



Marshall P. Felch

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● **Marshall P. Felch**—Although O. C. Marsh rarely collected in the field, he organized and financed fossil quarries in the Garden Park area that were overseen by a local rancher named Marshall Felch. Although Felch had very little formal training, he was able to send over 270 crates of fossils to Marsh in spite of obstacles such as vandalism to the quarry, deaths in his family, and flooding.

Ornithel Charles Marsh



Photo by: Matthew Brady or Levin Indy

● **Ornithel Charles Marsh**—Professor O. C. Marsh of Yale University was the well known across America during the late 19th century for his work in Paleontology and his infamous rivalry with E. D. Cope. Although Marsh rarely went into the field, he had many specimens sent to his offices and he is responsible for naming and describing many dinosaurs, including Triceratops, Apatosaurus (Brontosaurus), Stegosaurus, and Allosaurus.

Edward Drinker Cope



Photographer Unknown

● **Edward Drinker Cope**—One of the preeminent paleontologists of the late 1800s was E. D. Cope. During his prolific career, Cope published over 1,200 scientific papers and named over 1,000 species. Cope was well known for his highly publicized rivalry with Ornithel Charles Marsh, which was called the "Bone Wars" in the press at the time.

The Paleontologists

● **Sauropods** were a group of large, long-necked dinosaurs that thrived during the Jurassic period. They were the largest land animals to ever live on earth, reaching lengths of up to 130 feet (40 meters). These dinosaurs were exclusively herbivorous and it is believed that their primary defense from predators was their sheer size. Some of the sauropods found in Garden Park include Apatosaurus (Brontosaurus), Amphicoelias, Diplodocus, Haplocanthosaurus, Camarasaurus, and Brachiosaurus.



Credit: Dmitry Bogdanov

The Dinosaurs

● **Bryan Small and Kenneth Carpenter**—During a geological survey of the Garden Park area, Carpenter and Small discovered the fossilized remains of a nearly complete Stegosaurus which was excavated by volunteers from the Denver Museum of Nature and Science and the Garden Park Paleontological Society.

● **Edwin Delfs**—Edwin Delfs was sent to Garden Park by the Cleveland Museum of Natural History to search for dinosaur bones. Over three summers, Delfs and his students excavated the remains of a large sauropod dinosaur near four mile creek.

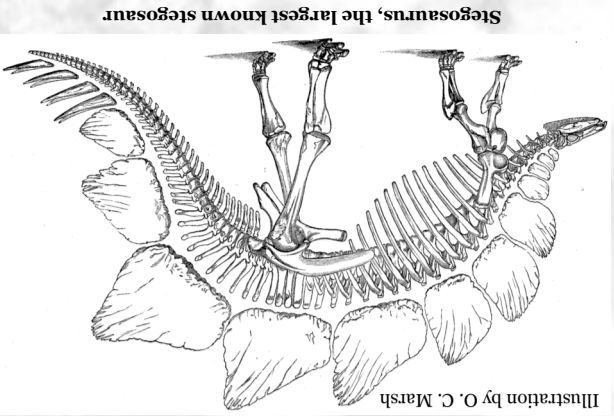
● **Frederick Kessler**—Professor Kessler was another Canon City school teacher who excavated dinosaurs the area. In the late 1930s he and his students were hired by the Denver Museum of Nature and Science to excavate a Stegosaurus skeleton from Garden Park.

● **Dall DeWesse**—Dall DeWesse was a local celebrity of some renown who had won fame for his exploits on hunting expeditions to Africa, Alaska, and South America. He was also well known in the area for his excavation of dinosaurs from Garden Park.



Photo provided by the Royal Gorge Regional Museum and History Center

Dallas "Dall" DeWesse

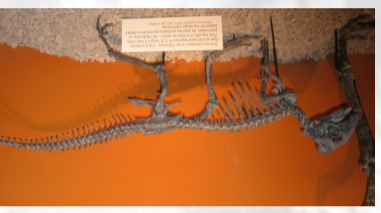


Stegosaurus, the largest known Stegosaur

Illustration by O. C. Marsh

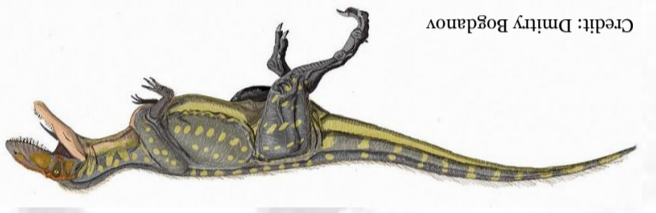
● **Stegosaurus** were robust herbivorous dinosaurs easily recognizable by their alternating rows of back plates and paired tail spikes. Their plates are believed to have been used for temperature regulation or communication purposes and their spikes were probably used for defense. The Stegosaurus discovered by Frederick Kessler was named the Colorado state fossil in the 1980s.

