Nature's Forces - Geology

In the space of one mile, the cliffs of Eldorado Canyon reveal a 1.6 billion year panorama of geologic history. The oldest rocks in the park, the granite exposed at the west end, formed when molten magma seeped from the earth's core through cracks in its crust, still deep beneath the earth's surface. As the magma slowly cooled, its quartz, feldspar and biotite components solidified into interlocking crystals to make this light gray igneous rock.

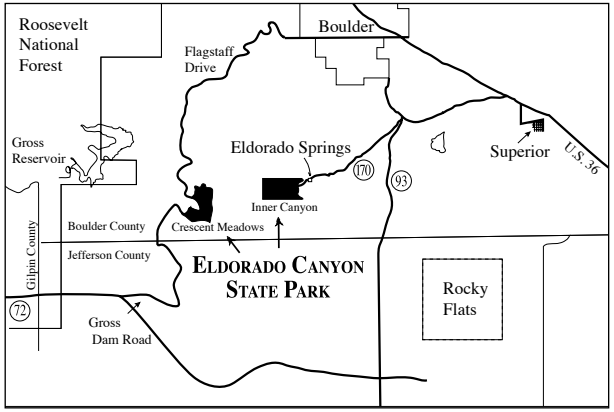
Overlying the granite is quartzite, which started out as thick layers of eroded sand about 1.6 billion years ago. Further erosion buried the sand to a great depth, where heat and pressure compacted it into sandstone, a sedimentary rock. As folding and faulting of the earth's crust pushed the sandstone closer to the earth's core, increasing heat and pressure compressed it into a metamorphic rock. This prominent grayish quartzite can be seen at Supremacy Rock and along Rattlesnake Gulch.

Roughly 300 million years ago the Ancestral Rocky Mountains were uplifted in the same position as the present day Rockies, about 30 miles west of the park. As these granite mountains eroded, streams deposited thick layers of sand and pebbles, which compacted into sandstone as it was buried to increasing depths. This rock is known as the Fountain Formation, which is also exposed in Boulder's Flatirons and Red Rocks Amphitheater. The reddish coloring is the result of the iron ore called hematite. Most of the canyon's high cliffs - The Bastille, Wind Tower, Redgarden Wall, West Ridge, Peanuts and Rincon Wall - are made of this rock.

280 million years ago a desert existed east of the Rocky Mountains. Windblown sand dunes were deposited above the Fountain Formation, and then compacted into sandstone 240 million years ago. This is the youngest rock in the park, known as the Lyons Formation, and is exposed at the Rotwand Wall.

The uplifting of the modern Rocky Mountains 65 million years ago caused the previously horizontal layers of the Fountain and Lyons formations to tilt, which is clearly visible on the sheer cliff walls where South Boulder Creek has slowly eroded through the layers. The softer areas of rock have eroded faster, creating ravines leaving the harder rock sections in stunning ridges. The tilted layers also carry groundwater from the Rockies down and eastward to a depth of 8,000 feet before it is forced back to the surface as the artesian spring just east of the park entrance.

Location



Directions

From Boulder:

- SOUTH on Broadway three miles outside Boulder to State Highway 170.
- WEST (right) on S.H. 170. Travel 3 miles (through the town of Eldorado Springs), and enter Eldorado Canyon State Park.
- Continue one mile on the dirt road through Eldorado Canyon, cross the small bridge, veer to the left and follow the sign to the VISITOR CENTER.

From Denver:

- INTERSTATE 25 North to STATE HIGHWAY 36, WEST (towards Boulder).
- EXIT at "Louisville-Superior" and turn South (left) at the light.
- Take the first right (WEST) onto STATE HIGHWAY 170.
- Continue on S.H. 170 for 7.4 miles to Eldorado Canyon State Park.
- Continue one mile on the dirt road through Eldorado Canyon, cross the small bridge, veer to the left and follow the sign to the VISITOR CENTER.

