

# CROWN OF THE CONTINENT

## RESEARCH LEARNING CENTER NEWSLETTER

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Quarterly News

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**MISSION STATEMENT:** *To facilitate inquiry and learning in and about the Crown of the Continent Ecosystem toward assisting communities in making informed decisions and enhancing stewardship of the region's cultural and natural resources.*

### Last Quarter in Brief

#### CCRLC Roundtable

The annual CCRLC Roundtable was held Jan 31, 2005 in the Glacier NP Community Building. Goals were to exchange information and enhance working relationships with our partners. Around 30 people participated, including staff from Waterton/Glacier NPs and Flathead Nat. Forest, park researchers, educators, and non-governmental organizations. Leigh and Sallie presented accomplishments and discussed research and educational strategies for the future. Their PowerPoint presentation can be accessed from the CCRLC web site.

#### Glacier Fire Atlas

Don Helmbrecht and Lee Macholz at the University of Montana's National Center for Landscape Fire Analysis (<http://firecenter.forestry.umt.edu/firecenter>) have designed and developed a geo-database for Glacier's fire staff that allows them to build fire event information in an ArcView environment that integrates with existing fire history layers. The 'fire atlas' eliminates several inefficiencies in the existing management of fire data and will be prototyped during the upcoming fire season. Future work on the project will aim to integrate fire information with other data such as vegetation, weather, and fuels and define their relationship with fire history.

#### International Intern: Guy Trudeau

March 21 – Sept. 9, 2005, CCRLC is sponsoring Guy Trudeau as an international volunteer to work at Glacier National Park. Guy is a Master of Science student at Universite Paul Cezanne in Marseille, France. Supervised by Sallie Hejl and working closely with Steve Gniadek, GNP Wildlife Biologist, Guy will work on several wildlife projects that include: assisting in the songbird habitat

project by taking GPS readings and sampling vegetation plots; monitoring raptors and their nests; summarizing information for an interactive web page in conjunction with the Divisions of Interpretation & Education and Science & Resources Management; and learning from park staff about how NPS resource managers use scientific information toward effective management decisions. Guy will also conduct a literature review comparing several bird monitoring programs and will write a report on his experience. He will reside at the Research Learning Center residence.

#### Crown of the Continent Managers Partnership: Exotic Plant Forum

The Crown of the Continent Managers Partnership's Annual Forum was held at the Hampton Inn in Kalispell, March 2-4, 2005. This year's forum topic on managing exotic plants across the Crown was organized by Leigh Welling with the CCRLC at Glacier, Sue Crowley with the BC Ministry of Water, Land and Air Protection, Cam Lane with Alberta Sustainable Resource Development, Mary Lou Zimmerman with the Flathead National Forest, and Jed Fisher with the Flathead County Weed District.

Speakers included Don Gayton with the Forest Research & Extension Partnership in BC who talked about "Social and Environmental Impacts of Invasives"; Bruce Maxwell and Lisa Rew with the Land Resources & Environmental Sciences Department at MSU who presented "Predicting the Behavior of Invasive Plant Populations"; Maria Mantas of the Nature Conservancy gave a case study on "Evaluating Risk to Native Plant Communities from Selected Exotic Plant Species"; Robert Gray, a consultant from BC, spoke on "Fire and Invasives"; and Marijka Wessner with the Missoula Co. Weed District talked about "Crafting an Educational Message". Various

agency programs were presented in two panel discussions on exotic plant management and participants outlined a suite of actions that could be undertaken across the Crown landscape to help facilitate greater collaboration across jurisdictions.

Support for the 2005 CMP Forum came from the Intermountain Region's International Conservation Office. A complete summary will be available soon on the Miistakis Institute of the Rockies web site at <http://www.rockies.ca/cmp>.

## **George Wright Society Biennial Meeting**

The GWS Biennial Conference on Parks, Protected Areas, and Cultural Sites was held March 13-18, 2005 in Philadelphia, PA. Sallie and Leigh helped to organize some sessions and made presentations at the meeting.

Sallie gave a talk in the RM CESU session on the 'Fire in the Crown' workshop that the CCRLC held in Glacier

National Park, Spring 2004 for park employees and partners. A summary and bibliography from the workshop are available on the CCRLC web site.

Leigh helped to organize two sessions at the GWS meeting that provided overviews of existing RLC programs. There are 13 centers now funded under the NRC and all were represented at the meeting. Judy Geniac, the National RLC Coordinator, also held a 2-hour meeting for RLCs to discuss issues and strategies for stronger communication and organization across the RLC Network. In addition, many RLC staff attended the 2-hour workshop, 'Collaboration Across the Challenge'. A white paper is under development from this session.

