



Rocky  
Mountain  
Conservancy

# 2018 End-Of-Season Portfolio

## High School Leadership Corps



June Crew



July Crew



# Rocky Mountain Conservancy

Since 1931, Rocky Mountain Conservancy has supported Rocky Mountain National Park and other public land partners through educational programs and philanthropic donations. Early on, the focus of the Conservancy was developing educational materials and publications for visitors to use while in Rocky Mountain National Park (RMNP). Over the past eighty year, the Conservancy has grown to support its public land partners in a breadth of ways. Currently, Rocky Mountain Conservancy contains six departments:

- **Retail** – manages 42 nature stores throughout Colorado and Wyoming to provide visitors with educational materials to enhance their experience.
- **Publications** – produces nature guides, children’s literature, natural and cultural history books, and more.
- **Membership** – connects people to RMNP in support for the Conservancy and through newsletters updating constituents on upcoming projects.
- **Development** – raises funds for RMNP and Conservancy programs through donor outreach, grant proposals, and community engagement. Funds are used for specific projects including land acquisition, historical preservation, trail maintenance, building construction, and education.
- **Education** – provides field classes, internships, nature-based activities, and fellowships for people of all ages to further understand and connect with public lands.
- **Conservation** – offer internship and volunteer opportunities for high school students, young adults, and community members to complete service learning work on public lands.

## High School Leadership Corps Program Outline

The Rocky Mountain Conservancy created the High School Leadership Corps (HSLC) in 2017. The program was established to provide an opportunity for Colorado high school youth to connect with and learn about RMNP, public land management, and natural resource careers. The HSLC serves as a link between the Next Generation Fund’s youth programs teaching audiences age 4-15 about RMNP and the Conservation Corps program offering conservation-based internships to young adult audiences age 18-25. In 2017, the Conservancy hosted one HSLC crew with 10 participants from Colorado’s Front Range. In 2018, the Conservancy added a second crew to the HSLC program. The program is led by two Conservancy staff members.

### Program Goals

The Rocky Mountain Conservancy, through the High School Leadership Corps will:

1. Connect new, non-traditional audiences with the outdoors.
2. Develop participant’s understanding of public land and its value.
3. Provide participants with outdoor training, job skills, and career development in the field of natural resources.
4. Expose participants to internship and entry-level positions with the National Park Service (NPS).
5. Promote a more diverse public land workforce that reflects changing demographics

The crews spend twelve days camping in Rocky Mountain National Park. The schedule for the HSLC is:

- Week One (Day 1-5) – Participants develop outdoor leadership skills, learn about RMNP’s ecosystems and history, meet with a variety of NPS staff, and complete half-day conservation projects in RMNP.
- Weekend (Day 6-7) – Participants explore the west-side of RMNP and rest for the upcoming week.
- Week Two (Day 8-11) – Participants complete full-day service projects with USFS partners in the Arapaho-Roosevelt National Forests, surrounding RMNP.
- Final day (Day 12) – Participants pack up camp, complete reflections, and enjoy a picnic with their families.

The program provides work clothing, camping gear, food, transportation and a living stipend to all members. The program is funded through generous donor support, in-kind gear donations, grant funding, and support from local organizations (Indian Peaks Wilderness Alliance, Poudre Wilderness Volunteers, and Headwaters Trail Alliance).

