RM-CESU NEWS & EVENTS

Jerry O’Neal National Park Service Student Fellowship

Applications are now being accepted for the Jerry O’Neal Fellowship for work in Glacier National Park, Grant-Kohrs Ranch NHS, and Little Bighorn Battlefield NM. The fellowship aims to provide educational assistance for students seeking to understand natural and cultural resources issues and how these interact with human values. Special consideration will be given to proposals that address the following:

1. natural resource issues such as aquatic ecology, terrestrial ecology, fire ecology, invasive plants, and climate change
2. cultural resource issues, such as history and architectural studies, cultural landscape reports, ethnographic research and archeology
3. social science that informs resource management about a natural or cultural topic and/or that addresses visitor impacts to park resources

Competition is open to graduate students or superior upper division undergraduate students at RM-CESU universities and colleges only. Awards range from $1000-4000. Applications must be submitted electronically by February 14, 2014. For details on the application process please visit http://www.cfc.umt.edu/cesu/files/Announcements/ONeal_announcement_14.pdf

Boyd Evison Student Fellowship for research in the Greater Yellowstone

The Grand Teton Association and Grand Teton National Park offer a graduate fellowship of up to $10,000/project for graduate studies focused on documenting the almost intangible and disappearing aspects of the Greater Yellowstone Ecosystem, including Grand Teton and Yellowstone National Parks, the John D. Rockefeller, Jr., Memorial Parkway, and other public or private lands. Emphasis areas are lesser-known ecosystem elements such as air and water; geologic or other processes; plants, insects, reptiles, or amphibians, fungi; natural soundscapes; and social science related to public understanding of natural resources and their use or management.

Graduate students pursuing either a Master's or Doctoral degree are invited to submit proposals on the application form by February 14, 2014. http://www.cfc.umt.edu/cesu/files/Announcements/Evison%20Fellowship%20Call%202014.pdf
Carolin Recognized for Her Work in Research

Glacier National Park Crown of the Continent Research Learning Center Director Tara Carolin was recently awarded the 2013 National Park Service Intermountain Region Director’s Award for Professional Excellence in Natural Resource Research.

As center director since 2009, Carolin has created and nurtured science and research partnerships; communicated science results to natural resource managers, the academic community, teachers and the public; served in the Rocky Mountain Inventory and Monitoring Network and communicated its monitoring results; encouraged and assisted student research and intern mentorship; been a leader in climate change research, communication and adaptation planning; provided leadership for the park’s citizen science program for more cost-effective monitoring and science education; and disseminated research results.

In addition to Glacier National Park, Carolin’s work supports Little Bighorn Battlefield National Monument, Grant-Kohrs Ranch National Historic Site and Waterton Lakes National Park in Alberta, Canada.

Glacier National Park Superintendent Jeff Mow said, "We are pleased with Tara’s leadership at the Crown of the Continent Research Learning Center. The center provides leadership across the National Park Service through their success in facilitating research and communicating research results."

In response to the recognition, Carolin said, "I was both very surprised and honored to receive the award. I want to thank all of the incredible staff at the Crown of the Continent Research Learning Center who carry out many of the projects that were included in the award nomination. All of these accomplishments couldn’t have happened without their dedication and hard work."

Carolin’s career includes 22 years with the National Park Service. She has a master's degree in wildlife and range resources from Brigham Young University with a strong background in native plants. As a regional recipient of this award, Tara is eligible for the national award in this category.

Fall Newsletter: Crown of the Continent Research Learning Center

As fall fades into winter, staff at the CCRLC catch our breath from the busy summer and take a moment to reflect on some of the issues facing our area. In this issue of Science in the Crown, you will find research on how climate change may be affecting mountain goats and amphibians, innovative methods teachers are taking to teach climate change, and perspectives from students and staff. To view the newsletter:

http://www.crownsscience.org/download_product/1263/0
RM-CESU’s Kathy Tonnessen receives the Department of the Interior’s Superior Service Award

Dr. Kathy Tonnessen has just received the Department of the Interior’s Superior Service Award, which recognizes her exceptional career accomplishments and contributions. Since the inception of the Rocky Mountains CESU, Kathy has been an outstanding leader in the development and evolution of the Cooperative Ecosystem Studies Unit network nationwide. She was one of the first agency representatives in the system and has provided leadership through participation in National CESU meetings and forums and served as the national program lead for the NPS CESUs from 2008-10. Under Kathy’s leadership, the RM-CESU is the linchpin for the Intermountain CESUs, conducting monthly meetings with the Financial Assistance group to ensure currency, consistency, and overall excellence in customer service to parks. As a result the RM-CESU has become a service model for how Dept. of Interior CESU liaisons can best connect land and resource managers with the scientific community.

