

PROGRAMS

SEVENTH GRADE - FALL

Plates near the La Platas

Did you know the Rocky Mountains used to be underwater? In a giant ocean? Well, one can see evidence of this phenomenon in Overend Mountain Park (and other areas) in the form of tiny, prehistoric echinoderms embedded in rock. In this lesson, students will learn about the formation and history of the trails in our backyard on a geologic timescale: successive sedimentation, folding, faulting, and uplifting caused by plate tectonics along with some erosion and deposition, which formed these foothills and mountains we call home. The afternoon includes trail maintenance with on-the-ground training by Trails 2000 crew leaders.

Location: Local trails in Overend Mountain Park, Nature Trail, or Horse Gulch

Fulfills Colorado Academic Standard, Earth Systems Science 3.1, 3.2: Major geologic events such as earthquakes, volcanic eruptions, mid-ocean ridges, and mountain formation are associated with plate boundaries and attributed to plate motions; Geologic time, history, and changing life forms are indicated by fossils and successive sedimentation, folding, faulting, and uplifting of layers of sedimentary rock.

EIGHTH GRADE - SPRING

Ecological Disturbance

Have you ever seen what a forest looks like after a fire? Clear-cutting? There are many ways that disturbances (caused by humans or the environment) can change an ecosystem. In this lesson, students will participate in a hands-on lesson about ecological succession, edge effect, habitat fragmentation, and other ecological phenomena that occur when ecosystems are disturbed. Learn how trails affect the local ecosystem and what we can do to reduce our own ecological impact. Stay around in the afternoon to do some trailwork to learn how to safely and effectively use tools with an on-the-ground training by Trails 2000 crew leaders.

Location: Local trails in Dalla Mountain Park, Horse Gulch, or Overend Mountain Park

Fulfills Colorado Academic Standard, Life Science 2.1: Human activities can deliberately or inadvertently alter ecosystems and their resiliency.



A Program of Durango Trails 2000

For more information, contact:

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TrailKids is a fully sponsored youth educational program provided by local nonprofit, Trails 2000. Formed in 1989, Trails 2000 plans, builds and maintains trails, educates trail users, and encourages connectivity on road, path and trail. Each season, the organization contributes over 3,500 hours of volunteer work - on Forest Service, BLM, City, County and private lands - which provides the community with a trail network of over 300 miles of trail within 30 minutes of town.

The TrailKids program is designed to inspire curiosity, stewardship, and an appreciation for natural lands through outdoor, hands-on science education and trailwork. Focused on Durango-area middle school students, TrailKids offers a variety of one hour, half-day, and full-day programs for 6th-8th grade. Each course is tailored to Colorado Academic Standards and focuses on Durango's unique ecosystems and geology to better understand the importance of trails.

All programs are offered free of cost for all middle school students in the Durango area.

Each course is offered in three different formats:

1. Spring snow format: This option is a multi-day program, consisting of a 60 minute, hands-on lesson inside in the classroom during snowy months when trailwork is not possible. Later in the spring semester when temperatures rise, educators will plan a half day of trailwork outside to complement the indoor lesson.
2. Half day format: This option consists of a half-day, hands-on lesson outside in the morning or afternoon (to be determined prior to class by TrailKids instructor and teacher).
3. Full day format: This option consists of a hands-on lesson in morning and trailwork in the afternoon, both outside. Trail conditions must not be muddy, snowy, icy, or frozen (colder than 32 degrees).

Locations of courses offered outside will be determined in advance by the teacher and TrailKids educators depending on proximity to the school and where trailwork is needed. Transportation costs may be covered via an online grant application.

SIXTH GRADE - SPRING

Just Go With the (Energy) Flow

How do we get our energy? What about a tree? A mountain lion? Discover what it means to be a producer or consumer, and how matter and energy is recycled in our own backyard through an interactive, hands on lesson. The full-day lesson will include trail maintenance with an on-the-ground training by Trails 2000 crew leaders.

Location: Local trails in Horse Gulch, Overend Mountain Park, or Dalla Mountain Park

Fulfills Colorado Academic Standard, Life

Science 2.1: Changes in environmental conditions can affect the survival of individual organisms, populations, and entire species.

Watch Out for Knapweed!

How can we tell the difference between native and invasive species? How did invasive species make their way onto the trails and why? In this hands-on lesson, students will learn to identify common invasive plant species of the area, why they colonize some disturbed areas, how they affect populations of native plants, and how humans can help. The lesson can be expanded to a full day to participate in trail maintenance, and even weed removal (by hand). The full-day lesson will include trail maintenance, and students will learn how to use tools safely and effectively with an on-the-ground training by Trails 2000 crew leaders.

Location: Local trails in Horse Gulch or Overend Mountain Park

Fulfills Colorado Academic Standard, Life

Science 2.1: Changes in environmental conditions can affect the survival of individual organisms, populations, and entire species.

The Evolution of the Durango Landscape

Durango has many unique geological features: the La Plata Mountains, Perins Peak, Animas Mountain, and Fort Lewis Mesa. Learn how the features developed by exploring deposition, erosion, weathering, and sedimentation, and how these geological processes affect OUR trails. The full-day lesson will include trail maintenance, and students will learn how to use tools safely and effectively with an on-the-ground training by Trails 2000 crew leaders.

Location: Local trails in Dalla Mountain Park, Overend Mountain Park, or Horse Gulch

Fulfills Colorado Academic Standard, Earth

Systems Science 3.1: Complex interrelationships exist between Earth's structure and natural processes that over time are both constructive and destructive.

SEVENTH GRADE - FALL

Darwin in Durango!

In this lesson, learn about microclimates and natural selection just minutes from downtown. Students will learn how differences in light, temperature, and soil moisture create different selective pressures for different plants. What specific traits do these plants need to have in order to survive in these different microclimates? Stay around in the afternoon to do some trailwork to learn how to safely and effectively use tools with an on-the-ground training by Trails 2000 crew leaders.

Location: Local trails in Overend Mountain Park or Horse Gulch

Fulfills Colorado Academic Standard, Life

Science 2.1: Individual organisms with certain traits are more likely than others to survive and have offspring in a specific environment.

