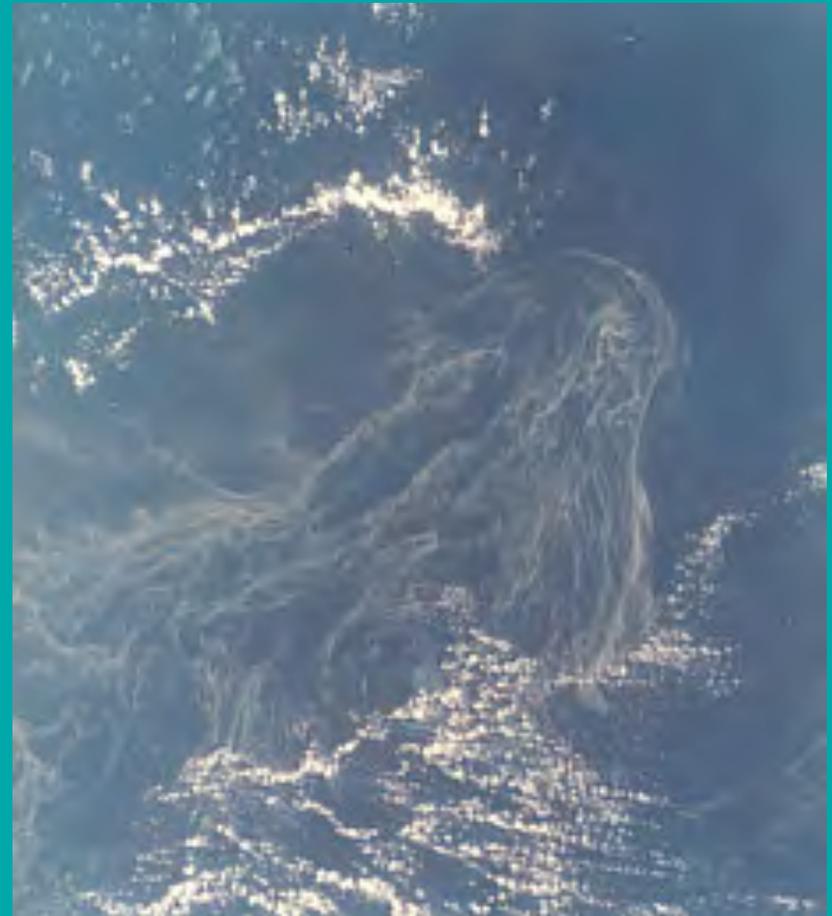
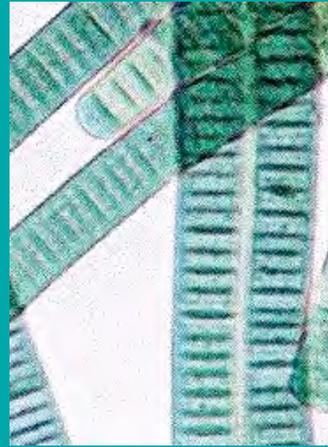
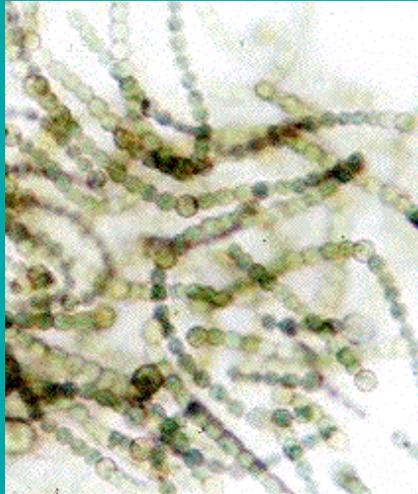