Eldorado Canyon State Park

#9 Kneale Road • PO Box B
Eldorado Springs, CO 80025
Phone (303) 494-3943 • Fax (303) 499-2729
E-mail: eldorado.park@state.co.us

cpw.state.co.us

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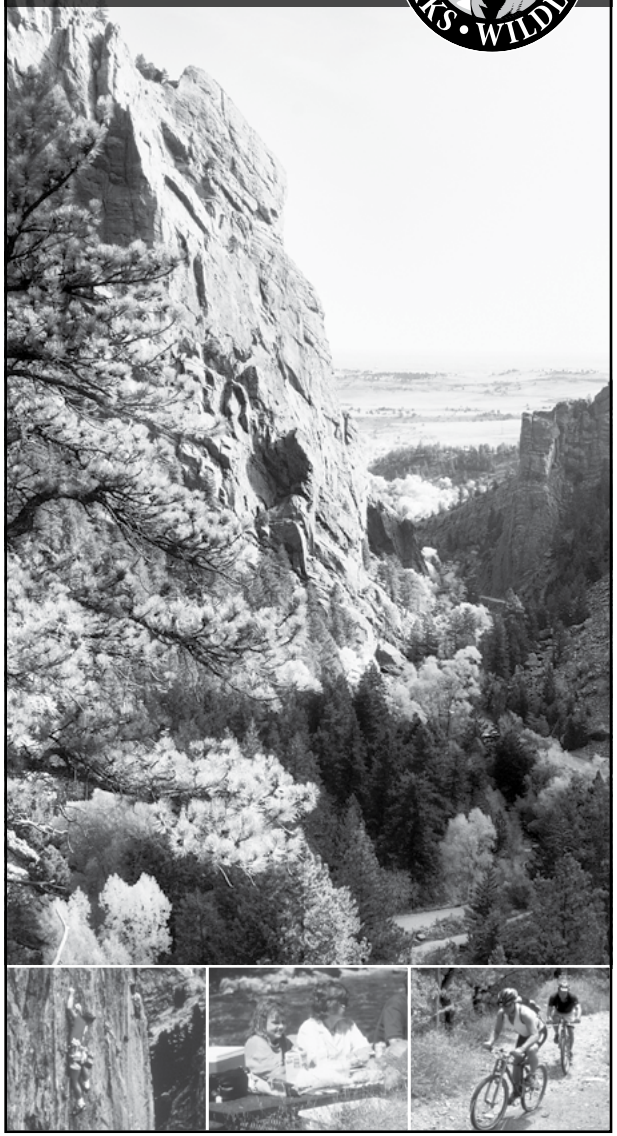
COLORADO PARKS & WILDLIFE

Eldorado Canyon State Park

42 STATE PARKS FOR YOU TO ENJOY



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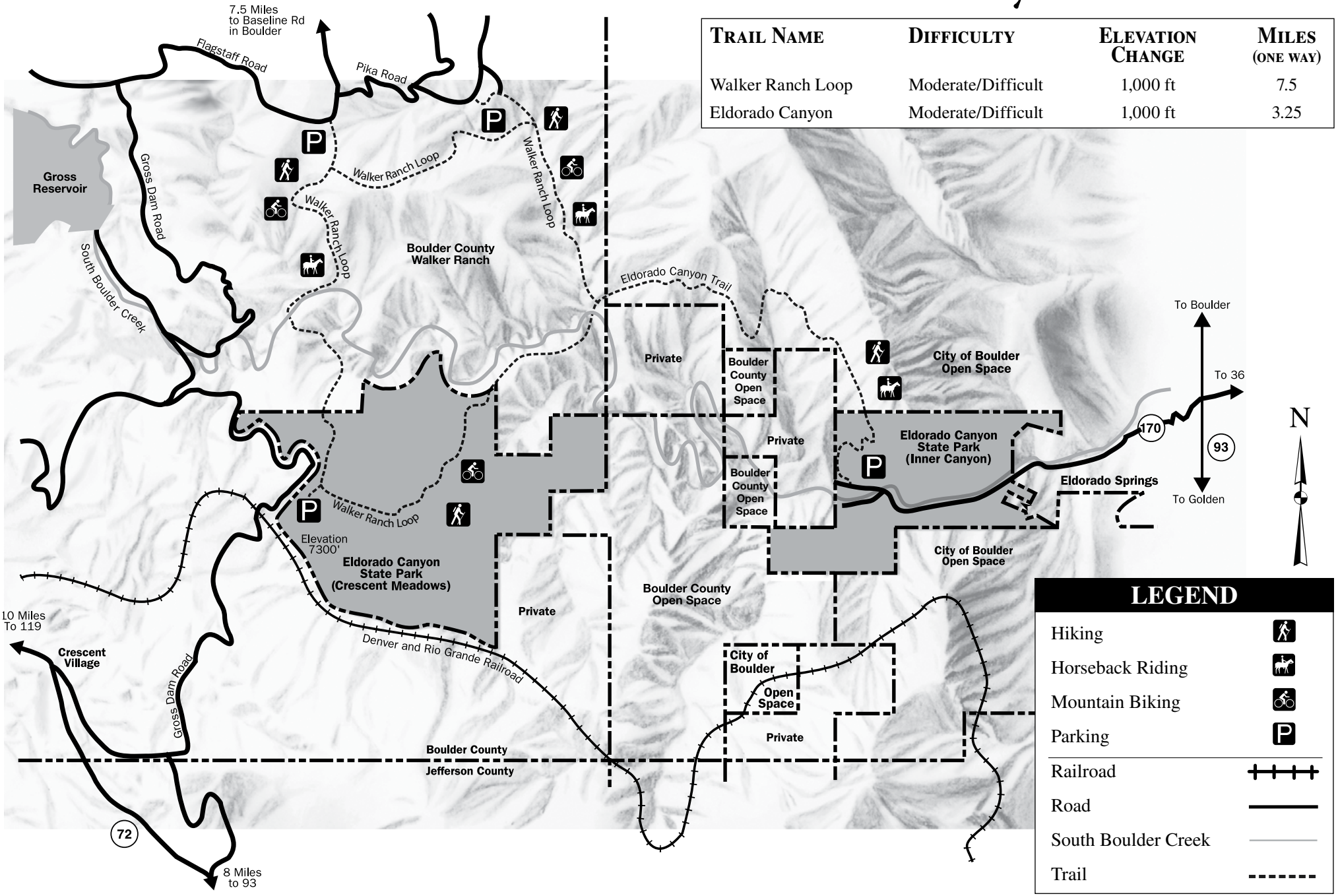
Map of Park and Surrounding Area

