

Central Dakota Gem & Mineral Society Bismarck, ND



Orthoceras



External Shell

Orthoceras (meaning “straight horn”) is an extinct animal related to squid and octopus. Unlike tasty calamari, their shells (being in the phylum mollusca) are on the outside of their bodies, instead of the pen-bone or gladius seen today. They are often mistaken for another straight-shelled cephalopod, Baculites, however lived much earlier during the Ordovician through Triassic (488-190 mya), rather than the Cretaceous (145-65 mya). Limestone deposits containing mass die-offs of Orthoceras are common in Morocco. The ones from this location tend to be white in color, with a black background – often used in decorative carvings, bowls, and even countertops.

Their straight shells are divided horizontally by “septa”, which separate living chambers of the animal. When it grew too large for one chamber, it would add on another. A tube running through the length of the shell, called a “siphuncle”, helped regulate water and air in the shell, allowing for both movement and buoyancy. They vary in size, from tiny centimeter long shells, to more than 6 feet long (more, if you add the tentacles!).



Polished Orthoceras, showing siphuncle and septa.



The Orthoceras as it would have looked like in the sea

<http://en.wikipedia.org/wiki/Orthoceras>

<http://www.fossils-facts-and-finds.com/orthoceras.html>