The Plants and Animals of Padilla Bay

Kingdom
Phylum
Class
Order
Family
Genus
Species

Kingdom

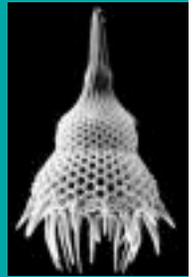
Monera - Bacteria and Blue-green Algae



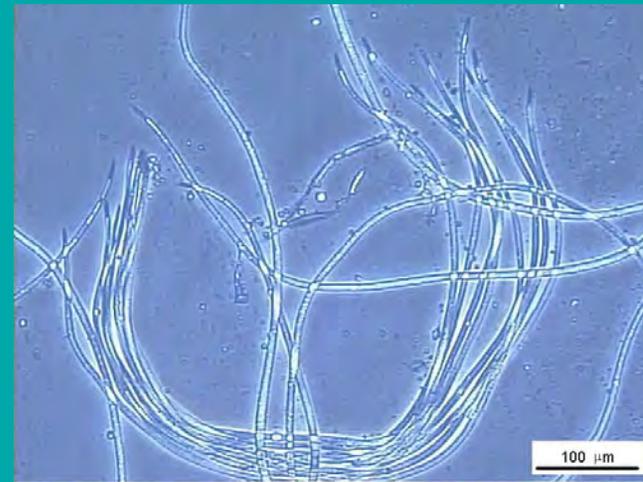
Kingdom

Protista - Single celled or colonial -

Dinoflagilates, Diatoms, Algae, Protozoans



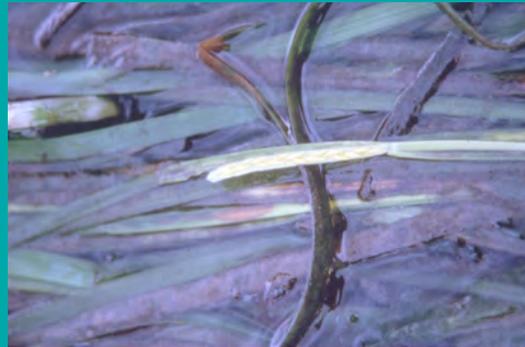
Kingdom Fungi



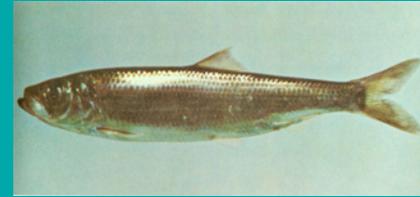
Kingdom

Plantae or Embryophyta -

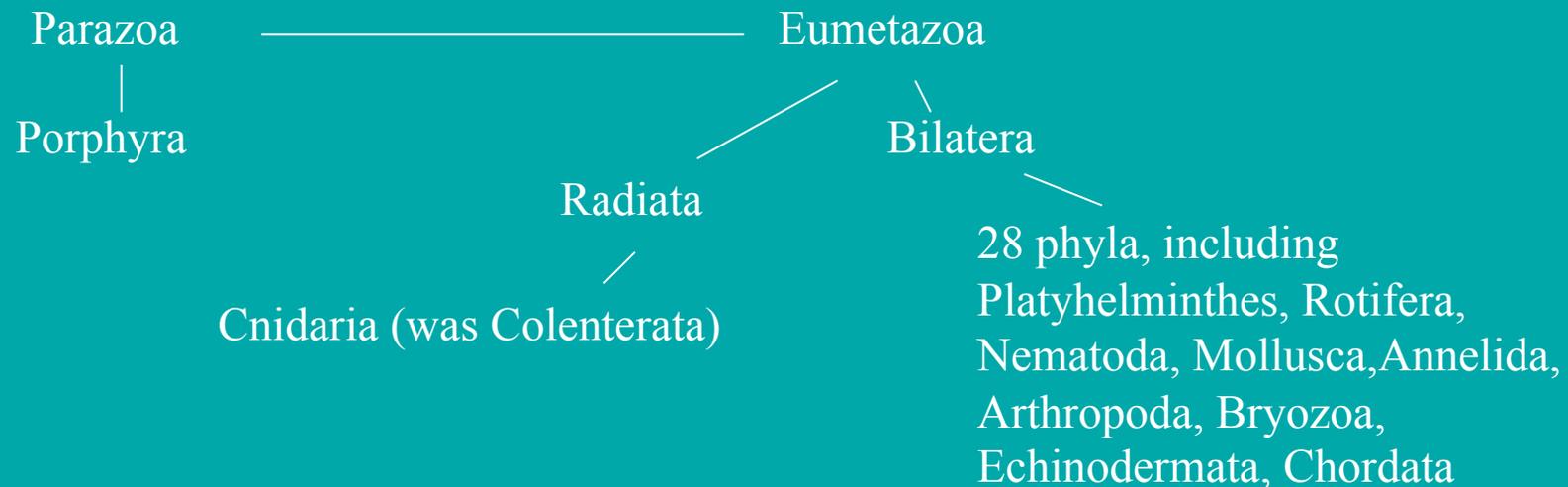
Anthophyta - flowering plants



Kingdom Animalia or Metazoa -



Animal Kingdom



Phylum Chordata includes Urochordata - Sea squirts or tunicates, and the subphylum Vertebrata, the vertebrates.

