

10. The Burro Canyon Formation: Rivers of the Early Cretaceous

These boulders are of Burro Canyon Formation, a pebbly conglomerate that was deposited by eastward-flowing rivers. The formation also includes beds of green-tan flood-plain shale.

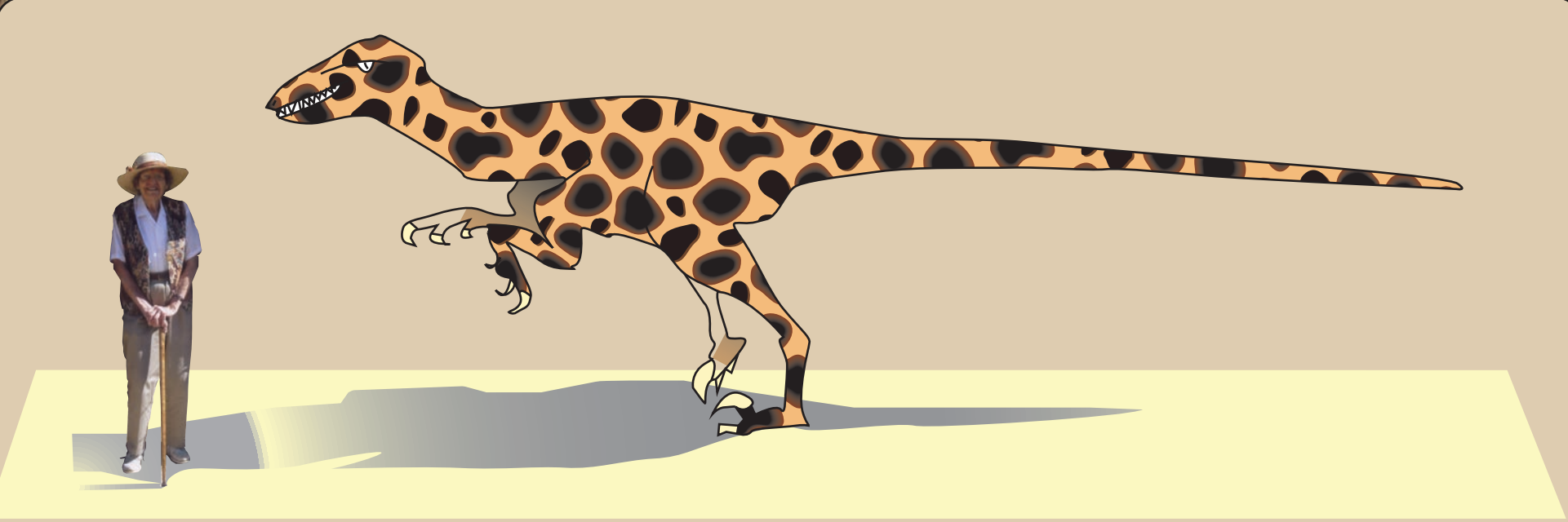
If you hunt patiently, you may find a pebble that contains a Paleozoic marine fossil! The pebbles were washed here all the way from mountains in western Utah. The pebbles are made of hard chert, a very fine-grained form of quartz.



This conglomerate of pea-sized gravel with light-colored cement is typical of the Burro Canyon Formation.

