

Two RM-CESU Students Awarded Jerry O'Neal Fellowship for Research in Glacier National Park

The Jerry O'Neal Fellowships, funded through the Crown of the Continent Research Learning Center at Glacier National Park, were announced for student work in summer 2013. This student award is named for the former deputy superintendent at Glacier NP, in honor of his dedication to science and research in the NPS. The competition is facilitated through the Rocky Mountains CESU and was open to students at all of the RM-CESU universities. **This year's Fellowship recipients are:**

Cristina McKernan, M.Sc. Candidate - Ecology, Colorado State University: *The Effects of Glacier Loss on Alpine and Subalpine Riparian Vegetation in Glacier National Park, Montana*

Cristina will assess the current vegetative composition and the status of high elevation riparian wetlands in GNP and evaluate how this vegetation may respond to changes in stream flow and geomorphic processes caused by glacial melting. Understanding the potential influences of climate induced changes in the hydrologic drivers of riparian wetlands is a critical topic with implications for channel stability, flood control, water chemistry, and biodiversity, all high priority concerns for GNP.



Elizabeth Pansing, M.Sc. Candidate - Integrative Biology, University of Colorado Denver: *Role of microsite type, cache pilferage, and elevation in whitebark pine (Pinus albicaulis Engelm.) regeneration in the Northern Rocky Mountains: Implications for restoration and climate change*

Elizabeth's research investigates the regeneration ecology of whitebark pine. Her research goals are to determine microsite types in which whitebark pine germinates most frequently, how germination rates change with elevation, and if rodent seed predation is a significant source of seed loss. Results are expected to provide information that could increase the success of a developing restoration technique called *direct seeding*, and use treeline dynamics to determine

the impact of climate change on regeneration and restoration.

As a requirement of their Fellowships, Cristina and Elizabeth will provide a final project report and copies of any publications as a result of their research. In addition, they will prepare a one-page, illustrated project summary that will be featured in a future RM-CESU newsletter. For more details contact Lisa Gerloff, Executive Coordinator of the RM-CESU at the University of Montana, at rmcesu@umontana.edu.