

Meet

'Al' the Allosaurus
at the

Cleveland-Lloyd Dinosaur Quarry

National Natural Landmark

Fossilized bones of dinosaurs or any other vertebrate animal may not be taken from public lands except by permit. These permits are issued by the Secretary of the Interior only to properly accredited museums, universities, and other scientific institutions.

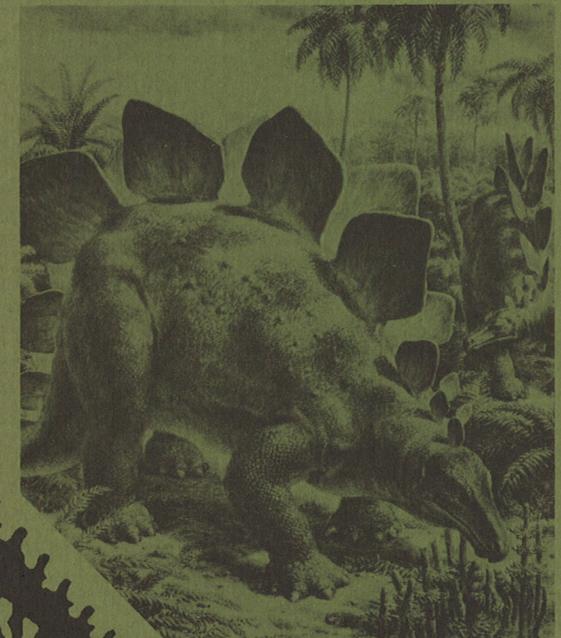
Dinosaur bones are a rare and nonrenewable resource, and anyone discovering these fossils should report their find to the nearest university, BLM office, or to the Antiquities section of the Utah Division of State History.

The removal of even one bone may despoil a discovery in such a way that vital scientific information is lost.

Cleveland-Lloyd Dinosaur Quarry was designated a Registered National Natural Landmark in 1966 and is therefore protected under the Historic Sites Act of 1935. Quarry visitors may not collect fossils, rocks, plants or animals.



An Allosaurus attacking a trapped brontosaurus

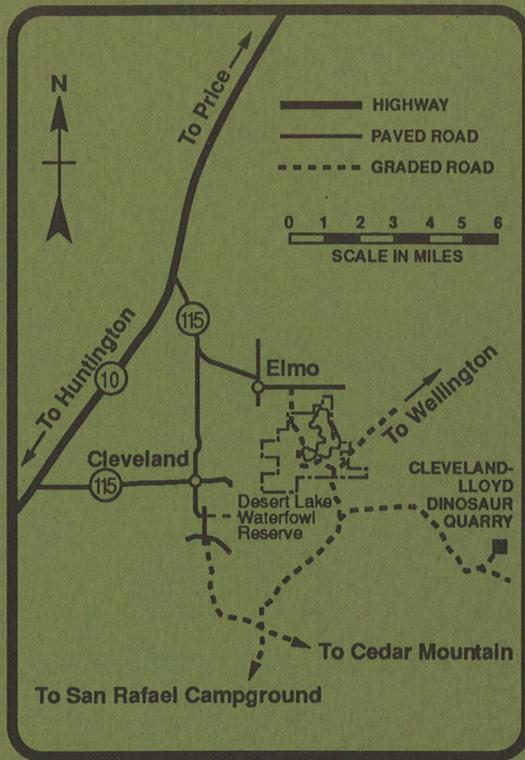


Stegosaurus



U.S. Department
of the Interior
Bureau of Land Management
Moab District

Location



Cleveland-Lloyd Dinosaur Quarry is 30 miles south of Price, Utah on a signed route. Room-size boulders scattered about the area create a unique setting for the exhibit buildings, interpretive displays, picnic facilities and the self-guided Rock Walk Nature Trail.

Located on the northern edge of the San Rafael Swell, the quarry serves as a gateway to nearby points of interest, such as Cedar Mountain Recreation Area, Desert Lake Waterfowl Management Area, and the Wedge overlook. The quarry is open weekends (weather permitting) from Easter until Memorial Day and Thursday through Monday from Memorial Day through Labor Day weekend. Opening hours are 10 am to 5 pm. For additional information call BLM in Price, Utah at (801) 637-4584.

Recent History

Reports of fossil bones in this area reached the University of Utah in 1928, from local cowboys and shearers. University of Utah scientists made a preliminary investigation and began digging in 1929.

Princeton University dug here in the summers of 1939-41 to obtain an exhibit specimen. The expedition was partially financed by Malcolm Lloyd Jr., a Princeton law graduate. For this reason, and because of the quarry's proximity to Cleveland, Utah, it became known as the Cleveland-Lloyd Quarry.

There was no digging from 1941 to 1960, when the University of Utah commenced a 5-year project with several cooperating schools and museums. Dr. William Lee Stokes was in charge of this ambitious project, with assistance from James H. Madsen Jr.

Over the years some 18,000 bones have been taken from the quarry, representing at least 70 different animals. Over 60 cast and original skeletons have been assembled from these bones and are on display across the United States and in other parts of the world. In recent years, scientists from Brigham Young University and the College of Eastern Utah have also excavated at the quarry.



Camarasaurus sacrum

Natural History

The quarry region was not always dry and hilly. Geologists believe that about 147 million years ago this area was a shallow, fresh-water lake with a muddy bottom. The vegetation surrounding the lake was attractive to plant-eating dinosaurs, who occasionally became trapped in the mud and made easy prey for meat-eating dinosaurs. Some carnivores who ventured into the water and muck also became trapped, and as the years passed the area became a concentration of the bones of at least 10 different types of dinosaurs.

The bones became scattered and the bog dried up. Both were covered with volcanic ash, and rivers and shallow seas deposited thick layers of sand and mud on top. Meanwhile, the bones became fossilized. Millions of years later water and wind eroded the layers to produce the topography that can presently be seen.

The bones are now fairly close to the surface and can be removed from the clay with ice picks and whisk brooms. Three-quarters of the bones uncovered are from **Allosaurus**, a large carnivore. Also present are fossilized remains of plant-eating **Stegosaurus**, **Camarasaurus**, and **Camptosaurus**. In the mid-1970's James H. Madsen Jr. described 2

previously unknown dinosaurs from bones uncovered here. These small carnivores are known as **Stokesosaurus clevelandi** and **Marshosaurus bicentesimus**.



Dr. W. L. Stokes