

### ***Pole Forest***

#### **Garden of the Gods**

**300 million years ago**

**Our world changed** dramatically over the last 300 million years. In the Pennsylvanian Period, Colorado was home to a long-lost mountain range known as the Ancestral Rockies. The mountain slopes were forested with lycopod trees that captured sunlight not only with their leaves, but also with their trunks and roots.

The Fountain Formation is a thick layer of dark red sandstone and conglomerate that formed as rivers flowed away from the Ancestral Rockies. Lycopod roots and gravel from the Ancestral Rockies are among the fossils found at the Garden of the Gods near Colorado Springs.

### ***Slimy Shoreline***

#### **Roxborough State Park**

**250 million years ago**

**The Permian extinction** destroyed most of Earth's marine species just over 250 million years ago, and a lot of life on land as well. At the time, there was beachfront property in Colorado. The post-extinction Colorado coastline was home to single-celled bacteria and algae, living together in mounded colonies known as stromatolites.

The Lykins Formation consists of cream-colored layers of wavy limestone amid thick piles of brick-red mudstone. The thin limestone layers—remnants of ancient stromatolites—stick out like short, white walls at Roxborough State Park.

### ***Triassic Thickets***

#### **Rifle Falls State Park**

**225 million years ago**

**Armored plant-eaters** known as aetosaurs once rummaged through a Colorado understory filled with *Sanmiguelia* plants. Dense thickets of giant rushes rose overhead. This otherworldly 225 million-year-old landscape also was home to the small, carnivorous *Coelophysis*, Colorado's oldest known dinosaur.

The brick-red Chinle Formation occurs throughout the Four Corners area, including southwestern Colorado. This Triassic Period scene is based on plant and animal fossils collected near Telluride and Rifle Falls State Park, not far from the western slope town of New Castle.

### ***Stegosaurus Snacks***

#### **Dinosaur National Monument**

**145 million years ago**

**Mysterious landscapes** covered with fern-like bennetite bushes and full-size tree ferns were home to some of the largest animals ever to walk the planet—right here in Colorado. *Stegosaurus* and many other dinosaurs once browsed this pan-flat terrain.

The Morrison Formation was named for the town of Morrison, Colorado, where dinosaurs were discovered in 1877. But the big find came in 1909 with the discovery of a magnificent outcrop full of dinosaur bones in northwestern Colorado, now on display at Dinosaur National Monument. Fossil leaves complete the picture of Jurassic-Period Colorado.

### ***Maritime Colorado***

#### **Pueblo Reservoir State Park**

**85 million years ago**

**Colorado was underwater** millions of years ago—not a mile high, but 500 feet below the sea! Air-breathing marine reptiles called plesiosaurs roamed the waters, surfacing occasionally for air. Schools of fish beneath the waves drew the attention of soaring pterosaurs with their eye on a quick meal.

It's hard to imagine Colorado as a seafloor, but a mile-thick layer of evidence in the form of marine mud and limestone lies under downtown Denver. You can see the Pierre Shale and other Cretaceous Period formations, containing fossils of fish and other marine life, at Pueblo Reservoir State Park.

### ***Triceratops Swamp***

#### **Marshall Mesa**

**68 million years ago**

**Three-horned dinosaurs** aptly called *Triceratops* foraged in Colorado swamps during the Cretaceous Period. Similar swamps exist today along the U.S. Gulf Coast—minus the dinosaurs. The first known *Triceratops* fossil was discovered in a creek bank in downtown Denver in the late 1880s, with many more found over time.

The Laramie Formation lies 500 feet beneath the Colorado Convention Center. It rises to the surface near Boulder, where it is exposed at Marshall Mesa. The remains of Cretaceous swamp forests form into deposits of underground coal, which was once mined at several Boulder-area locations.

### ***After Armageddon***

#### **Plains Conservation Center**

**65.5 million years ago**

**A giant asteroid** the size of Denver struck the shallow seas covering Mexico's Yucatán Peninsula more than 65 million years ago. Dinosaurs and their ecosystems vanished in a flash. Within a few years of the catastrophe, vast meadows of ferns blanketed charred Colorado landscapes bisected by alligator-infested creeks.

On the banks of West Bijou Creek, Denver Museum of Nature & Science paleontologists discovered a thin layer of debris that was left behind by the asteroid impact. Such deposits have been found worldwide. The site is owned by the Plains Conservation Center.

### ***Rainforest Eruption***

#### **South Table Mountain**

**64 million years ago**

**Volcanic eruptions** poured lava across Colorado's landscape during the formation of the current Rocky Mountains, some 64 million years ago. The Front Range was mantled with tropical rainforest, and lava cut fiery swathes through the dense vegetation—much as it does on the big island of Hawaii today.

The flat top of South Table Mountain near Golden, Colorado, is actually the remains of Paleocene lava flows. The lava solidified into rock that was much harder than the underlying soil, and erosion has since sculpted the landscape into the familiar shapes of rock-capped mesas.

### ***Redwoods and Roses***

#### **Florissant Fossil Beds**

**34 million years ago**

**Giant redwoods** grew in Colorado 34 million years ago, the way they do along the coast of northern California today. Brilliant shafts of sunlight pierced the forest, illuminating patches of wild roses and palmetto shrubs. Tiny and timid oreodonts, distant relatives of today's goats, nibbled rosehips among the trees.

Massive fossil trees provide mute testimony that Colorado hosted redwood forests during the Eocene Epoch. Massive tree trunks, foliage, ancient insects, and other fossils are preserved within the Florissant Formation at Florissant Fossil Beds National Monument.

### ***Ghost Predator***

#### **Bonney Lake State Park**

**30,000 years ago**

**Prehistoric lions** hunted among Colorado sand dunes during the Pleistocene Epoch, surveying the drifting landscape for potential prey. A nearby river drained from the distant Rockies into the dry terrain. The landscape was in constant motion, as windy conditions caused dunes to migrate across the land.

The northwestern corner of Colorado is still covered with lightly vegetated sand dunes, remnants of an ancient dustbowl. The dunes are best seen from the air, but you can also see them as you approach Bonney Lake State Park, near the town of Wray, from the northwest.