● **Ornithelia, a type of small Ornithopod** on display at the Dinosaur Depot



● **Ornithopods** were dinosaurs that were common in Colorado during the Jurassic. The small ornithopods found in Garden Park were similar to theropods in that they were bipedal, however they were herbivorous. The ornithopods varied greatly in shape and size; the small, fleet footed dinosaurs found in Garden Park stand in stark contrast with their larger, crested duck billed relatives found in younger rocks. Some Ornithopod dinosaurs found in Garden Park are Camptosaurus, Dryosaurus, and Ornithelia.

● **Torosaurus, a theropod found in Garden Park**



Credit: Dmitry Bogdanov

● **Theropods** were bipedal, predatory dinosaurs that lived and hunted throughout the Mesozoic era. Their large, powerful jaws helped hunt large prey such as sauropods and Stegosaurus. They vary drastically in size, the smallest measuring only a few inches and the largest measuring 55 feet (16 meters). Theropods from Garden Park include Ceratosaurus, Allosaurus, and Torosaurus.

Garden Park: Playground for Paleontologists

For over a century, the Garden Park Fossil Area has played a critical role in the field of paleontology, which is the science that studies prehistoric life through examination of the fossil record. Scientists from all over America have come to Garden Park to search for Dinosaur skeletons, and they have not been disappointed. The Garden Park fossil quarries have yielded dozens of specimens, including many household names such as Apatosaurus (Brontosaurus), Diplodocus, Stegosaurus, and Allosaurus.

The dinosaur skeletons found in Garden Park are virtually unmatched in terms of quantity, quality, and size. However the value these dinosaurs have as flamboyant exhibitions of prehistoric girth and power is insignificant compared to the understanding of Earth's past that studying these animals has bought us.

The sheer scope and history of life on Earth is staggering and by understanding past events, we can be better prepared for the future. We hope you enjoy your visit to Garden Park and hope you grown to appreciate the history and prehistory of the area.

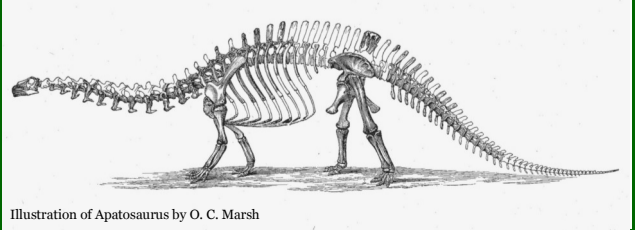


Illustration of Apatosaurus by O. C. Marsh

Additional Information

For more information about the History, Paleontology, and Geology of the Garden Park area, contact any of the following sources:

- Bureau of Land Management
3028 East Main st.
Cañon City, Colorado 81212
(719) 269-8500
- Cañon City Chamber of Commerce
403 Royal Gorge Blvd
Cañon City, Colorado 81212
(719) 275-2331
- Dinosaur Depot
330 Royal Gorge Blvd. #A
Cañon City, Colorado 81212
(800) 987-6379
- Royal Gorge Regional Museum and History Center
612 Royal Gorge Blvd.
Cañon City, Colorado 81212
(719) 262-6926
- Cañon City Public Library
516 Macon Ave.
Cañon City, Colorado 81212
(719) 269-6020

In case of an emergency call:

Fremont County Sheriff (719)-276-5600

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The Garden Park Fossil Area



Picture Provided by the Dinosaur Depot

A Self Guided Tour through of one of America's Richest Dinosaur Collecting Sites

Dinosaur Depot—The Dinosaur Depot is a natural history museum devoted to the study of Dinosaurs and other prehistoric life. On display is a petrified tree, a 6 foot long fossilized fish, fossilized bones from dozens of dinosaur species, and a nearly complete stegosaurus skeleton. Volunteers in the Museum Preparation Laboratory can be seen carefully preparing real dinosaur bones and other fossils.



