

FOSSILS

Of the Ancient Michigan Devonian Seas

The part of the Midwest that covers Michigan and Ohio is very fossil rich. Thanks to the last Ice Age, all the dirt and material covering this part of the country was scraped away exposing bedrock that is around 350 Million years old.

350 Million years ago, this area was a warm, shallow tropical sea. It was the period paleontologists call, the Devonian Period. During the Devonian, the seas were teeming with life. Primitive land plants and animals continued to develop and populate the land-masses. Trilobites that were so abundant during the Cambrian period now began a steady decline.

During the Devonian period there were many coral reefs that formed and provided sanctuary for a wide variety of sea life much as modern coral reefs provide habitats for today's sea creatures. One may find many of the over 200 species of prehistoric life that inhabited this small area. Corals, crinoids, bryozoans, gastropods, brachiopods, cephalopods, trilobites and very primitive fish and sharks swam and lived here. All of these fossils may be found here.

Corals

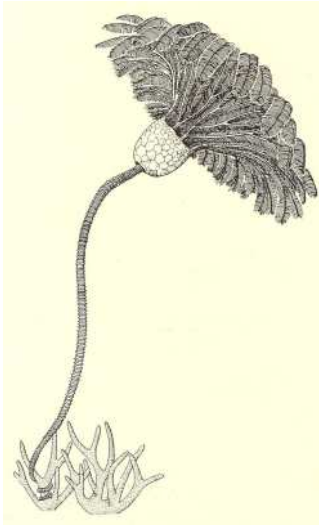


Corals are simple aquatic animals that are credited with the formation of reefs and in some cases islands in the ocean. Corals are important rock builders because they are comprised of lime exoskeletons that are essential in the formation of limestone. Two common types of coral found here are solitary and colony corals. Their names suggest the way they evolved. Solitary corals such as horn coral grow by themselves and colony corals grow in tight groups.

Bryozoans

These creatures are sometimes called “Moss Animals”. They are a minute colonial creature that either forms branching or encrusting growths. Branching Bryozoans resemble corals. Each individual indentation in the Bryozoan you see contained a tiny creature that resembled the modern sea anemone.

Crinoids



Sometimes called lilies of the sea are actually animals, not plants. The central column is made up of small disk shaped segments that are stacked like poker chips. Once the creature dies the structure falls apart leaving hundreds of such disks scattered on the ocean floor. The top crown, or calyx is made up of many feather-like appendages, which filter the seawater in order to feed. Common throughout history they are also found in the deep ocean today.

Brachiopods



These ancient creatures abounded in the seas of the Paleozoic Era. Sometimes called lamp shells, these once common invertebrates are some of the most easily recognized fossils. Of the nearly 30,000 species of brachiopods that were once common in the seas, only about 200 species survive today. These primitive seashells came in many forms. Usually they comprise two unequal halves. The shells are made up of calcium phosphate and chitin. The shells were held together by internal muscles. Some brachiopods grew to 9 inches long but most were only about an inch in diameter.

Cephalopod



Cephalopods are an ancient group that appeared some time in the late Cambrian several million years before the first primitive fish began swimming in the ocean. Scientists believe that the ancestors of modern cephalopods octopus, squid, and cuttlefish diverged from the primitive externally shelled Nautilus very early - perhaps in the Ordovician, some 438 million years ago. They normally have a long bullet shape, but some species still have a rounded shell.

Gastropod



The Class Gastropoda includes the snails. Most gastropods have a single, usually spirally coiled shell into which the body can be withdrawn. Fossil gastropods had a muscular foot which was used for locomotion in most species. In some, it is modified for swimming or burrowing. Most gastropods had a well-developed head that included eyes, 1-2 pairs of tentacles, and a concentration of nervous tissue (ganglion).

Trilobites



<http://www.rockhounds.com/rockshop/trilobite.jpg>

The best known Michigan, New York and Northern Ohio trilobite, is *Phacops rana*. From the 1920's to the 1970's, specimens of this species were collected by the thousands from a quarry near Sylvania, west of Toledo. They have been found in Alpena and all the way to Buffalo, New York. *Phacops rana* has an inflated glabella and large, froglike eyes, hence the specific name of *rana*, Latin for frog. Most specimens are less than 2 inches long.