Another topic the CCRLC was involved in at the GWS meeting was climate change in National Parks. Leigh worked with Julie Thomas, the Air Resource Division's Washington liaison, to organize three sessions on this topic. Discussions are underway to publish these results.

## **Upcoming Projects & Events**

### **Tehabi Internship**

Garrett Boarts, a summer intern with the Tehabi Program (<http://www.cnr.usu.edu/tehabi>) will work with Sallie and the Divisions of Interpretation & Education and Science & Resources Management to develop a series of interactive web pages on Glacier's cultural and natural history. The web page will help inform visitors who are planning trips to the park, remote visitors who can't come to the park, and students studying the park or cultural and natural resource issues. The project is funded by Rocky Mountain Cooperative Ecosystems Studies Unit (RM-CESU).

### **Staff & Citizen Science Training: Common Loons**

Sallie will be working with Steve Gniadek, GNP Wildlife Biologist and Therese Hartman, a Biological Technician, to initiate staff and citizen science training this summer on loons. The Common Loon is a Species of Special Concern in Montana and high proportions of them (~20% of the state's nesting pairs) are found in Glacier. In order to protect the loons, resource managers need to better understand where the loons are, how many pairs are reproductively successful, and what causes nest or brood failure.

Efforts this summer will focus on Glacier Loon Day, an event held in mid-July when lakes in Glacier are sampled for the presence and reproductive success of Common Loons. Hartman will create a training video for Glacier

Loon Day that will be used to train park staff and volunteers. A number of non-governmental organizations (e.g., Flathead Audubon Society, the Montana Loon Society, Montana Common Loon Working Group) and state groups (Montana's Department of Fish, Wildlife, and Parks) are helping the CCRLC find volunteers for the project, which has been funded through a grant from the Rocky Mountain Cooperative Ecosystems Studies Unit (RM-CESU).

### **Birds & Fire Ecology Education**

Several related educational projects are underway as part of a Joint Fire Sciences grant to understand and communicate the influence of local and landscape conditions on the occurrence and abundance of Black-backed Woodpeckers in burned forest patches. Sallie Hejl, Dick Hutto, Professor - University of MT, Deborah Austin, Forest Supervisor - Lolo NF, and Sue Reel, Wildlife Interpretive Specialist - Lolo NF, are working together with Susan Sindt, Interpretive Park Ranger, and Matt Graves, Glacier NP West Lakes Supervisory Interpreter, to develop the following: (1) a new self-guided trail (including brochure and wayside exhibit); (2) a list of potential interpretive trails throughout the park; (3) a notebook about fire ecology for interpreters; (4) synthesized information on birds and fire ecology for Glacier's website; and (5) a power point presentation on birds and fire ecology for interpreters, fire managers, and natural resource professionals, and other park staff.

## Cultural Significance of Chief Mountain

The CCRLC is working with Lon Johnson, Historic Architect and Cultural Resource Manager at GNP, the University of Montana's Anthropology Department, the Rocky Mountain CESU, the Blackfeet Tribe, and Salish-Kootenai College on a project to establish Chief Mountain as a National Cultural Landmark. Central to the project are a series of interviews with Native American Elders to document the use of the mountain for religious and spiritual purposes. Betty Mathews, a graduate student at the University of Montana and Blackfeet Tribal member is conducting the interviews. Funding for the project is through the Intermountain Region's International Conservation Office.

## Teacher Workshop at Grant Kohr's Ranch National Historic Site (GKR)

The CCRLC will work with staff at Grant Kohrs Ranch National Historic Site to develop and host a workshop July 20-22 for Middle School teachers in Deerlodge, MT. Goals are to explore natural processes in the area, such as water, grasslands, and wildlife, and to help teachers relate the natural features of the region to the Ranch's historic and cultural landscape. Funding for the workshop is provided by the RM-CESU.

## Waterton-Glacier Science and History Conference

Location: Lake McDonald Lodge Auditorium  
Date: August 18, 2005, 8:30 a.m. – 4:00 p.m.  
Communicating park research to the public is an important role of the CCRLC and we hope to make this an annual event. Last year's conference was well attended and very informative. Speakers this year will include Kate Kendall and Dan Fagre from the USGS Glacier Field Station, Mark Lorang and Bonnie Ellis from the Flathead Lake Biological Station, Greg Pederson from Montana State University, Eric Higgs from the University of Victoria, Dick Hutto from the University of Montana and others. Mark your calendars!

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**Notice:** *Help us maintain your current contact information. If you make changes to your work address/contact information please e-mail us with current information at [billie\\_thomas@nps.gov](mailto:billie_thomas@nps.gov).*