“Cañon City Al” standing guard outside the Dinosaur Depot

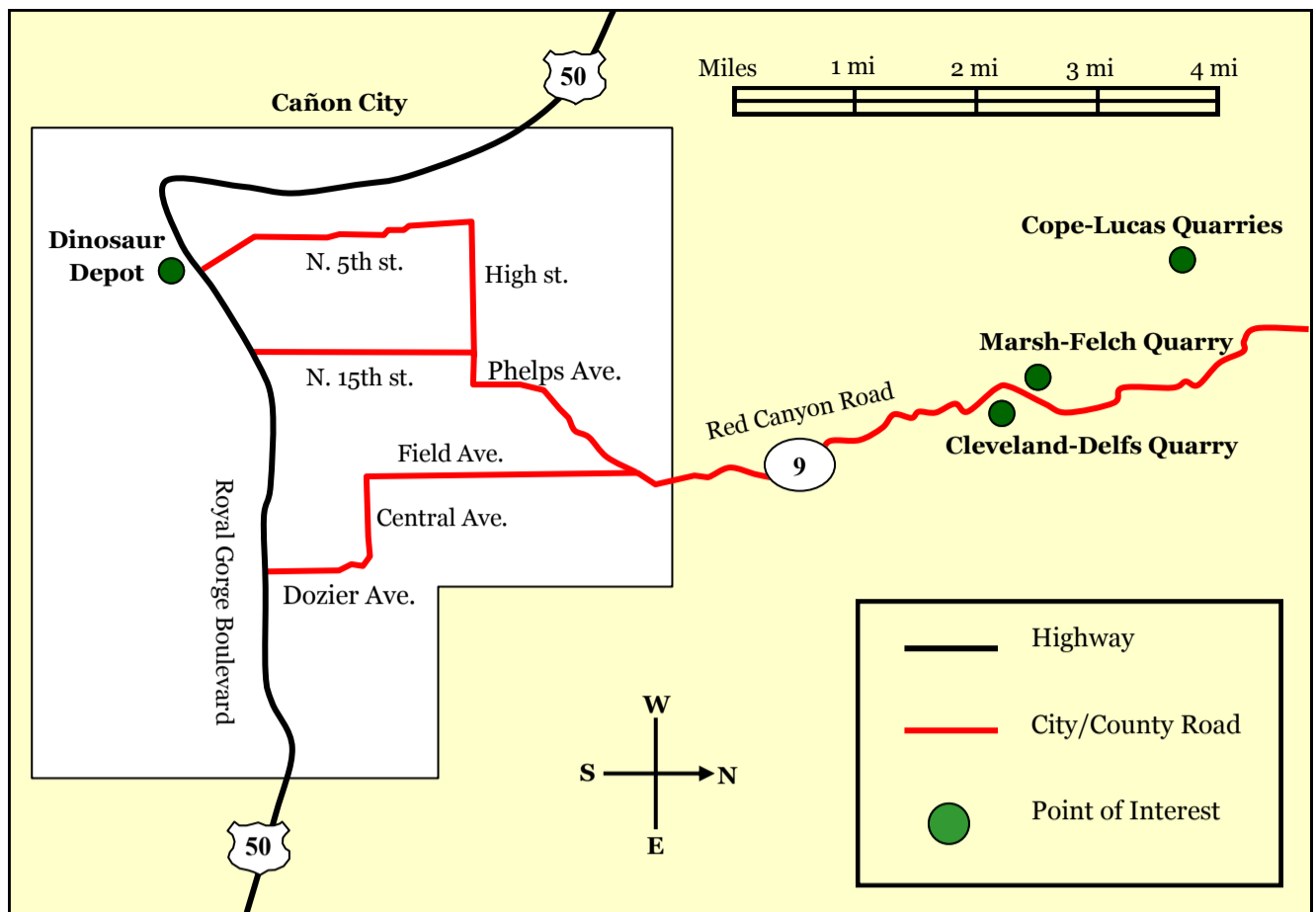
The Quarries

Cope-Lucas Quarries (pictured below) - In 1876 Oramel Lucas was working as a school teacher in Garden Park while taking a break from his studies at Oberlin College. While hunting in the hills above Garden Park, he stumbled across several dinosaur bones which he reported to the paleontologist Edward Drinker Cope. Cope, eager to acquire dinosaur specimens, immediately began excavations at several sites in the hills with Oramel Lucas and his brother Ira directing the work. The Cope-Lucas quarries produced dozens of dinosaur specimens that include partial skeletons of Camarasaurus, Allosaurus, and Amphicoelias. Legend has it that Cope discovered the largest dinosaur ever at the quarries; a sauropod known as Amphicoelias fragillimus. According to notes from Cope’s notebooks, the dinosaur was nearly 200 feet (55 meters) long; almost twice as long as the next largest dinosaurs. Unfortunately, the specimen has been lost, and Cope’s Amphicoelias fragillimus cannot be verified.

