)

**MEETINGS OF INTEREST**

September 5-6, 2013: **4th annual Pacific Northwest Climate Science Conference**, Portland, OR. The conference provides a forum for researchers and practitioners to convene and exchange scientific results, challenges, and solutions related to the impacts of climate on people, natural resources, and infrastructure in the Pacific Northwest. The conference attracts a wide range of participants including policy- and decision-makers, resource managers, and scientists, from public agencies, sovereign tribal nations, non-governmental organizations, and more. As such, the conference emphasizes oral presentations that are comprehensible to a wide audience and on topics of broad interest. This conference is an opportunity to stimulate and showcase decision-relevant climate science in the Pacific Northwest. [http://pnwclimateconference.org/](http://pnwclimateconference.org/)

September 16-19, 2013: **12th Biennial Conference of Research on the Colorado Plateau**, Northern Arizona University, Flagstaff, AZ. Resource managers, scientists, citizens, and students are invited to attend and participate in this solution-oriented conference that addresses some of the most pressing natural and cultural resource management issues facing the Southwest and virtually every other region in North America. [http://nau.edu/Merriam-Powell/Biennial-Conference/Welcome/](http://nau.edu/Merriam-Powell/Biennial-Conference/Welcome/)


October 6-11, 2013: The SER2013 World Conference on Ecological Restoration: Reflections on the Past, Directions for the Future, Madison, WI. The conference will bring together more than 1,200 delegates from around the world interested in the science and practice of ecological restoration as it relates to natural resource management, climate change responses, biodiversity conservation, local and indigenous communities, environmental policy and sustainable livelihoods. http://www.ser2013.org/


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.