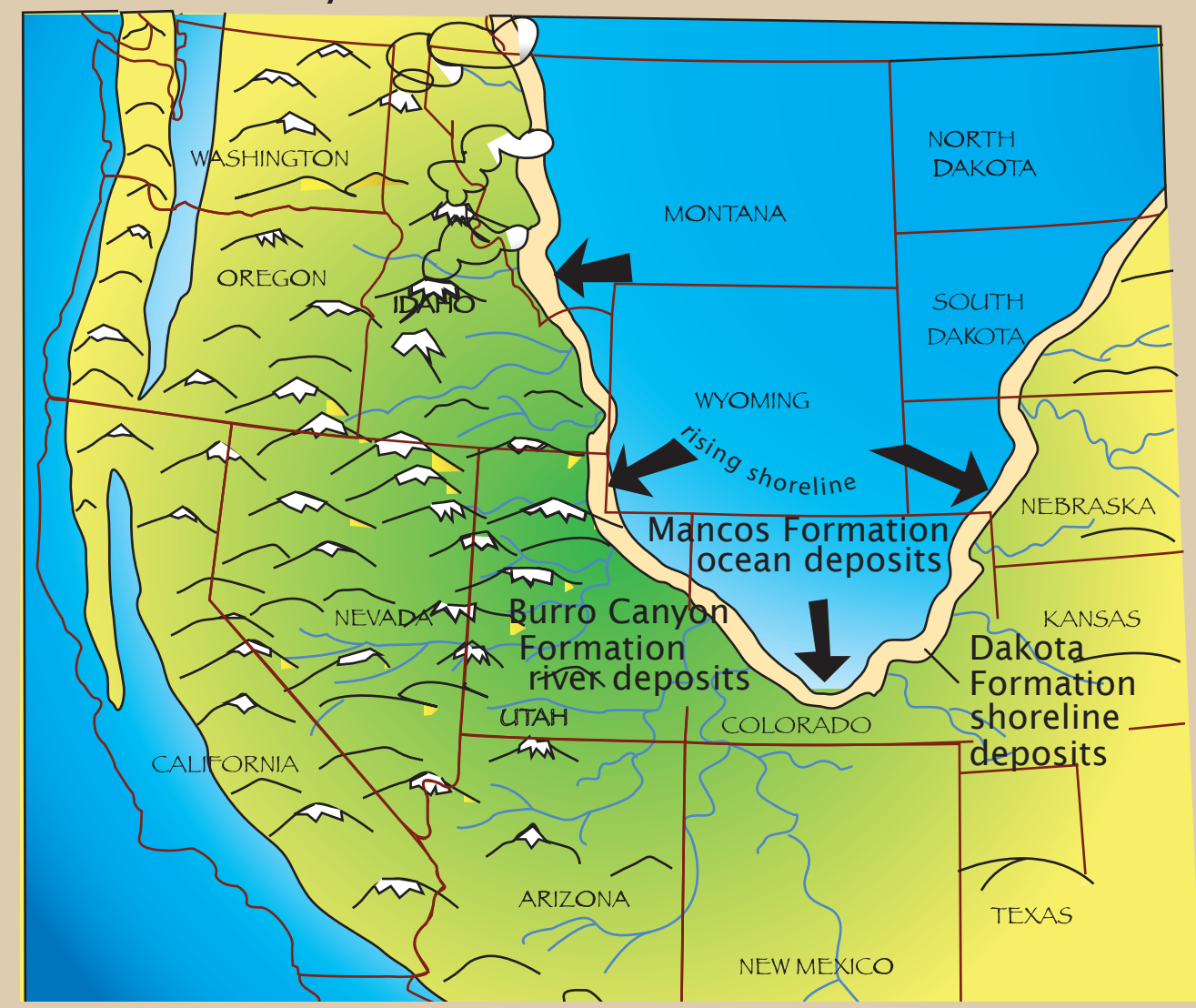


There is more clay in the Burro Canyon Formation on the northwest side of Opal Hill. The well-rounded pebbles get their shape from their long journey.



In 1991, Utahraptor was discovered west of the Colorado River in Utah, where the Burro Canyon layers are known as the Cedar Mountain Formation. Before the discovery, paleontologists believed these layers did not hold fossils, so nobody had been hunting in them! Since then, many more dinosaur fossils have been found in them, including some in Dinosaur National Monument.

Early Cretaceous Paleoenvironment



In Early Cretaceous time, between 130 and 97 million years ago, sand and pebbles found in the Burro Canyon Formation were washed northeastward from a range of mountains in western Utah. The Rocky Mountains had not yet risen. Over time, the land sank, letting the sea come in across the plain. The sand that washed along the sea's shoreline is now the Dakota Formation.

