



Rocky Mountain National Park

Research at Rocky

Rocky Mountain National Park (RMNP) issues approximately 75 research permits annually, making it the fifth largest research program in the National Park Service. Natural and cultural resource research topics range from microorganisms to stream hydrology to social science. Although the projects underway have a value of approximately \$4 million dollars, the park's funding contribution in 2003 was only \$185,895, reflecting the significant leveraging power of this program. In addition to coordinating research efforts, Rocky Mountain National Park's Office of Science and Research Administration also works to communicate research results to park staff, partners, and the general public, ensuring that research results are used broadly in decision-making.

Research Acquisition – The Research Administrator (RA) identifies needed research, solicits proposals, reviews submissions for scientific quality, negotiates with researchers to meet park needs, develops task agreements, and monitors subsequent work. In addition to overseeing the RMNP research program, the RA has also issued task agreements and provided expert advice to four smaller parks.

Research Permits - Whether or not a project receives park funding, all research conducted in the park must have a research permit. Each proposed project is scrutinized to ensure it does not adversely affect park resources or visitors and will contribute in some way to an understanding of the park. The review process allows the park to shape projects, even those receiving no government funding, in ways that will maximize value for the park. Inappropriate projects, or those lacking scientific validity, are rejected, in order to protect the integrity of park resources.

Research Application to Management – Limited park research funding is allocated on the basis of the importance of projects to management decision-making. For instance, the top priority project for 2003 was a social science study of the visitor use of the Highway 7 corridor, an area growing in popularity. Study results will contribute to both short and long-term planning for the area. The top priority project in 2002 focussed on bighorn sheep, a species that anecdotal evidence suggests is declining in the park.

Research projects in Rocky Mountain National Park in 2004 include:

Park Disturbance History, Visitor Use Patterns on Longs Peak, Estimating Chronic Disease Prevalence Rates in Mule Deer, Western Airborne Contaminants Assessment Project, Distribution and Abundance of Bighorn Sheep, Boreal Toad Demographics, Effects of Snowmobiles on Water Quality, Cheatgrass Control and Community Restoration, The Role of Beaver in Controlling Hydrologic, Biogeochemical, and Sedimentation Dynamics of the Kawuneeche Valley, Habitat Use and Moose Browsing Effects, Aspen Cavity Nesting on Elk Winter Range, Wapiti Vocalizations, Sediment Transport in Gravel-Bed Stream Bends and Relationships to Meander Development in Natural Rivers, Influence of Traffic and Other Road-Related Disturbance on Mineral Lick Use by Bighorn Sheep, Tools to Increase Translocation Success of Colorado River Cutthroat Trout, Snow Drift Control by Vegetation.



Researchers, park staff, and volunteers survey the Boulderfield on Longs Peak for glacial movement. (NPS-RMNP photo)

For more information on the park's research program, see <http://www.nps.gov/romo/resources/research.html> or contact ROMO_Research_Administration@nps.gov.