

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Rare Plant Field Surveys and Database Development at BLCA and CURE

Discipline: Natural Resources
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Effective Dates: 4/10/2011 - 6/30/2012
Funding Amount: \$5,000

Investigators and Agency Representative:

NPS Contact: Danguole Bockus, Ecologist, National Park Service, Black Canyon of the Gunnison NP/Curecanti NRA, 2465 S Townsend Ave, Montrose, CO 81401;
danguole_bockus@nps.gov; 970-249-1914 x432

Investigator: Peggy Lyon, Colorado Natural Heritage Program, 1474 Campus Delivery, Colorado State University
Fort Collins, CO 80523-1474; peggy.lyon@colostate.edu; 970-491-7331

Project Abstract: Black Canyon of the Gunnison NP / Curecanti NRA (BLCA/ CURE) staff will partner with the Colorado Natural Heritage Program (CNHP) at Colorado State University (CSU) staff to survey for 5 rare plant species in specified areas of BLCA and CURE. CNHP will re-visit known locations of the targeted plants, compile existing information to identify potential areas that include habitat for the 5 species, and perform field surveys targeting these habitats. CNHP botanists will use their technical expertise, rock climbing techniques, field survey skills, and knowledge of the target species to survey the steep canyon walls and cliff ledges that provide habitat for Black Canyon gilia and hanging garden *Sullivantia*. These areas are very difficult to access and are not often visited by NPS staff. These surveys for all 5 species will provide the BLCA/CURE staff with updated information on existing populations and potential new occurrences of these imperiled plants.

Species location records will be updated to reflect current population size and condition at each site, and this information will be used to finalize status reports for each species. Photographs will be taken and additional information on habitat and threats will be recorded as needed. Staff members of BLCA/CURE will provide input to the project, priorities of targeted plant species, and expertise in the natural resource management issues of the study area.

The results of this research project will provide NPS and CNHP with up-to-date information on the location, population size, habitat, and threats to rare plants that occur within BLCA/CURE. This data set is needed for NPS staff at BLCA/CURE to adequately manage, monitor and protect these globally-imperiled plant species. A complete data set is also required to predict species distributions, and to enable monitoring of population trends. Location specific data are extremely valuable for assessing range and abundance, and for identifying areas of important habitat.

Outcomes with Completion Dates:

1. Field surveys will be conducted in the summer of 2011 at the appropriate phenological times for the targeted rare plant species. Field survey data will be incorporated into the CNHP Biotics database in the fall and winter of 2011/2012.
2. Element Occurrence Data, tabular and GIS: CNHP will provide Level 1 data for the element occurrences which intersect BLCA and CURE lands. Upon receipt of a signed data use agreement, these Data will be provided as a pre-packaged ArcMap Hyperlink Project (ArcGIS.mxd) which links a GIS shape to its associated .pdf file containing tabular data for that particular element occurrence. Delivery will be in February 2012.
3. Final Report: A brief synopsis of the work completed under this project including objectives, methods, and results will be furnished to the BLCA and CURE in February 2012.

Key Words: rare plant surveys, database, Colorado State University - Colorado Natural Heritage Program, Black Canyon of the Gunnison NP, Curecanti NRA