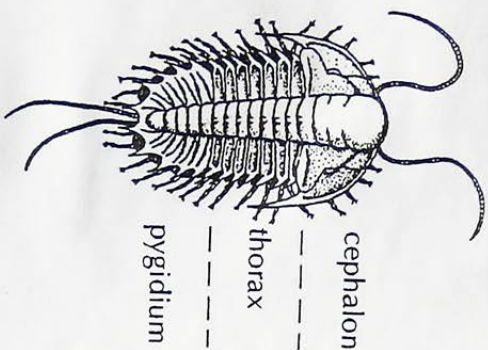


What is a Trilobite?

A trilobite is a fossil of an animal that lived in the sea. It had a shell like a horseshoe crab, jointed legs, and antennae. Its eyes were compound, like a fly, and it could curl up like a pill bug.



cephalon

thorax

pygidium

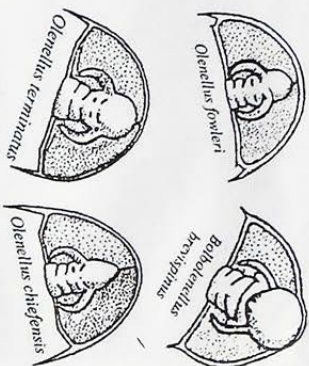
The trilobite gets its name from the longitudinal divisions of its shell into a central part and two side parts. The body consists of a head (cephalon), a variable number of segments in a thorax, and a tail (pygidium).

When the trilobite died, the parts of the shell often were separated, so that complete bodies were rarely preserved. Most commonly we find isolated heads, thoracic segments, and tails.

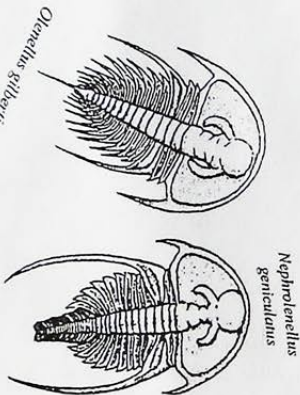
The Trilobites at Oak Springs Summit

Fossil remains of six types of trilobites are found in the tan-colored shale at the site.

You will find mostly heads.

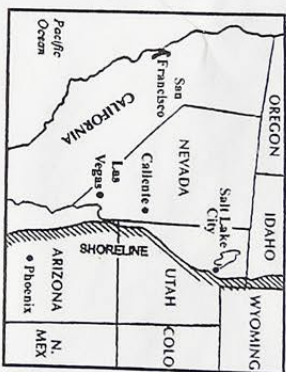


But you may be lucky and find a whole specimen.



Paleogeography

The trilobites at Oak Springs Summit belong to a family called the Olenellidae that dominated the shallow seas that began to cover parts of North America 530 million years ago.



Trilobites & Extinctions

Ten million years later, the Olenellidae disappeared abruptly everywhere. Limited evidence suggests that the warm, well-oxygenated surface waters of the world's oceans were disrupted (perhaps by a meteor impact?) and replaced by cold, oxygen-poor water from the ocean depths. Many animals in the shallow seas could not adapt and became extinct. However, other families of trilobites survived for more than 100 million years.

A trench at the collecting area exposes the fossil rich layers below the extinction boundary. The nearly barren layers above the boundary are also visible.

Collecting

Common invertebrate fossils such as trilobites, plants, and mollusks may be collected from public lands for personal use in reasonable quantities, but may not be bartered or sold.

Care should be taken to minimize disturbance of vegetation and soil. Excavation of pits or trenches is not encouraged. If encountered, trenches or pits should be contoured so they are not hazardous to people, livestock, and wildlife.

Please limit your collections to the smallest number of specimens that you anticipate keeping. You should always wear eye protection when prospecting. Many fossil collectors use a mason's hammer with a chisel shaped blade for separating layers of shale.

Remember that prehistoric and historic artifacts, archeological sites, and vertebrate fossils, such as dinosaurs, mammals, fishes, and reptiles may be collected only by trained researchers under permit.

Further Reading

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Tschanz, C.M., and E.H. Pampeyan. 1970. *Geology and Mineral Deposits of Lincoln County, Nevada*. Reno: Nevada Bureau of Mines and Geology Bulletin 73.

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