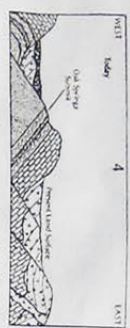
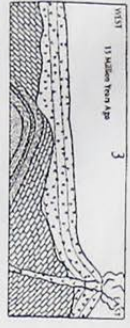


Geologic History

Over the 520 million years since the Olenellidae swarmed in a shallow sea the landscape has changed remarkably at Oak Springs Summit. Geologists read the story taking us from the present back in time.



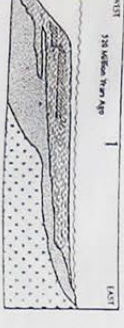
The view today shows massive blocks of volcanic rocks and ancient sea-laid limestones contorted and broken by earthquake faults and eroded by wind and water.



About 15 million years ago volcanoes centered near Caliente buried all the earlier rocks under many hundreds of feet of rhyolitic magma and ash flows.

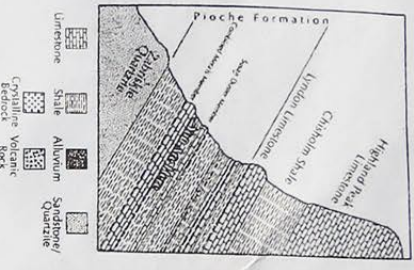


Between 35 million and 60 million years ago the ancient sea-laid sediments were folded, uplifted, and eroded.



Starting more than 520 million years ago, an ancient sea covered the area depositing mud in horizontal layers. Nearly six miles (9) of sea-laid sediments accumulated above the ancient sea bed surface on which you are standing.

This sketch, a profile of the mountain slope as if it were cut with a knife, shows the sequence of different rock layers.



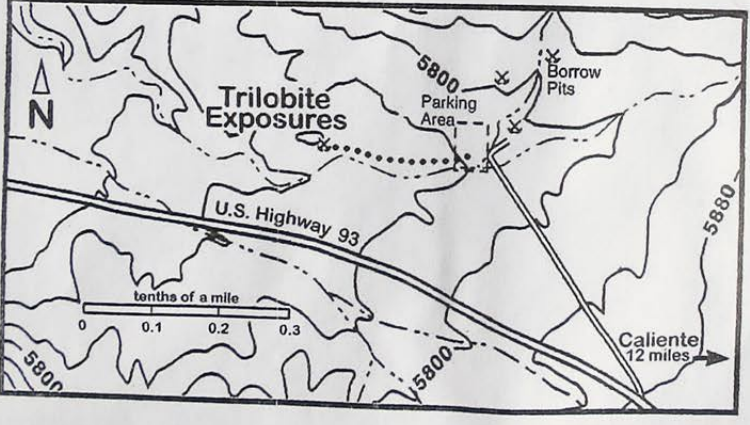
In reading the geologic history pay attention to the symbols for the various rock types.

Why is the Study of Fossils Important?

From the tiniest bacteria to some of the largest creatures ever to roam the Earth, swim in its seas, or soar in its skies - fossils are clues which help us solve the fascinating riddles of how life on Earth evolved. Fossils illustrate how all forms of life are interdependent and affected by their environment. They also contribute to the way we live. Fossils constitute the bulk of many rock types, such as coal, phosphate, and limestone, or serve as indicators of other commodities, such as oil and gas, which are important in our economy and everyday lives. In addition, fossils are simply fun to study because of their natural beauty and the excitement, wonder and understanding they evoke about life in the ancient world, lost in time, a world that we can only imagine.

Where are they?

The trilobite fossil collecting area is about 12 miles west of Caliente on U.S. Highway 93. Leaving Caliente, continue over the Oak Springs Summit to a point approx. mid-way between milepost markers 82 and 81. A dirt road to the right (north) leads to a borrow, or gravel pit. Park at the gravel pit and walk west about two tenths of a mile to a knob or hill. The fossils are exposed in a trench on the east slope of the knob.



TRILOBITES AT OAK SPRINGS SUMMIT
 (Near Caliente, Nevada)

AGUIDE AND HISTORY OF THE COLLECTING AREA

U.S. Department of the Interior
 Bureau of Land Management
 U.S. Geological Survey