Common Animal Groups in the Salish Sea

Phylum Porifera: The Sponges

- ❖ Most primitive group of multicellular animals
- ❖ Skeletal framework composed of spicules or spongin
- ❖ Filter feeders
 - ◆ Use specialized cells (collar cells) to pass water through body cavity and capture food







Phylum Cnidaria: The Stinging-Celled Animals

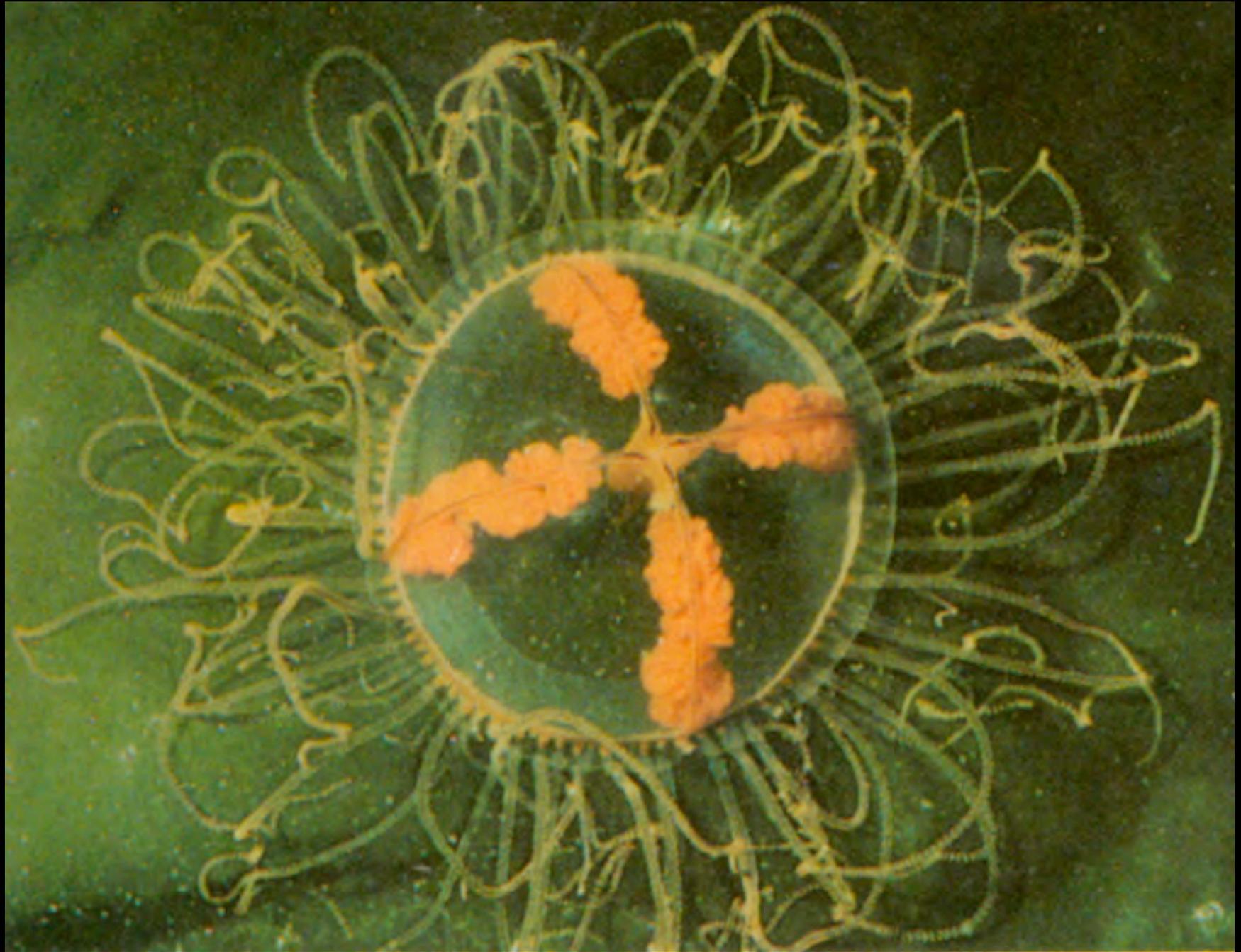
- ❖ Includes jellyfishes, hydroids, sea anemones, sea pens and corals
- ❖ Two layers of cells are filled with a jelly-like substance
- ❖ Tentacles around mouth contain cnidocytes (stinging cells) used for capturing prey
- ❖ “Alternation of Generations” Reproduction
 - ◆ Polyp and medusa