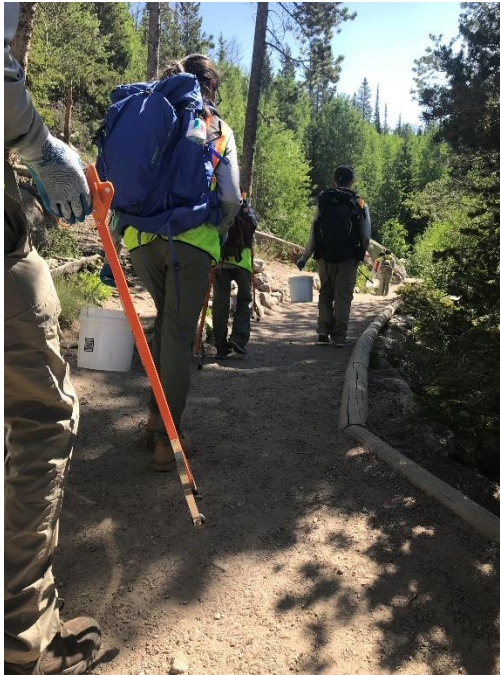
## June Crew

June 11 - June 22, 2018

### Program Summary:

On the first day, the crew spent the morning removing trash in the Bear Lake area. Crew members hiked around Bear Lake, down the connector trail to Glacier Gorge, up to Alberta Falls, and out to the Glacier Gorge Trailhead. The crew also collected litter from the Bear Lake and Glacier Gorge parking lots. Altogether, they removed 7 pounds of trash.

Participants gained experience using clompers, speaking with visitors, and hiking on trails in RMNP.



For the remainder of the first week, the crew worked with the Vegetation Management Crew in RMNP to eradicate invasive species. Crew members worked four-hours per day for three days targeting musk thistle (*Carduus nutans*), common houndstoungue (*Cynoglossum officinale*), mullein (*Verbascum Thapsus*), and Russian thistle (*Salsola collina*).

The primary method for eradication was a gridding system where the crew lined up arm-length apart and surveyed an area in that formation to find and pull targeted invasives. The crew completed this work around the Moraine Park Discovery Center parking area, adjacent to the Bear Lake Park and Ride, and along South Moraine Park Trail. The crew managed more than 20 acres of land throughout the week by manually pulling plants and removing their seed head.

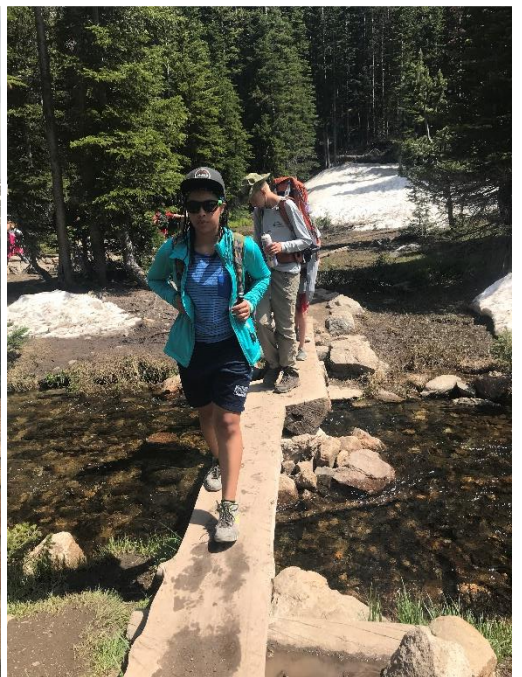
Participants gained experience using shovels, pruners/loppers, and seed collection bags, developed skills associated with plant identification, and practiced outdoor safety and leadership skills throughout their work day.



In addition to the work projects, the crew participated in enrichment programming during the other half of each day. The first educational activities of the week focused on Leave No Trace ethics and outdoor skills. These lessons were integrated into campsite set-up and practiced through various camp tasks distributed to all members on each day.

The crew also participated in a tour of Trail Ridge Road focusing on the natural and human history of RMNP and the ecological value and fragility of the tundra ecosystem. In addition to the tour, crew members attended a plant identification class and hike where the Corps members developed an awareness of major plant groups within the park.

Furthermore, the crew attended a resume workshop to help members understand the value of a resume and translate their past experiences and this program into a professional resume for future opportunities. Members were also provided resources related to applying for positions and internships with public lands during this time. To supplement the resume workshop, crew members also learned about the variety of career opportunities across all five-divisions of the NPS in RMNP by touring the Park's administrative area and speaking with current NPS staff. To close out the educational programming, crew members completed leadership development activities helping them understand their own personal strengths and opportunities for growth related to leadership and teamwork and how group dynamics evolve over time.