A major part of Kathy’s duties are to assist national parks in the Rocky Mountains region in acquiring state of the art science and technical assistance. National park managers in the Rocky Mountains and throughout the NPS consistently praise Kathy and the RM-CESU for “...being an ever-willing source of advice and counsel on research project, potential providers, funding strategies, and more...” Kathy helps NPS resource managers to:

1. understand, articulate and prioritize their science and research needs,
2. access and leverage funding to address these needs,
3. connect with a network of outstanding scientific collaborators to conduct the natural, cultural and social science research,
4. involve students in NPS research from a wide variety of backgrounds including RM-CESU tribal affiliates,
5. help to communicate and widely distribute research results, and
6. constantly improve working relationships with RM-CESU partners.

Kathy Tonnessen works with scientists, managers, tribal affiliates, faculty members, and graduate students on variety of projects that include historic structure documentation, inventory and monitoring of natural resources in parks, and climate change, to name a few. She has served as the secretary for the National Atmospheric Deposition Program and is a member of the International Air Quality Advisory Board of the International Joint Commission. For Kathy, the most rewarding aspects of her job are “Working in beautiful and fun locations to...”
protect and preserve these areas. The fact is, the average person cares about our National Parks and wants these resources protected, and so public support is tremendous. The National Park Service has established credibility with the public and that makes it easier to work towards resource protection." Hot topics for the future include wildlife and plant diseases, predator-prey interactions, climate change, de-glaciation in Grand Teton and Glacier National Parks, and fire effects on water quality and ecosystem health. The Department of Interior’s Service Award is well-deserved for the scope, complexity, and excellence of Kathy Tonnessen’s accomplishments as NPS Research Coordinator for the Rocky Mountains CESU. Congratulations, Kathy!

PARTNER NEWS & EVENTS

Announcements:

**Colorado State University**: Catastrophic wildfires ignite new CSU Center for Managing WUI Wildfire Risk

Extreme Colorado wildfires over the past two years burned in unprecedented ways in urbanized wildlands causing devastating loss of life and property. Colorado State University’s Department of Forest and Rangeland Stewardship is launching a new center dedicated to creating and applying the next generation of wildfire management solutions. The Center for Managing WUI Wildfire Risk will provide science-based answers to critical questions raised by the most destructive wildfires in Colorado’s history. Read more: [http://www.today.colostate.edu/story.aspx?id=9276](http://www.today.colostate.edu/story.aspx?id=9276)

**Montana State University**: Horner wins lifetime achievement award from Society of Vertebrate Paleontology

Montana State University paleontologist Jack Horner has won the highest honor given by the Society of Vertebrate Paleontology.

The Regents Professor of Paleontology and Curator of Paleontology at MSU’s Museum of the Rockies will receive the Romer-Simpson Medal on Saturday, Nov. 2, for “sustained and outstanding scholarly excellence and service to the discipline of vertebrate paleontology.”

The lifetime achievement award will be presented in Los Angeles during the SVP’s 73rd annual meeting. The organization, which is also honoring filmmaker Steven Spielberg this year, has more than 2,300 members, including professional paleontologists, students, artists, preparators and others interested in vertebrate paleontology.

“I certainly don’t feel as if I’m nearing the end of my work, but I am greatly honored that others think I’ve accomplished enough to deserve such a thing,” said Horner, 67. “I just hope no one expects me to slow down.” Read more: [http://www.montana.edu/news/12241/horner-wins-lifetime-achievement-award-from-society-of-vertebrate-paleontology](http://www.montana.edu/news/12241/horner-wins-lifetime-achievement-award-from-society-of-vertebrate-paleontology)

**University of Wyoming**: UW Haub School to Boost Efforts to Sustain Landscapes in Wyoming and the West

The University of Wyoming Haub School of Environment and Natural Resources is poised to tackle some of the West’s toughest natural resource challenges. A $500,000 gift from the Walton Family Foundation will support efforts over the next two to four years to sustain landscapes in Wyoming and the Rocky Mountain West. This will include research, analysis and educational programs to inform sustainable management of open spaces, wildlife habitat, agriculture, water, human communities, energy resources and more. Read more: [http://www.uwyo.edu/uw/news/2013/10/uw-haub-school-to-boost-efforts-to-sustain-landscapes-in-wyoming-and-the-west.html](http://www.uwyo.edu/uw/news/2013/10/uw-haub-school-to-boost-efforts-to-sustain-landscapes-in-wyoming-and-the-west.html)
University of Montana: UM Professor Ranked Most Geographically Influential Author in Remote Sensing

Steve Running, University of Montana Regents Professor of Ecology, recently was ranked one of the top 20 most productive authors worldwide in remote sensing research. The ranking came out of a study published in the Scientometrics journal, which analyzed citations of remote sensing research between 1991 and 2010.