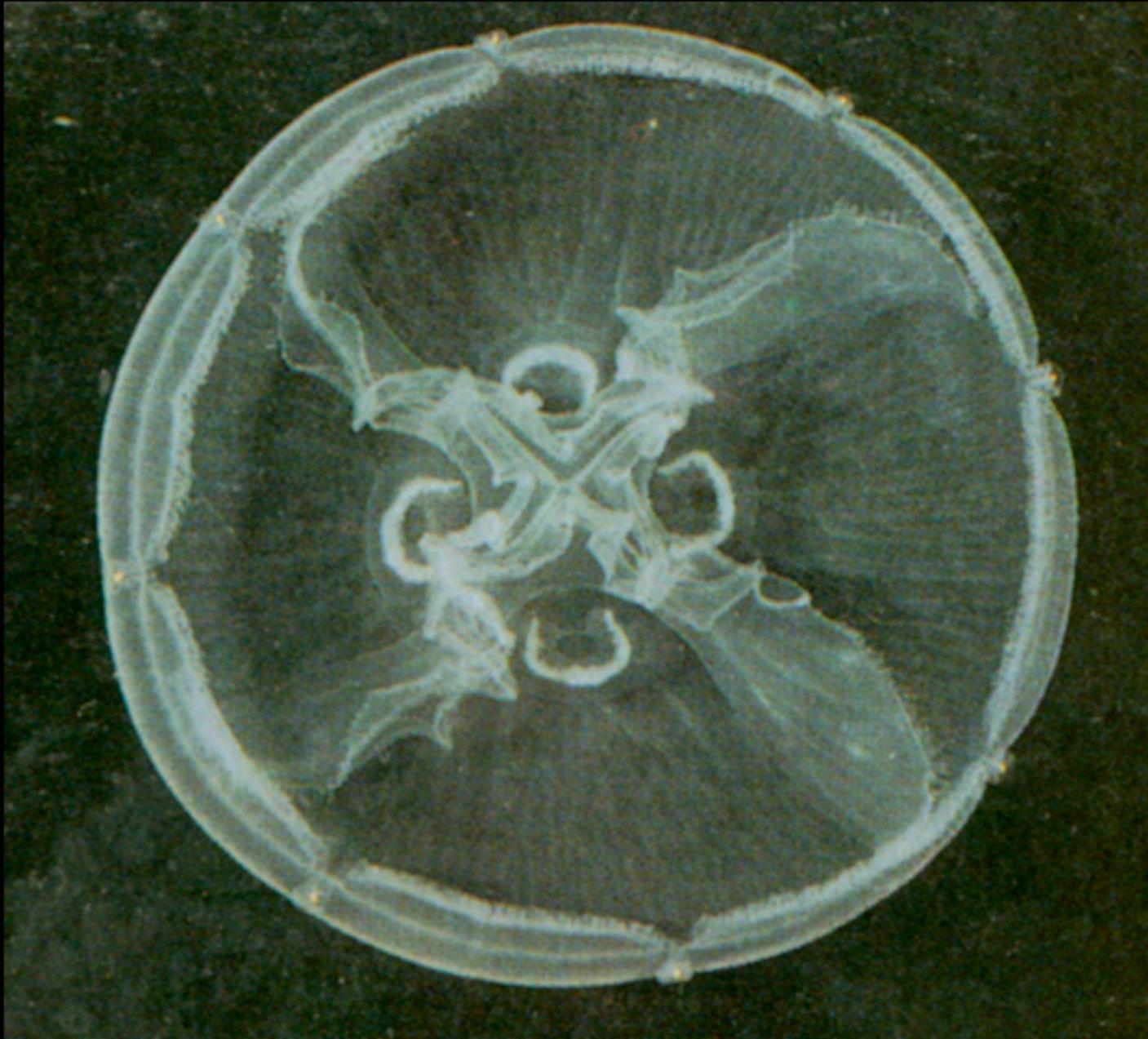
Phylum Cnidaria: The Stinging-Celled Animals

