

Crinoids: Ancient versus Modern Forms



Crinoids are a well-known fossil species in Indiana. Although they are known as sea lilies, they are animals and thrived in ancient seas 200 to 400 million years ago during the Paleozoic Era. Early species attached to the sea floor with a twiglike stem that connected to the head, called a calyx. Feathered arms attached to the calyx, giving it a fernlike appearance. The number of arms varied but were always a multiple of five. Massive limestones filled with crinoid fragments attest to the abundance of these animals in the shallow seas that once covered Indiana.

Crinoids today live today in temperate warm seas. Some modern crinoids inhabit the Caribbean Sea from Honduras to Barbados and north to the Bahamas. They are marked distinctly with bright colors—green, black, yellow, orange, and gold. Their arms range in number from 10 to 200. Modern crinoids are stemless, have the ability to shed an arm and grow two in its place, and can crawl and swim. While ancient crinoids lived at depths of 300 feet or more, modern crinoids of the West Indies are found at depths of 25 to 200 feet. Crinoids are related to starfish and other echinoderms and live among sponges, corals, and dense patches of algae.