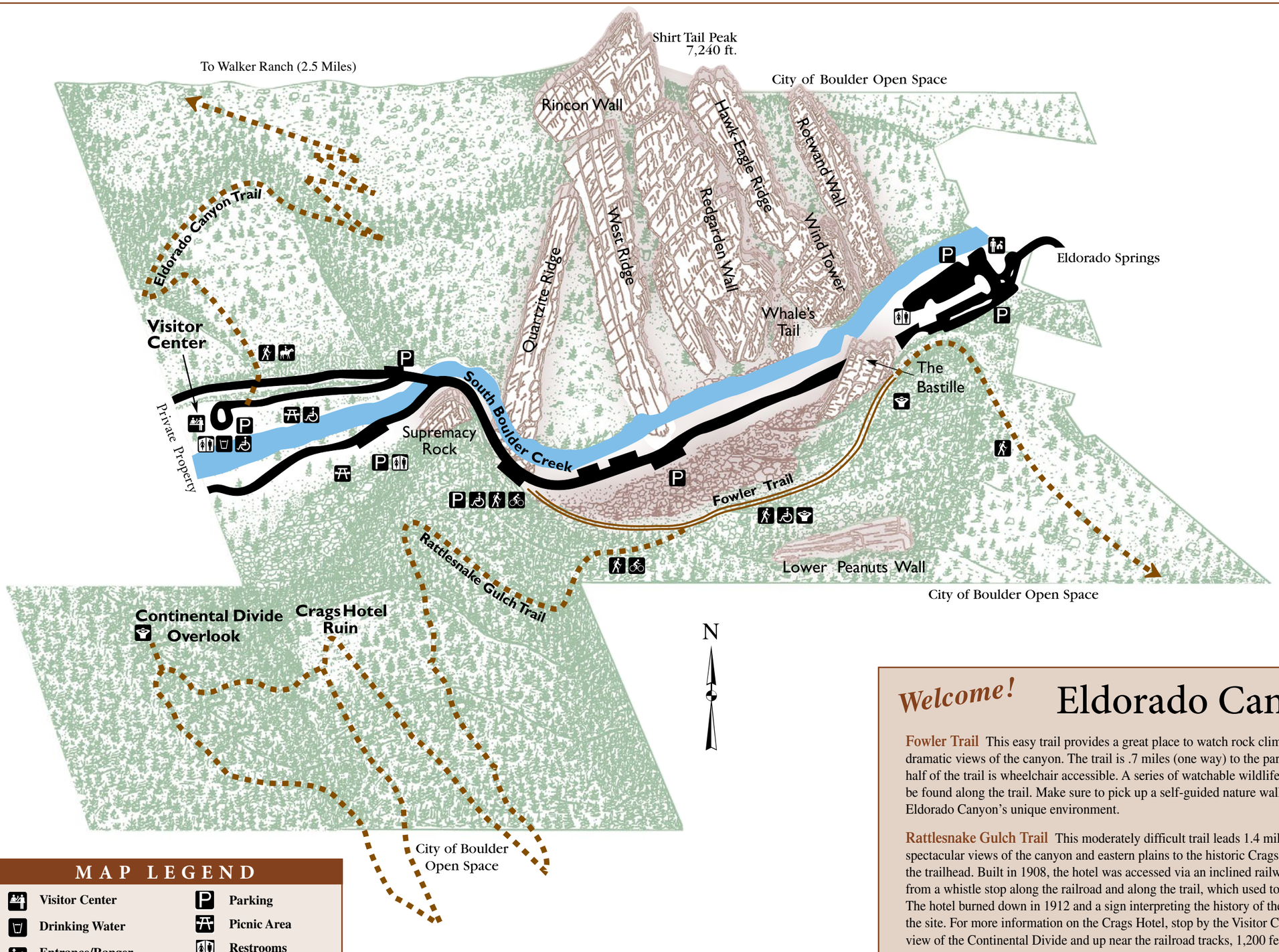
Eldorado Canyon State Park

Trail Name	Difficulty	Elevation Change	Miles (one way)
Walker Ranch Loop	Moderate/Difficult	1,000 ft	7.5
Eldorado Canyon	Moderate/Difficult	1,000 ft	3.25



LEGEND

- Hiking
- Horseback Riding
- Mountain Biking
- Parking
- Railroad
- Road
- South Boulder Creek
- Trail



MAP LEGEND

- Visitor Center
- Drinking Water
- Entrance/Ranger Station
- Hiking
- Horseback Riding
- Mountain Biking
- Parking
- Picnic Area
- Restrooms
- Scenic Overlook
- Wheelchair Access
- Dirt Road
- Improved Trail

REGULATIONS

Please help us protect and keep state park lands safe and enjoyable for all visitors:

- Stay on designated trails to reduce erosion.
- Keep pets on a maximum six foot leash and under control at all times.
- Do not gather or collect rocks, flowers or other natural materials including dead and downed wood so that others may enjoy.
- The park is open dawn till dusk year-round.
- Camping is prohibited.
- Swimming is prohibited.
- Ground fires are prohibited. Limit fires to facilities provided.
- Mountain bike and horseback riding are limited to the park roadway and selected trails.
- Motor vehicles must remain on roadways or in designated parking areas.
- All vehicles, bikers, and pedestrians are required to display a valid park pass.
- Picnic sites are available on a first come, first serve basis; and have a maximum capacity of eight (8) people per picnic table.
