

MSI Field Course



Thank you to our
funders and
collaborators

FUNDERS

- * Alpine Bank
- * Anschutz Family Foundation
- * The Community Foundation Serving Southwest Colorado
- * Ballantine Family Fund
- * El Pomar Foundation
- * National Forest Foundation

COLLABORATORS

- * Bureau of Land Management
- * Durango Mountain Resort
- * Rhea Environmental Consulting
- * SME Environmental
- * Telluride Valley Floor- Open Space Commission
- * Forest Health Timber Products, LLC
- * San Juan National Forest
- * Southern Ute Indian Tribe
- * Lemon Reservoir Management Staff
- * Chalkboard, Inc.



Students reach new heights during field course program

The Experience Mountain Science Program (xMSP), hosted by the Mountain Studies Institute, connects teens with scientists and resource management professionals to explore environmental and science careers, learn about pressing local issues, and gain 21st-century skills. At the end of the two-week program, students are united by a drive to monitor, explore, and restore our mountain heritage.

Where? xMSP brought together students to explore environmental issues and careers throughout the San Juan Mountains. Students were involved with wetland restoration around Silverton, wildlife monitoring in Telluride, disaster management near Durango, and forest health in Pagosa Springs. The six students represented Durango, Norwood, Ridgway and Bayfield for two four-day expeditions.

Why? Mountain Studies Institute (MSI) is driven to lead state-of-the-art science and education efforts with our partners because the mountains have called us, just like they call to you to explore and to appreciate the San Juan Mountains and their vibrant communities.

What? This unique program was specifically designed to provide an opportunity for students to engage with professionals in the environmental field and develop their professional skills. Over two weeks, students connected to ecosystems and communities across the San Juan Mountains. After days packed with science, the students had time to swim in lakes, soak in hot springs, hike trails, and roast s'mores under the stars. In order to meet our educational goals, students led discussions, kept journals, responded to writing prompts, and published newspaper articles which incorporated 21st-century skills and Colorado State Curriculum Standards.

"Really loved how there was a taste of everything from wetlands to forestry!"

—XMSP STUDENT



"She was with other students who are just as interested in science as she is. I believe this was [her] first meeting of scientific minds and I can see how what she experienced touched her deeply."

—PROGRAM PARENT

Silverton and Telluride, CO

Week One

Students started the program by learning about wetland ecology by digging into a restoration project near Ophir Pass. They contemplated the immense challenges posed by invasive species as they discussed biological and mechanical thistle controls with weed managers. As part of an ongoing citizen science effort, students recorded data about high-elevation populations of American pika. In Telluride, they visited a climate station and helped MSI monitor a stream restoration project's effects on macroinvertebrates and groundwater.



IMPACT

1

Trail sign installed at the Animas River Trail in Silverton

6

Student interns

18

Hours of invasive weed removal on public land

27

Career talks with local leaders

225

Native sedge plugs planted in Ophir iron fen

"What I found was that the practice of science is more similar to a lifestyle than a career. It is a search for truth that follows a particular method of experimentation. [...] I'm taking away much more than facts about our environment. I'm leaving with a platform for my next steps, no matter where they take me."

—Rosalee, Ridgway Student
Ouray County Plaindealer





Durango and Pagosa Springs, CO

Week Two

“She loved what she learned and she’s teaching me. It added more fuel to her desire to blend positively with the natural world, as she’s a part of it.”

—Program Parent



Week two was a busy week for the group! First, they learned about our communities’ efforts to protect water and restore forests after the Missionary Ridge Fire. At Vallecito Reservoir, students joined the USFS in identifying and marking beetle-infected ponderosa pines for future removal. In Pagosa Springs, xMSPers helped take forest health measurements at a fuel-reduction treatment site, and met with an entrepreneur pursuing a new forest product called biochar. To close the week, they met with atmospheric scientists of the Southern Ute Indian Tribe to discuss ongoing monitoring of the methane hot spot in the Four Corners.



IMPACT

6

Student articles published in local newspapers

15

Bags of Canada thistle, houndstongue and Oxeye daisy removed from the banks of Lemon Reservoir

24

Ponderosa pines marked for removal to enhance forest health

30

Hours collecting forestry data in Pagosa Springs

330

Student hours of mountain learning, exploring and community

“The subsequent days brought a plethora of knowledge and appreciation for everything surrounding me, from rivers to beetles to soil.” —Natasha, Durango Student, The Durango Herald



Other highlights

Careers

Highlighted:

- Wetland Ecologist
- Botanist
- Water manager
- Wildlife Biologist
- Forester
- Restoration Ecologist
- Science Educator
- Atmospheric Scientist

Professional

Development:

- Resume building workshop
- Mentoring with college interns
- Environmental journalism assignment for local newspapers

"Having exposure to possible options in our futures is something I think more kids need these days. It made me feel better about my future." —XMSP STUDENT

Check out our website for full student articles and more information!

<http://www.mountainstudies.org/xmsp>



Mountain Studies Institute

SAN JUAN MOUNTAINS COLORADO

Contact Amanda Kuenzi for an application!

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"The xMSP program is great for kids who are unsure of what they want to pursue. Also, you learn a lot of good info and its very fun."

—XMSP STUDENT