The study surveyed articles related to remote sensing in the Science Citation Index and Social Science Citation Index databases. Of the top 20 authors, Running was ranked first in geographical influence, third in five-year citations and first in five-year citations per article.

Running has taught at UM since 1979 and is an internationally recognized scholar in satellite-remote sensing data, global vegetation productivity, climate change and more. He currently directs the Numerical Terradynamic Simulation Group at UM, a laboratory that pioneers new approaches for landscape ecological and hydrological analyses. Read more: http://news.umt.edu/2013/12/121813runn.aspx

National Park Service: Sue Masica named Intermountain Regional Director

National Park Service Director Jonathan Jarvis has named Sue Masica as the Service's Intermountain regional director, responsible for leading 6,000 employees and 91 national parks visited by more than 42 million people annually. Masica, who serves as the Alaska regional director, assumes her new position in Denver in January.

"Sue has an incredible track record of tackling tough issues and finding innovative solutions," Jarvis said. "Results-oriented and goal-driven, Sue manages by inclusion, building a collaborative work ethic among employees and with partners. She strives for the highest standards of transparency and accountability. She brings great experience to her new position from her previous National Park Service assignments. Sue is a valued member of our national senior management team."

"Serving as the Intermountain regional director is a tremendous honor," Masica said. "The region is home to spectacular landscapes and compelling stories; places that have been entrusted to the National Park Service by the American people for nearly 100 years. I'm looking forward to working with communities and National Park Service staff on issues that are very different from those in Alaska, like Colorado River water, and others that are similar, such as partnering on close-to-home recreational opportunities."

Calendar of Events:

February 2-4, 2014: International Conference on Outdoor Leadership, Salt Lake City, UT. The conference will feature workshops centered on the WEA curriculum's educational components, research and program symposiums, a keynote address about current issues facing outdoor leaders, and a celebration of 50 Years of the Wilderness Act. http://www.weainfo.org/2014-conference

February 19-20, 2014: Eighth Montana Plant Conservation Conference, Montana State University, Bozeman, MT. The first day will be a symposium on plant pollination. Topics will include: effects of fragmentation on pollinators, phenology of pollinators and their plants, generalist versus specialist pollinators, invasive plants and pollinator communities, and effects of prescribed fire on pollinators. In addition, there will be a pollinator identification workshop. The second day will be devoted to reviewing the status of Montana Natural Heritage Program species of concern and nominations for Important Plant Area designation. http://www.mtnativeplants.org/Montana%20Plant%20Conservation%20Conference
July 13-16, 2014: 2nd North America Congress for Conservation Biology, Missoula, MT. The biennial NACCB provides a forum for presenting and discussing new research and developments in conservation science and practice for addressing today’s conservation challenges. In addition, these conferences connect our regional community of conservation professionals and serve as a major networking outlet for people interested in North America conservation. Conference is hosted by North America Section of the Society for Conservation Biology, Montana Chapter of the Society for Conservation Biology, and Wildlife Biology Program at the University of Montana. https://www.xcdsystem.com/scbna.website/northamerica

STUDENT OPPORTUNITIES

2014 Park Break Sessions will Explore Archaeology, Hydrogeology

Are you a graduate student thinking about a career in parks, protected areas, and cultural sites? Park Break is an all-expenses-paid, park-based field seminar for students like you. Park Break puts you in a national park unit for a week’s worth of field and classroom activities in close collaboration with park scientists and scholars, managers and administrators, and partner organizations. Organized since 2008 by the George Wright Society in conjunction with the U.S. Geological Survey and the National Park Service, Park Break is a learning experience that you’ll find nowhere else.

In 2014, we are offering two Park Breaks:

- **Keweenaw National Historical Park**, located in the rugged Keweenaw Peninsula along Lake Superior in far northern Michigan, will host a Park Break focused on archaeology and cultural resources management during the week of April 7-11, 2014.
- **Saguaro National Park**, which straddles Tucson in the Sonoran Desert of Arizona, will host a Park Break focused on hydrogeology during the week of March 10-14, 2014.

Park Break is open to graduate students who are currently enrolled and actively pursuing their degree. Minority candidates are especially encouraged to apply. The deadline is January 7, 2014.

