

Project Completion Report Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)

Project Title: YIP: Promote Sustainability and Native American Engagement

Project Code : UMT-266/P12AC10322

Type of Project: Education

Funding Agency: National Park Service

Partner University: University of Montana

NPS Agreement Technical Representative: Tara Carolin, Director CCRLC; P.O. Box 128, West Glacier, MT 59936; 406-888-7863; fax: 406-888-7903; tara_carolin@nps.gov

Park Contact: Melissa Sladek, Science Communication Specialist CCRLC; P.O. Box 128, West Glacier, MT 59936; 406-888-7894; fax: 406-888-7903; melissa_sladek@nps.gov

Principal Investigator: Libby Covelli Metcalf, Assistant Professor of Parks Tourism & Recreation Management, University of Montana; CHCB 465, University of Montana, MT 59812; 406-243-4448; elizabeth.covelli@cfc.umt.edu

Start Date of Project: March 20, 2012

End Date of Project: June 30, 2013

Funding Amount: \$12,632

Project Summary,

The student, Andrea Miller, began her internship with an orientation with other interns and college students organized by the NPS Intermountain Regional Office and the Native American Cultural Center at Northern Arizona University. The orientation included sessions on contributions of local traditional knowledge to NPS management, NPS career opportunities and the new Pathways program, sustainability, and cross-cultural communication. The orientation also helped create excitement and self-confidence about the position with GNP. Andrea prepared a report summarizing what she learned through the orientation.

Andrea's work at Glacier National Park focused on three main projects. She was trained on the National Park Service's website content management system, which required both technical skills as well as layout ability. Andrea created five new web pages for Glacier National Park's website on the topic of sustainability. Each page is pleasing to the eye, and incorporates color schemes, layout balance, and enticing graphics.

The pages can be viewed at <http://www.nps.gov/glac/parkmgmt/sustainability.htm>

Andrea also worked on writing a resource bulletin on mountain goats and completed several short writing pieces on various topics for the CCRLC's new www.crownsience.org website. The mountain goat resource bulletin is currently in the final stages of production and once

completed, will be posted at <http://www.nps.gov/glac/naturescience/ccrlc-media.htm>. The writing for this bulletin and our developing website was a new avenue of writing to Andrea. She learned techniques and skills used in science writing and worked hard to understand how to incorporate scientific concepts and facts with creative and succinct language.

Lastly, Andrea was given a task to organize and test-pilot a lighting assessment project for Glacier. The project was assigned during the final week of her internship and included many unknowns, however her commitment and energy to the project made her efforts valuable to the park. She refined the suggested assessment protocol, completed assessments at several locations, and improved the project's design, enabling the park to have a system to assess excessive current outdoor lighting within Glacier.

The internship was a great opportunity for Andrea to receive hands on experience with communication and outreach. The student expressed a deep appreciation of the opportunity and the mentoring she received from GNP.

Number of students participating in this project: One undergraduate student, Andrea Miller

Lessons Learned from this project:

Although it was wonderful to work with this particular student, some of the tasks assigned to her seemed to be too advanced for her skill set. In future projects, a graduate level student is needed for the technical science communication work the CCRLC consistently produces. This advanced skill level would eliminate the many hours used in training and refining the student's work.

The orientation was a great idea for the program and the interns; however there were communication barriers with the NPS regional office. It was unclear who the point of contact was for the orientation and often questions went unanswered for several days. In the future, it should be clear to all parties who is in charge. There was some concern about Andrea and who would be looking out for her well-being while in Arizona. The orientation organizers should have reached out to University of Montana and Andrea to reassure them that she would be cared for while at the orientation. It also seemed unnecessary to fly a student to Northern Arizona University for the orientation. The travel from Missoula to Flagstaff was long and required several flight changes and shuttles. There should be options for the attending the orientation especially for students that have to travel a great distance. For example, the sessions could have been offered as a webinar or the NPS could have chosen a central location like Denver to conduct the orientation.

Successful internship programs require mentoring from both the sponsoring agency and the university. UM administered the payroll, handled paperwork and travel, and checked in every other week with the student. More mentoring could have been accomplished from the university if there was additional compensation. For example, there was no funding for a UM mentor to travel to GLAC to visit the student. In the future, these types of cooperative agreements should provide compensation for the university sponsor to help ensure the student is appropriately mentored in the position.

Other RM-CESU agencies or research partners who participated in this project:

North Arizona University developed and carried out the training for the interns.