The following list is not an exhaustive list of available programs. Please contact Larimer County Natural Resources Education Programs to see if we can create a better fit for your curriculum needs.

**Geology – At Devil’s Backbone Open Space**

Geology programs may be done as a half day stations programs with Larimer County Naturalists and extended to full day trail experience with teachers or chaperones to discuss morning lessons while hiking the wild loop at the Devil’s Backbone Open Space. Groups with a total of 24 or less students may schedule a full day trail experience with Naturalists.

1. **Rocks, Rocks Everywhere**: Cover the 3 rock types and their distinguishing characteristics. Students will understand the rock cycle and processes that make each rock type. (crosscutting concept: Patterns, Energy & Matter, SC.2.3.1
2. **The Present Doesn’t Look Like the Past:** Introduction to the 4 Geologic Layers of rocks, their characteristics and how/why they are present at Devil’s Backbone Open Space.
3. **Rocks Can Fall Apart:** Introduce students to cause and effect of weathering, erosion and deposition at Devil’s Backbone Open Space. (SC.2.3.2,
4. **Minerals Around Us**: Students will consider how minerals are formed and that they are the building blocks of rocks. We will also look at how humans use minerals in our everyday lives.
5. **Human Connection**: Students will learn some of the history of Alfred Wild and why he is significant to the area around the Devil’s Backbone. Students will learn the importance of how non-living things (rocks and minerals) can affect us and the other living things around them.
6. **What’s Living What’s Not:** Students will inspect how nonliving (abiotic) factors influence what living (biotic) organisms live in a certain area or habitat.
7. **Natural Disasters:** Discuss how floods, erosion, fires and other natural disasters can affect the natural and human built world. How can we better prepare to protect our environment and ourselves in the face of these disasters?

**Ecology – At Horsetooth Mountain, Lions, Ramsey-Shockey or River Bluffs Open Space**

Ecology programs may be done as a half day stations program at Lyons or River Bluffs open space properties or as full or half day trail experience at Horsetooth Mountain or Ramsey-Shockey Open Space properties. Please contact Larimer County Natural Resources Education Programs to discuss the best options for your classroom needs.

1. Through the eyes of Insects: Students observe habitats around open space areas to determine if they think different arthropods live in different habitats. By using insect nets to catch arthropods in these different habitats they will ascertain if certain insects prefer different habitats.
2. **River Habitat Study:** Students will observe the river and surrounding area to hypothesize if the river is healthy or unhealthy habitat. Using dip nets to catch macroinvertebrates and identify them they will be able to ascertain the general health of the river using a pollution tolerance index.
3. **What this Habitat Needs:** (Oh Deer) Using Project WILDs Oh Deer activity students will explore what animals need in their habitat to survive and how excess or lack of certain resources can affect animal populations.
4. **Ecology/Habitat Walk:** As students walk along an open space trail they will look for signs of what animals use the area as habitat and consider why the area is good or bad habitat for the species who may live there.
5. **Life Zones:** Students will explore how different factors such as elevation, weather, water and sun availability effect the plant species in an area and how that can help determine what animal species call an area home.
6. **Seeds, Shoots and Trees:** Students will explore what plants need to survive in different environments, how the soil, sun and water availability can affect how well a plant can or cannot survive in different habitats.
7. **Natural Disasters:** see above