- ❖ Three classes of Cnidarians:
 - ◆ Hydrozoa: attached colony of animals, often mistaken for algae
 - ◆ Scyphozoa: true jellyfishes
 - ◆ Anthozoa: no medusa stage

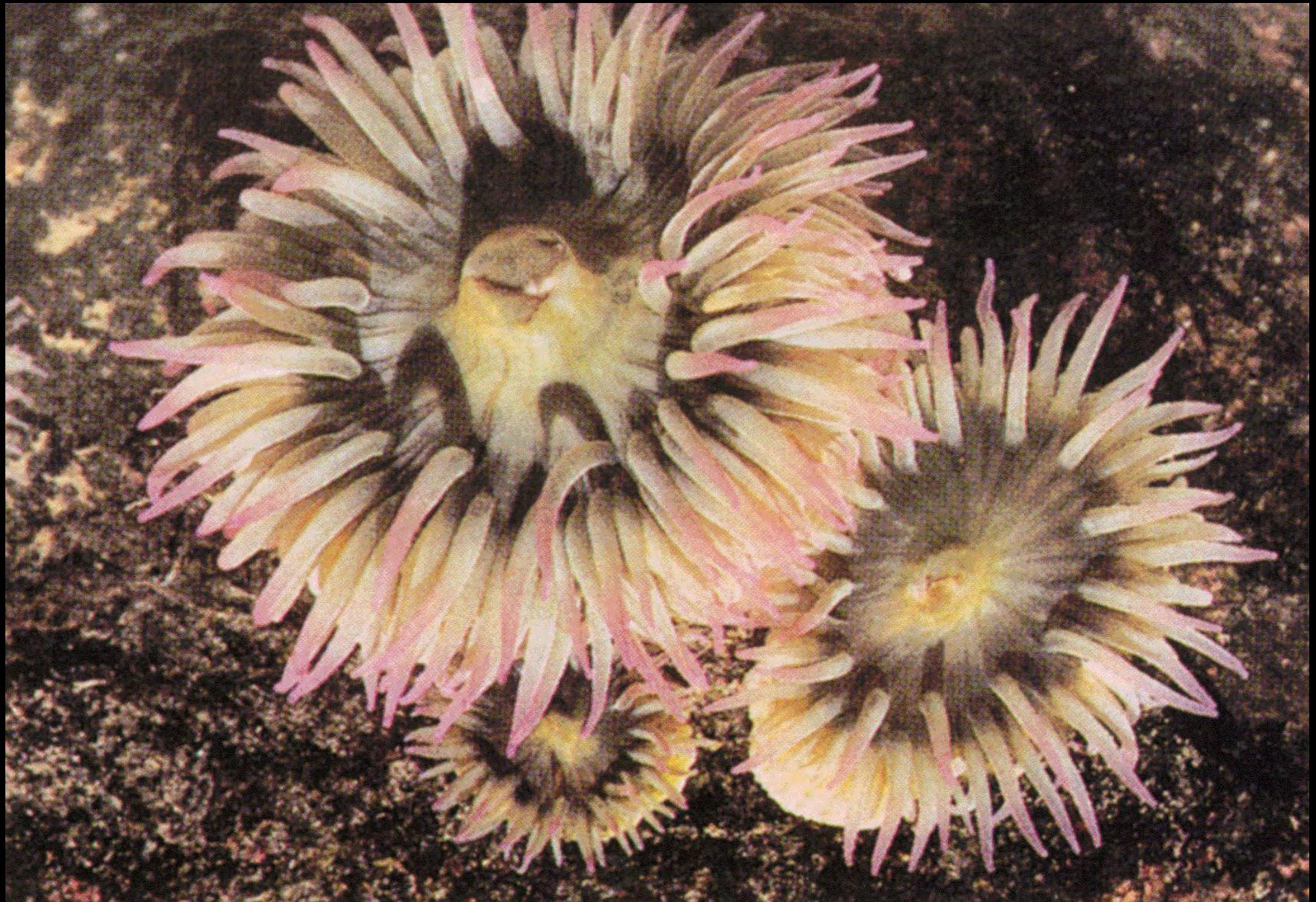
Hydroids







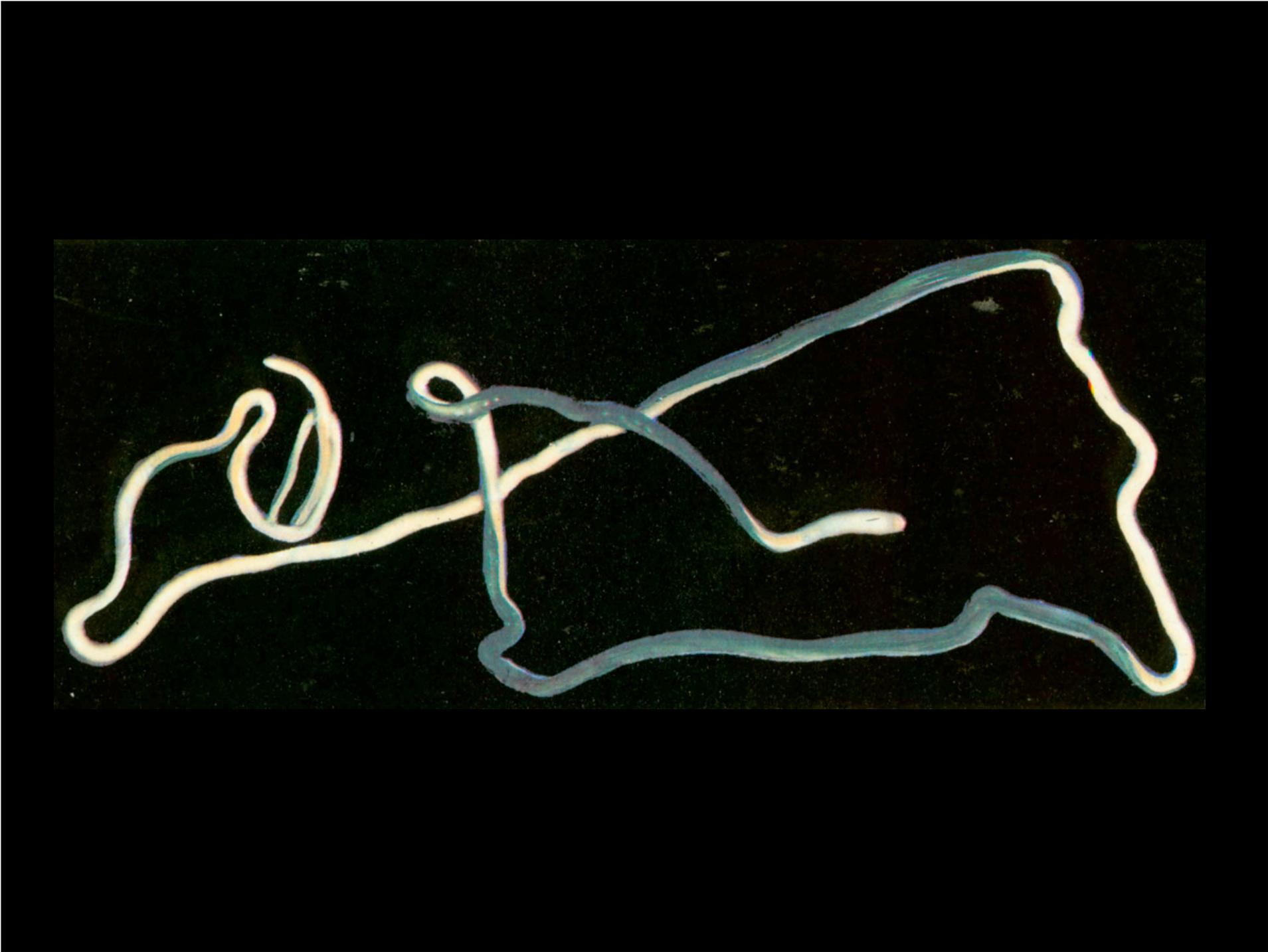




Phylum Nemertea: The Ribbon Worms

- ❖ Soft bodies are covered with cilia (small hairs used for movement)
- ❖ Slender and very contractile - length of a single organism can vary from under an inch to many feet
- ❖ Proboscis - specialized eversible structure located on the head-end, may be sticky or armed with venomous stylets, used to capture prey
- ❖ Feed on other worms (especially polychaetes)



