



The CDRLC supports management-driven research; public engagement, youth and diversity initiatives; and science communication and outreach at Rocky Mountain National Park. Photos: (Left) Colorado State University researchers and National Park Service staff collaborate to build and monitor simulated beaver structures in the park. (Center) Eagle Rock School students demonstrate the Lily Lake Phenology data collection process to RMNP's Leadership Team. (Right) 2020 Research Conference attendees learn about park science and research during the poster session.

The Continental Divide Research Learning Center (CDRLC) is one of 17 Research Learning Centers (RLCs) across the country dedicated to promoting and supporting scientific study in the NPS. RLCs were created through the 1999 NPS Natural Resource Challenge, an initiative developed in response to the 1998 Omnibus Park Act that directed the NPS to incorporate scientific research into park management decisions. The CDRLC, hosted by Rocky Mountain National Park (RMNP), facilitates park research; communicates research findings to internal and external audiences; and supports public and youth engagement in science. The CDRLC is a resource for all park divisions.

Research at RMNP

The CDRLC manages all research permitting at RMNP. We work with park managers to identify and prioritize key research needs that address gaps in our understanding of park resources, and impacts affecting these resources. We find and work with partners to co-produce research that addresses high-priority management needs and emerging issues. Research permit applications are reviewed and evaluated to determine their value and appropriateness. The CDRLC works with prospective researchers and park staff to identify and mitigate potential impacts to resources, wilderness character, and visitor experience.

The CDRLC further facilitates research through logistical support. We provide housing at McGraw Ranch and the Blister Rust dorm, arrange frontcountry and backcountry camping reservations, coordinate volunteer field support, provide recommendations on survey site selections, and review reports. This helps ensure project success and maximizes value to the park.

Science Communication

The CDRLC is dedicated to communicating the work of our research partners in meaningful ways to both internal and external audiences. Every other year, we host a research conference in Estes Park, CO, where researchers share their work with each other, park staff, and the public. Public presentations, as part of our *Science Behind the Scenery* speaker series, engage our community and visitors on park science during the summer.

Presentations to park leadership, resource briefs, and research summaries provide concise overviews of research and its management implications to park staff. Articles, the CDRLC website, and social media are tools used to engage the public in RMNP's diverse research. The CDRLC is always looking for new and innovative ways to share park science.

Science Literacy and Engagement

The CDRLC promotes public engagement opportunities in science and research, facilitates youth career experiences, and supports staff in professional development. Citizen science programs are the primary way that we engage youth and the public in hands-on research. The CDRLC partners with local schools on projects that foster science literacy and collect meaningful data on park resources.

Internship programs create opportunities for youth and young professionals from diverse backgrounds to explore career opportunities with the NPS. The CDRLC also organizes and coordinates professional development workshops and training sessions to support the career development of park staff and increase knowledge and understanding of resources and emerging issues.

Research and Engagement 2020

Research, Engagement and the Coronavirus Pandemic

Research and public engagement at RMNP will look a little different in 2020 due to the novel Coronavirus pandemic (COVID-19). While we will continue to support research in the park, we have adapted our operations to mitigate COVID-19 related risks to our staff, volunteers, and research partners. Public engagement and learning opportunities that can be done in small groups with social distancing may be continued, and park science will be highlighted through digital communication platforms.

Research throughout the Park

As of mid-May, there were 62 research permits and applications for the 2020 season. RMNP is an ideal place to study ecological processes, human impacts, and changing conditions. Some of the studies underway this year include:

- Long-term monitoring in the Loch Vale Watershed and the Upper Colorado River;
- Wildlife projects on pika, ptarmigan, butterflies, and fish;
- Weather and climate studies on snow pack, soil moisture, precipitation, permafrost, snow melt, and stream discharge;
- Airborne pollution monitoring of nitrogen, carbon, ozone, and particulates;
- Wildlife disease ecology and transmission research on *Chytrid* fungus, tularemia, and chronic wasting disease;
- Vegetation, forest, and fire ecology studies;
- Studies in support of restoration efforts, exotic plant management, and human health; and
- Visitor use, movement, and impact studies.

Summer Engagement Activities

This summer's line-up of youth and public engagement activities focus on citizen science. The Lily Lake Phenology project was launched to the public in 2019 and will continue this year. Visitors of all ages are encouraged to participate by collecting data at seven stops along the Lily Lake loop trail using a personal cell phone or tablet. Schools, summer camps, and youth groups are also welcome to participate.

In August, CSU's Public Lands History Center will bring students to the park for a week-long environmental history workshop. This year, the students will be exploring the history of backcountry camping management from 1969–present. They will have the opportunity to interview the Wilderness Office manager, visit backcountry sites, and examine years of statistics on campsite use.

The CDRLC will also be exploring new ways to share park science and research with park staff and the public through digital media.

Meet the 2020 CDRLC Team



Scott Esser, Director

Scott oversees the staff, facilities, and research and engagement programs.

Scott_Esser@nps.gov (970)586-1394



Carissa Turner, Science Communication Coordinator

Carissa highlights park research and findings to various audiences and manages McGraw Ranch.

Carissa_N_Turner@nps.gov (970)586-1416



Paige Lambert, Research Coordination Specialist

Paige facilitates park research through permitting and field and logistical support.

Paige_Lambert@nps.gov (970)586-1445



Camille Thorson, Learning Specialist

Camille coordinates and leads engagement programs and supports the McGraw Ranch operation.

Camille_Thorson@nps.gov (970)586-1466



Kirk Acharya, Future Park Leaders Intern

Kirk is examining human impacts throughout the Loch Vale watershed.

Kirk_Acharya@partner.nps.gov (970)586-1297



Bill Peterson, McGraw Ranch Caretaker

Bill oversees facilities at McGraw Ranch and provides logistical support to its residents.

Bill_Peterson@partner.nps.gov (970)586-1431

Many volunteers support the CDRLC in our research, communication, and engagement programs and activities!

Resources for You

Interested in learning more about park science and research?

Integrated Resource Management Application (IRMA) is an on-line database housing research-related documents. Search by topic and park to find reports from RMNP at <https://irma.nps.gov/DataStore/>.

Research Library We get reports and publications related to park research that have not yet made their way into IRMA. Find these on the park's shared drive Q:\Library of Research and Science_ROMO

CDRLC Website Learn more about research in the park and CDRLC learning activities at www.nps.gov/rlc/continentaldivide/index.htm

Still can't find what you are looking for? Give us a call - we can help!