- Grills / cook stoves are only permitted in designated picnic sites.

Welcome!

Eldorado Canyon State Park

Fowler Trail This easy trail provides a great place to watch rock climbers or simply enjoy dramatic views of the canyon. The trail is .7 miles (one way) to the park boundary. The first half of the trail is wheelchair accessible. A series of watchable wildlife interpretive signs can be found along the trail. Make sure to pick up a self-guided nature walk brochure to explore Eldorado Canyon's unique environment.

Rattlesnake Gulch Trail This moderately difficult trail leads 1.4 miles (one way) past spectacular views of the canyon and eastern plains to the historic Crags Hotel ruin, 800 feet above the trailhead. Built in 1908, the hotel was accessed via an inclined railway from the canyon floor from a whistle stop along the railroad and along the trail, which used to be an old wagon road. The hotel burned down in 1912 and a sign interpreting the history of the hotel can be found on the site. For more information on the Crags Hotel, stop by the Visitor Center. The trail continues as a .8 mile loop and leads to a view of the Continental Divide and up near the railroad tracks, 1,200 feet above the trailhead.

Eldorado Canyon Trail This scenic, moderately difficult trail is 3.25 miles long (one way). It gains over 1,000 feet in elevation and after 3.25 miles the trail intersects the **Walker Ranch Loop Trail.**

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