The second week of work was spent with the Poudre Wilderness Volunteers constructing a bridge on Lion Gulch Trail, just east of Estes Park along US Highway 36. The Lion Gulch Trail was heavily damaged and closed after the 2013 Colorado floods. Since 2013, the USFS and other conservation organizations, including the Conservancy, have spent thousands of hours rebuilding, rerouting, and restoring sections of trail to reopen it for recreational use. The foot bridge at the beginning of the trail was the final project required to fully restore access on this trail.

On the first day of the project, the Poudre Wilderness Volunteers provided an overview of tool safety, tool use, environmental concerns, and the project scope. The work was focused almost exclusively on building rock supports for the bridge and installing the log stringer. Therefore, the first step was to identify and collect stringer logs, rocks, and support logs for construction. The bridge was designed as a backcountry foot bridge, with a horse ford established next to the bridge. The project required two log stringers with rock abutments supporting each end of the logs.

This was the crews first project using trail tools. Since this was a fairly extensive project, there was a variety of jobs for crew members to cycle through to learn a diverse set of skills. These tasks included; de-barking logs, collecting and setting rocks, shaping rocks, collecting dirt and crush, sawing logs, moving logs, drilling holes into the logs, fitting logs for placement, and establishing tread. Although the project required a lot of work, the crew had the bridge constructed and completed by the third day.

On the final day of the work week, the HSLC crew moved up trail to help maintain some of the recent recovery work. This work included decommissioning and restoring old trail corridor back to a natural state and clearing more than 50 drains on the remainder of the trail.

Over the course of the work project, the HSLC crew learned how to use a variety of tools including double and single jacks, Pulaskis, pick-mattocks, rock austins, mcleods, rock bars, chisels, log tongs, shovels, buckets, rebar, drills, crosscut saws, hand saws, draw knives, and dirt bags to complete trail work. Additionally, the HSLC developed skills related to constructing rock structures, installing a bridge, maintaining trails, and restoring areas.





On the last day of the June Crew's season, the Conservancy invited crew members family and friends to join the crew for a BBQ picnic at the Field Institute. During that time, the crew members had an opportunity to reconnect with their families, introduce their new friends and crew mates, and share stories of their experience on the High School Leadership Corps.





## Crew Member Journals

Throughout the season, corps members rotated through serving as “Leader-of-the-Day.” One of the duties in this position was to lead a discussion at the end of each day and provide a journal prompt for every to reflect upon in their journals. Below you will find some of the prompts with a snippet of individual’s responses.

**Prompt:** How did helping with a litter clean-up affect you?

*“I never actually paid any attention to trash on walks or hikes because it felt like it was just there. Today, when the objective was to look for and collect all of the trash, all of a sudden I saw everything from a plastic bottle to a tiny piece of gum. I don’t think I have ever been happy picking up trash before today. The trash doesn’t only affect us, as people, but it also has a big impact on the wildlife.” – Jezey*

**Prompt:** How did learning about the park’s different jobs change your opinion on how it works?

*“Learning about the roles of the park changed my opinion about how the park functions. One way it changed my opinion is by showing how many people participate and work to make the park function. Before I thought only a few people ran everything and kept stuff in order. Another way it changed my opinion is by showing how many people work and volunteer in the park” – Cyrus (Lafayette, CO)*

**Prompt:** How has building a bridge brought us together?

*“I really think that the bridge has really brought us together. It was super tough work that forced us to work together. At some points the whole group worked together at once, like when we picked up the large logs. Seeing the finished project as a group allowed us to reflect. We were super happy with each other and our efforts” – Odin (Fort Collins, CO)*

**Prompt:** What was the most influential thing you learned this week?

*“I learned this week how to properly communicate in a group setting. I was made to exchange ideas with others. This was very influential because it takes a while for me to open up and I assumed everyone would be like that too. On the first day, everyone started talking and getting along. I was really scared to open up out of fear of judgement. Bu the end of this week I let my shield drop and felt more comfortable with others.” – Alina (Denver, CO)*

**Prompt:** What is one lesson you learned here that will impact your future behavior?

*“A lesson I learned here was how to be a more responsible person. By being here, I have taken more initiative and helped when I previously wouldn’t.” – Kinara (Denver, CO)*

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**Prompt:** Why do you feel it is important to protect plant life in the Park?

