Phylum – Cnidaria Class Anthozoa (Horn and Colonial Coral) Order Tabulata Genus *Favosites* Genus *Halysites* \* Order Rugosa Genus *Heliophyllum* Genus *Hexagonaria* Order Scleratinia (stony corals) Genus *Septastraea* 

Note: Coral and Jellyfish used to be grouped into the phylum Coelenterata, but differences led to the split. Coelenterata is now an obsolete term.

- The Cnidarian Phylum contains jellyfish, sea anemones, and corals.
- All use stinging cells known as **nematocysts** to capture prey, which is usually plankton.
- Corals are benthic, sessile, and shallow marine, and require warm water and sunlight. Also sensitive to turbidity and wave action
- Jellyfish are planktonic.
- Corals are useful in defining past water temperature, continental drift location, past ocean chemistry, etc.
- Most corals are colonial, but some are solitary
- Modern corals have a symbiotic relationship with algae.

## Phylum – Cnidaria, Class - Anthozoa Genus *Favosites*

- Extinct genus of tabulate coral characterized by polygonal closely packed corallites (giving it the common name "honeycomb coral")
- Ordovician to Permian





## Phylum – Cnidaria, Class - Anthozoa Genus *Halysites* \*

- known as the "chain coral" due to growth pattern, could also be thought of as brain coral
- Tabulate coral
- Ordovician to Late Silurian
- Index fossil for Silurian





## Phylum – Cnidaria, Class – Anthozoa ALSO CALLED RUGOSE CORAL Genus *Heliophyllum*

- Solitary Horn Coral (also known as Rugose coral)
- Classic Devonian fossil of NY state
- Elongated, horizontal corallites
- Strong calcite shell promotes preservation



Phylum – Cnidaria, Class - Anthozoa Genus *Hexagonaria* 

- Named for hexagonal corallites
- Worldwide distribution, but state fossil of Michigan (Petoskey stone)
- Prevalent in Devonian
- Colonial rugose coral







Polished "Petoskey" stone

## Phylum – Cnidaria, Class – Anthozoa Genus *Septastraea*

- Only recent coral on your list, from Miocene to Pleistocene (went extinct during recent ice ages)
- Can grow in many shapes
- A colonial coral, also a stony coral (meaning that each polyp has a calcium carbonate skeleton)



Phylum – Cnidaria, Class – Scyphozoa (True Jellyfish)

- Rare as fossils as body is soft and mostly water (98%)
- Oldest Cnidaria (known to 580 MY)
- Two life stages
  - 1<sup>st</sup> sessile (as polyps)
  - 2<sup>nd</sup> planktonic (as medusa)



Cambrian sandstone with jellyfish fossil (rare)

NOT INCLUDED in 2019-2020