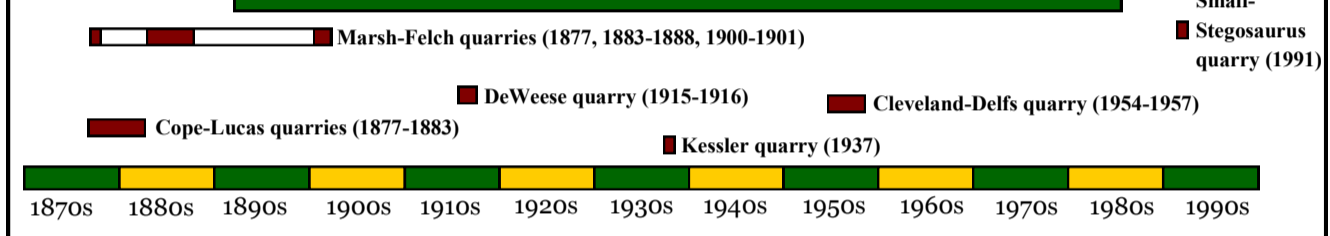


The Cope-Lucas Quarries as viewed from Route 9

Marsh-Felch Quarry (pictured on the front cover)—During the Jurassic period 150 million years ago, this was the site of a meandering river on a large flood plain. The U-shaped outline of the channel can still be seen in the cliff face. It is believed that this area was one of the last places to hold standing bodies of water during droughts and thirsty dinosaurs would gather here at isolated watering holes during dry spells. If the dinosaurs died of dehydration, their bodies would settle at the bottom of the dry riverbed and when the waters returned, the bones would be covered by thick layers of sand and mud carried along by the currents. The excavations at this quarry in the 1870s and 1880s were organized and financed by Othniel Charles Marsh of Yale University and overseen by Marshall P. Felch, a rancher from Garden Park. Later excavations in 1900 and 1901 were financed by the Carnegie Museum of Natural History with the continued help of Felch. In the face of crop failures, drought, near poverty, deaths in his family, and vandalism to the quarry, Marshall P. Felch was able to excavate 270 crates of fossils including superb specimens of Allosaurus, Ceratosaurs, and Stegosaurus that are now on display at the Smithsonian Institute in Washington D. C. Marshall Felch continued work at the quarry right up until his death until 1901. Although he had no formal training, he died a naturalist and paleontologist in his own right.



Timeline of the Excavations in Garden Park



Excavations at the Cleveland-Delfs quarry in the 1950s
Photo Provided by the Dinosaur Depot

Cleveland-Delfs Quarry (pictured at the left)—During the summers of 1954, 1955, and 1957, Edwin Delfs and a group of students excavated a dinosaur in Garden Park for the Cleveland Museum of Natural History. In the face of hazards such as flash floods and the unstable cliff face, Delfs and his crew excavated the skeleton of a sauropod dinosaur called Haplocanthosaurus delfsi, which was named in honor of Delfs. The dinosaur is now on display as a featured exhibit at the Cleveland Museum of Natural History.

DeWeese Quarry (pictured below)—Dall DeWeese was a man of many interests. He had won renown as a big game hunter for his expeditions to Africa, Alaska, and India where he collected many trophies that are now on display at the Royal Gorge Regional Museum and History Center. In 1915 and 1916 he organized an excavation in the hills of Garden Park at a site now called the DeWeese Quarry. A large and nearly complete skeleton belonging to a sauropod Dinosaur called Diplodocus was unearthed at the quarry. The DeWeese diplodocus was sent to the Denver Museum of Natural History (now Denver Museum of Nature and Science) and it became the first dinosaur in the Museum’s collection.



Excavations Taking Place at the DeWeese Quarry
Royal Gorge Regional Museum and History Center

Small Stegosaurus Quarry—In the summer of 1992 while conducting a geologic survey of Garden Park, paleontologist Bryan Small and volunteer Tim Seeber discovered stegosaurus bones in the hills east of the Marsh-Felch quarry. As the stegosaurus was excavated and the full extent of the skeleton was revealed, the excavation team realized that removing the skeleton from the quarry would be a problem since they were too far from the road and since they couldn’t risk damaging the skeleton by carving it up into smaller parts. To get the skeleton to a proper preparation lab, the excavation team resolved to airlift the stegosaurus skeleton out of the quarry by means of an army helicopter. On August 14, 1991 the army flew a Chinook helicopter to the quarry and the six and a half ton stegosaurus skeleton was lifted out. The stegosaurus was sent to the Dinosaur Depot in Cañon City, where it was carefully prepared for museum display over the next five years. The original skeleton is now on display at the Denver Museum of Nature and Science, still in the position it was in when originally excavated. An exact replica is also on display at the Dinosaur Depot (pictured below).

Kessler Quarry—When Frederick Kessler, a high school teacher in Cañon City, discovered dinosaur bones in Garden Park, he and his students were quickly hired by the Denver Museum of Natural History (DMNS) to excavate the whole skeleton. The dinosaur turned out to be a nearly complete Stegosaurus skeleton, which was missing only a few plates, a portion of the skull, and parts of the rear limbs. The Stegosaurus is now on display at the Denver Museum of Nature and Science and in 1982 it was named the Colorado State fossil.



The Stegosaurus from the Small Quarry
on display at the Dinosaur Depot in Cañon City