*“By keeping plant life safe, we ensure that biodiversity is maintained, which creates healthy ecosystems.” – Aiden (Estes Park, CO)*

## July Crew

July 16 - July 27, 2018

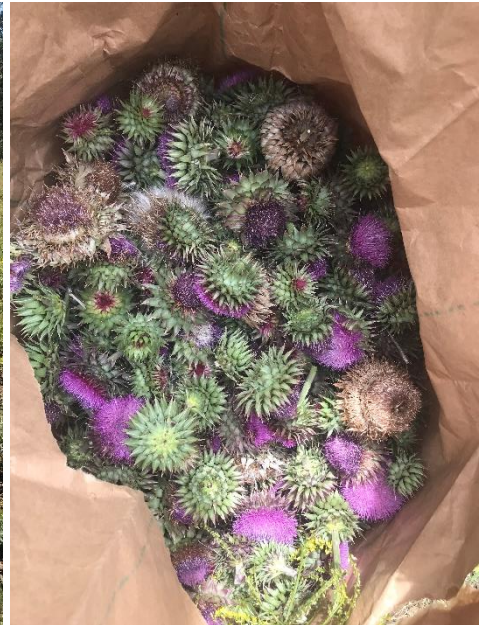
### Project Descriptions:

During the first week for the July Crew, the members completed projects with the Vegetation Management Crew within Rocky Mountain National Park. Similar to the June Crew, the July Crew spent much of their time managing invasive species. The target invasive were yellow sweet clover (*Melilotus officinalis*), musk thistle (*Carduus nutans*), common houndstoung (*Cynoglossum officinale*), common mullein (*Verbascum Thapsus*), and Russian thistle (*Salsola collina*). The crew began the week by mechanically removing these species (i.e. hand pulling with the aid of a shovel). The crew returned to the Moraine Park Discovery Center to continue to monitor and remove any invasive species that had come up since the June Crew's work. In addition to the Moraine Park Discovery Center area, the crew also surveyed and removed invasive from other areas along the recent waterline project. The waterline project focused on updating outdated infrastructure, as part of the NPS's push to complete backlogged maintenance. Although the construction portion of the project moved through Moraine Park last year, it caused significant disturbances on the landscape. These disturbed areas are hot beds for invasive plants to move into the Park.

Beyond Moraine Park, the crew also surveyed and removed invasive species from trails in Upper Horseshoe Park area. In Upper Horseshoe Park, the crew narrowed their focus onto musk thistle. Since the population in that area had already gone to see, the crew clipped seed heads to avoid further spreading and pulled the roots to eliminate future growth.

Lastly, the crew had the opportunity to support restoration work, as well. Restoration projects focus on disturbed areas and work to restore native plants to those areas. This helps combat invasive species and promotes healthy wildlife habitat. For their project, the crew returned to the water line project. This time, they were working on an area of disturbance near the Beaver Meadows Entrance Station. For their restoration work, the crew were collected seed heads from native plants. These seed head are brought back to the NPS Greenhouse in RMNP and will be sown into soil to propagate native plants that have adapted to that specific location. These plants will be used for future restoration projects at a nearby site.

During these projects the crew members learned how to use pruners, shovels, and collection bags for invasive species removal and native plant restoration work. Additionally, the crew networked with NPS professionals and learned about native and non-native plants in the area.





In addition to their work with the Vegetation Management Crew during their first week, the HSLC July Crew also completed educational enrichment after each half-day of work. The activities were the same as were completed for the June Crew (see page 5). These activities included a plant identification workshop, resume building session, natural history hike, Trail Ridge Road tour, leadership style survey, a career tour of the NPS, and a group dynamics discussion.