For complete information, and a link to the online application form, go to: [http://www.georgewright.org/parkbreak](http://www.georgewright.org/parkbreak)

2014 Selway-Bitterroot Frank Church Wilderness Ranger Internship


Two Research Fellowship Programs offer Funding for Research in Alaska National Parks

Two fellowship programs offer up to $8,000 for multiple fellows to conduct research projects in subarctic and arctic national parks, for use over one or two years. The fellowships are most appropriate for graduate students, but others may apply. Deadline for applications is February 15, 2014. Discover Denali Fellowship Program is for work in or near Denali National Park and Preserve. Murie Science and Learning Center Fellowship Program is for work in one or more of the following parks: Denali, Bering Land Bridge, Cape Krusenstern, Gates of the Arctic, Kobuk Valley, Noatak, Wrangell-St. Elias, Yukon-Charley. An information guide about the fellowships, which includes specifics on how to apply and other information helpful to the application process, may be downloaded from [www.nps.gov/rlc/murie/research-fellowships.htm](http://www.nps.gov/rlc/murie/research-fellowships.htm). For more information contact Denali’s Research Administrator Lucy Tyrrell at 907-683-6352 or lucy_tyrrell@nps.gov.
Donald G. Willems Scholarship, named for an eminent Montana water professional, is sponsored by the Montana Section of the American Water Works Association, the professional organization of the drinking-water industry. Any Montana university student planning a career in a water field is eligible. Deadline to apply is March 15, 2014. Application information is available from the MTAWWA website: http://www.montana-awwa.org/

Grand Teton National Park Summer Resources Internship Announcement 2014 (Two positions available)

(1) Water resources intern: Rising temperatures and changes in seasonal cycles of the streams and rivers in the Greater Yellowstone Ecosystem are likely to result in decreasing snowpacks and glaciers, earlier snowmelt, and lower base flows in dry months. The withdrawal of water for irrigation exacerbates these effects, resulting in further reduction in streamflow and rising stream temperatures, which affects hydrology and native trout fisheries. Grand Teton NP has many irrigation ditches and diversion structures associated with rights to use waters of the Snake and Gros Ventre Rivers. We need an intern to:

- complete mapping and documentation of ditches and add to the park’s water rights database,
- research and draft a set of best management practices as a guide for ditch operators, and
- assist with projects to improve stewardship of water resources, including thermal springs.

The water resource intern should have a background in hydrology, watershed or fisheries management, or related field. Some knowledge of GIS and GPS functionality is desirable, including experience with data management and spatial databases. This position involves considerable outdoors work, requiring candidates to be comfortable with fieldwork, hiking off-trail in forested terrain as well as in sagebrush grasslands.

(2) Museum intern: Grand Teton’s museum collection contains an array of natural and cultural history specimens, from historic furniture and photographs to an extensive herbarium collection and a large and growing archives. A major focus of recent museum work has been on the David T. Vernon Collection of American Indian Art and Artifacts. Many of the 1,400 objects in this collection, which include objects associated with more than 100 tribes, have undergone recent conservation treatment, and several hundred objects are on display in two park visitor centers, where park rangers interpret the objects and the collection’s history to thousands of visitors each year. The park seeks an intern to:

- do research and documentation on the history of the collection, which at one time was much larger and which was split in the mid-20th century
- assist with interpretation through a variety of means, from personal talks and programs to the development of newer interpretive media using new technology, and
- assist with care of the collection, learning monitoring and pest prevention techniques and other museum object conservation techniques and practices.

The museum intern should have a background in museum studies and/or anthropology, ethnology, or American Indian studies. Diverse applicants are encouraged to apply.

All applicants must be U.S. citizens and a student in the spring 2014 or summer 2014 semesters and be continuing in an academic program during the fall 2014 semester. Applicants should be able to work independently once provided direction and training. A current driver’s license and good driving record are also necessary.

Housing for these (8- to 10-week) positions will be provided at the University of Wyoming-National Park Service Research Center, located at the historic AMK Ranch on the shore of Jackson Lake in view of the beautiful Teton Range. A $2,500 stipend will also be provided. Start and end dates are flexible but are expected to be sometime between mid-May and early September, 2014.

How to apply: Interested students should submit a resume, names and contact information for three references, their expected graduation date, and a short statement of interest and skills related to the internship(s) with Grand Teton National Park and the John D. Rockefeller Parkway via email to: (1) kathryn_mellander@nps.gov (307-
739-3493) or (2) Bridgette_guild@nps.gov (307-739-3493) by 5:00 PM (MST) on February 28, 2014. Applications will be reviewed as soon as they are received so early application is encouraged.

**JOB OPPORTUNITIES**

**Natural Resource or Environmental Economist**, Montana Institute on Ecosystems, Montana State University, Bozeman, MT (screening begins 2/10/2014)

**Department Head, Environment and Society**, Utah State University (screening begins 1/31/2014)

**Instructor in Ski Area Management** (12-month Faculty Appointment (Non Tenure Track), Human Dimensions of Natural Resources Department, Colorado State University, Fort Collins, CO (screening begins 1/20/2014)

**Assistant Professor of Plant Sciences**, Department of Plant Sciences and Plant Pathology, Montana State University, Bozeman, MT (screening begins 1/15/2014)

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**


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.