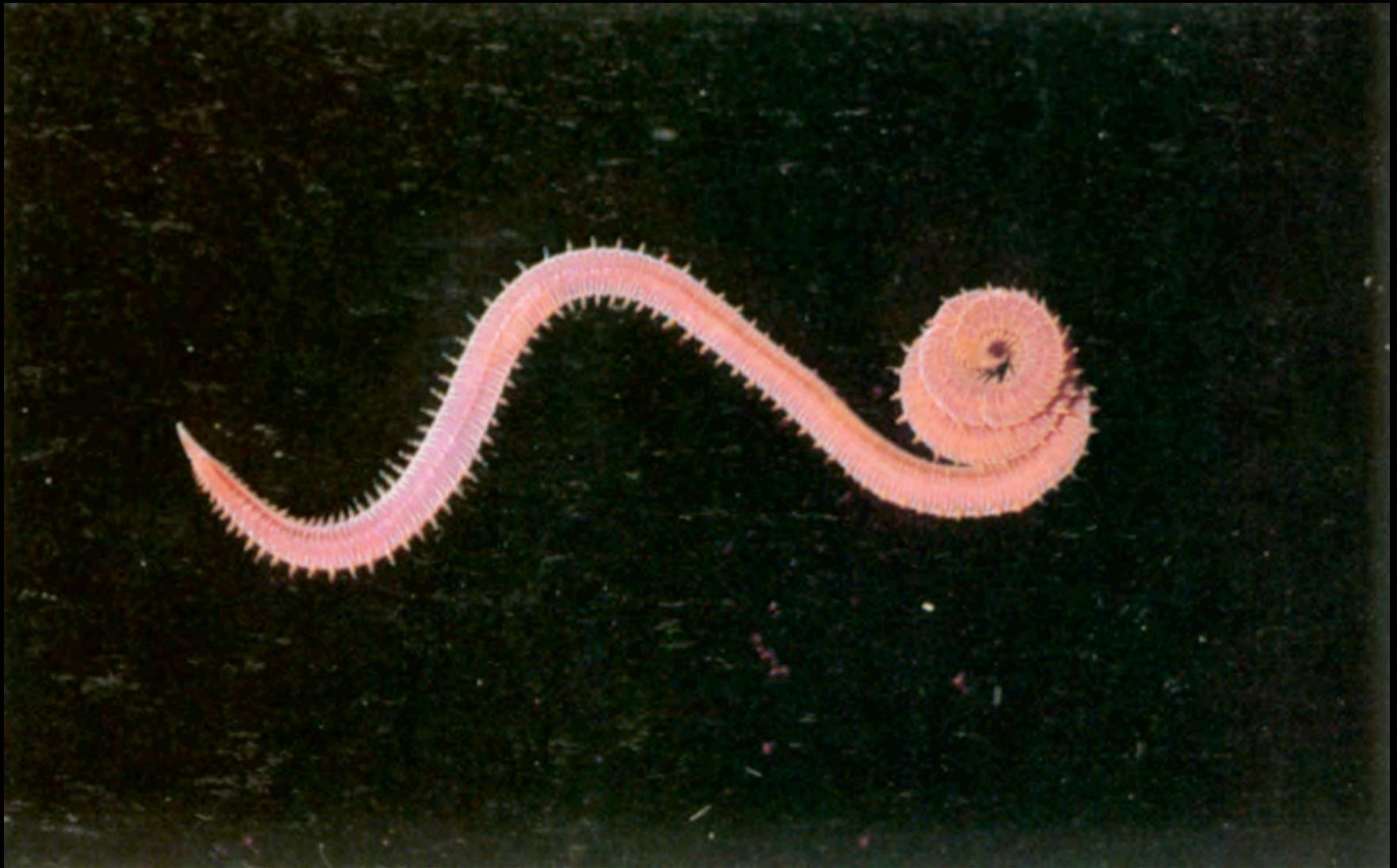


Phylum Annelida: The Segmented Worms

- ❖ Body divided into distinct segments
- ❖ Circulatory system is very similar to humans
- ❖ Class Polychaeta: “bristle worms”
 - ◆ Largest group of annelids, almost all marine
 - ◆ Burrowers, tube-dwellers, crawlers and swimmers
 - ◆ Fleshy extensions of tissue on the sides of the segments contain bristles (used for movement)
 - ◆ Some have large jaws attached to a proboscis