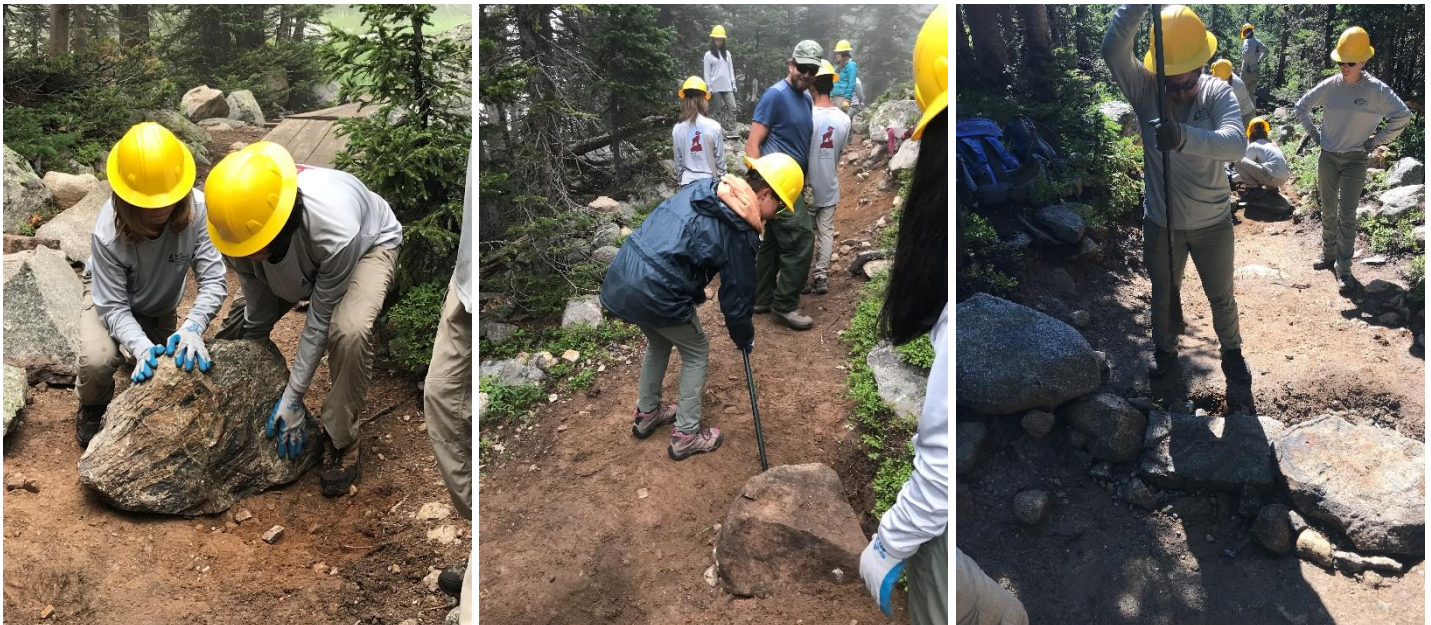


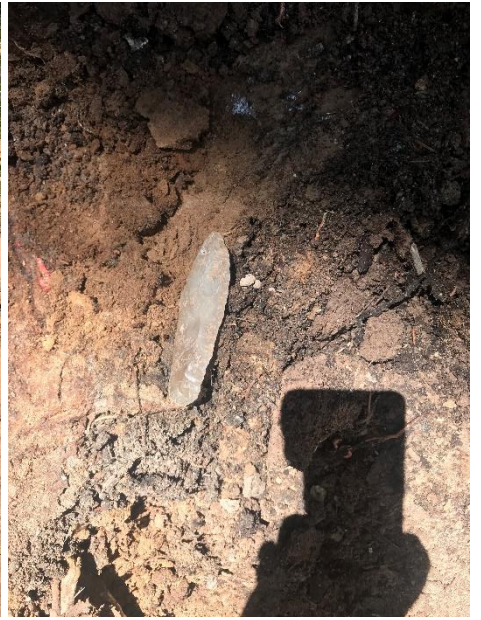
During the second week of service work, the HSLC July Crew worked with the USFS and Indian Peaks Wilderness Alliance in the Brainard Lake National Recreation Area. This is a heavily visited area within the Indian Peaks Wilderness. Due to the high visitation, the trail systems require constant maintenance and occasionally larger scale projects to improve trails and restore impacted areas.

The July Crew spent their week on the Long Lake trail constructing check dams to help stop trail erosion. These structures are small low-lying trail features that help slow and direct water as it washes down a trail to help retain soil. Check dams can be created using logs or rocks. Based on the high visitation to the area, the USFS chose to use rocks for the structures. Although it takes longer to install rock check dams, they have a much longer life than log dams. To begin the project, the crew focused on removing the existing rocks in the trail to improve the trail surface and encourage people to stay on trail. The crew members then moved on to collecting large rocks for the check dams. These rocks were then placed strategically along the trail to slow water run off and retain trail surface materials along steeper sections of trail suspect to erosion. Altogether the crew built a total of 8 erosion control features along the trail. In addition to the check dams, these features included drains (directional dips in the trail surface) and water bars (rock features created to divert water off the trail).

During the crew's time working on the Long Lake Trail in the Brainard Lake National Recreation Area, one of the crew members moved a large rock and discovered a Native American artifact. They discovered a rock that had been shaped into a tool or weapon by an indigenous peoples. The crew reported this find to the USFS staff they were working with and were fortunate enough to meet and help the USFS archaeologist, who came to the site the next day.

Over the course of this project, the crew gained experience using tools, including pick-mattocks, axes, rock austins, rock bars, single and double jacks, mcleods, pulaskis, rock buckets, shovels, rogue hoes, and tamping bars; developed an understanding of trail maintenance; and networked with USFS professionals.





Just as the HSLC June Crew wrapped up with an end-of-season picnic, so too did the HSLC July Crew. On the final day of the program, crew members packed up the campsite, turned in their gear, and completed evaluations and reflections before their friends and families arrived. During the BBQ picnic, the crew reconnected with their families, shared stories, and introduced their crew members as new friends.



## Corps Members Testimonies:

Throughout the season, corps members rotated through serving as “Leader-of-the-Day.” One of the duties in this position was to lead a discussion at the end of each day and provide a journal prompt for every to reflect upon in their journals. Below you will find some of the prompts with a snippet of individual’s responses.

**Prompt:** What is one thing you learned from the experience?

*“I learned a lot about the environment I live in, especially the relationships between humans, wildlife & plants. The most interesting thing I learned was how delicate the balance of nature is. I also learned a lot about getting a job in the park and the necessary elements required to pursue a conservation job” – Mae (Estes Park, CO)*

**Prompt:** What was the most influential thing you learned this week?

*“This week I gained a very personal outlook on how a group of people can come together with a common goal and discover a lot to talk about. I have never been part of a group like this from its very beginning before and I loved seeing how we began forming our RMC group.” – Annalise (Estes Park, CO)*

**Prompt:** What skill from the program will benefit you most in the future?

*“I think the most beneficial skill that I have learned in this program would have to be patience. Whether it is trail work, vegetation work, or just working at camp patience is important. It takes a long time for things to happen. I think I haven’t realized this as much in the past.” – Alex (Estes Park, CO)*

**Prompt:** Which career inside the NPS interested you the most? What would you want to do in your chosen field?

*“In the park, the Greenhouse and Volunteer office spoke to me the most. I love to learn about plants and ways to reduce invasive species in the area. I would like to work in the field with the greenhouse crew collecting samples and studying the native plants. In the volunteer office, I would like to get young people involved in the Park and in nature, so they take notice on the ways to preserve nature for future generations.” – Maryann (Greeley, CO)*

**Prompt:** Would you do a work program like this again? Why? What were your top two takeaways from the program?

*“I would do this in the future since it is fun and I’m protecting and preserving the landscape. My top two takeaways are how to work with tools to help the environment and how to work with others. I want to thank the Field Coordinators and the Conservancy for making this week possible.” – Jeffrey (Boulder, CO)*

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A **SPECIAL THANKS** to those that made this program possible, including:

RMNP License Plate Donors

The Rotary Club of Estes Park Foundation

Rocky Mountain National Park - Volunteer Office

Rocky Mountain National Park – Resource Stewardship Division

Rocky Mountain National Park – Moraine Park Campground Staff

USFS Boulder Ranger District – Recreation Program

Indian Peaks Wilderness Alliance

USFS Canyon Lakes Ranger District – Recreation Program

Poudre Wilderness Volunteers