Phylum Mollusca: The Soft-Bodied Animals

- ❖ Very large, extremely diverse phylum
 - ◆ 40-60,000 living species (another 35,000 fossil species)
 - ◆ Marine, freshwater and terrestrial environments
 - ◆ Philippine Trench (35,000 feet deep) to 15,000 feet above sea level
 - ◆ Tropics to the poles
- ❖ Unique anatomy: Viscera, mantle, radula, shell, ctenidia, muscular foot

Phylum Mollusca

- ❖ Class Gastropoda: snails and “sea slugs”
- ❖ Class Bivalvia: clams, cockles, mussels and oysters
- ❖ Class Cephalopoda: octopus and squid







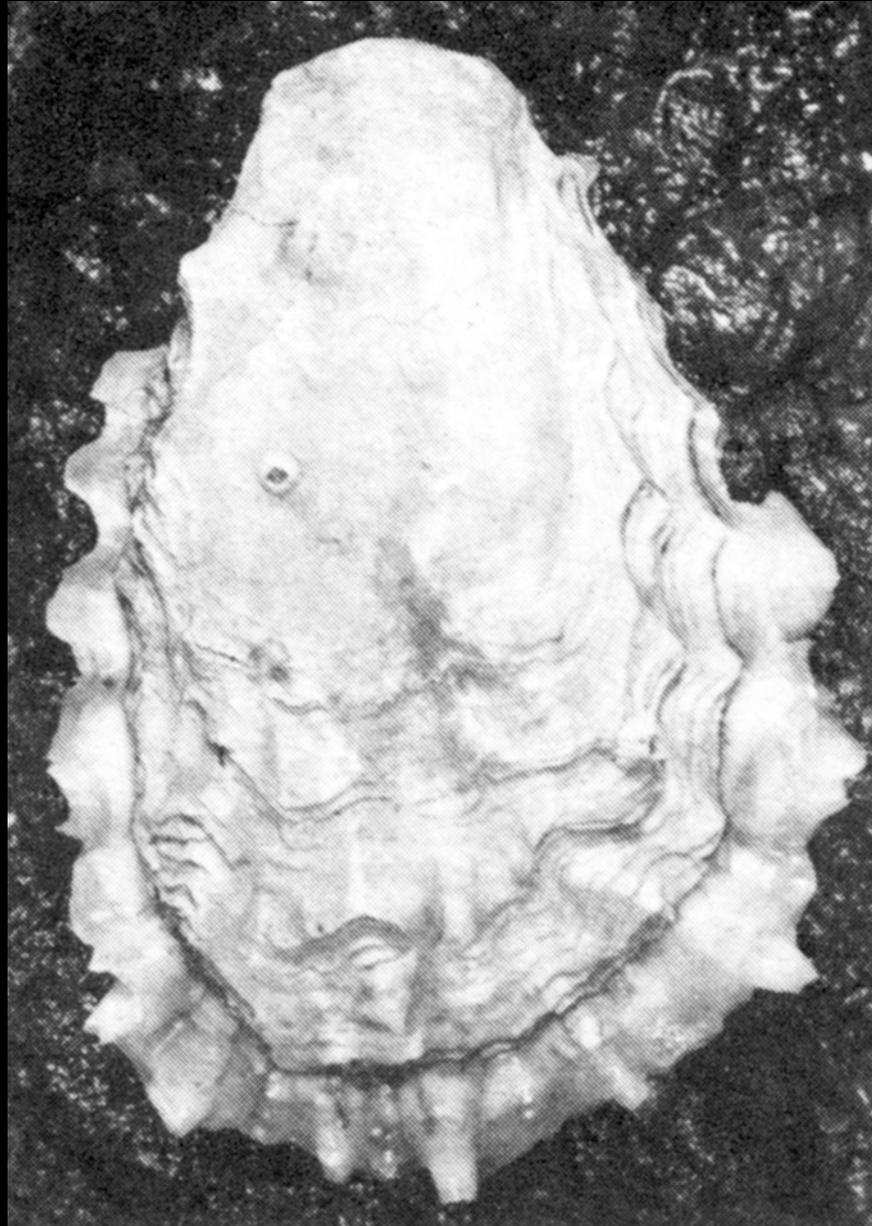










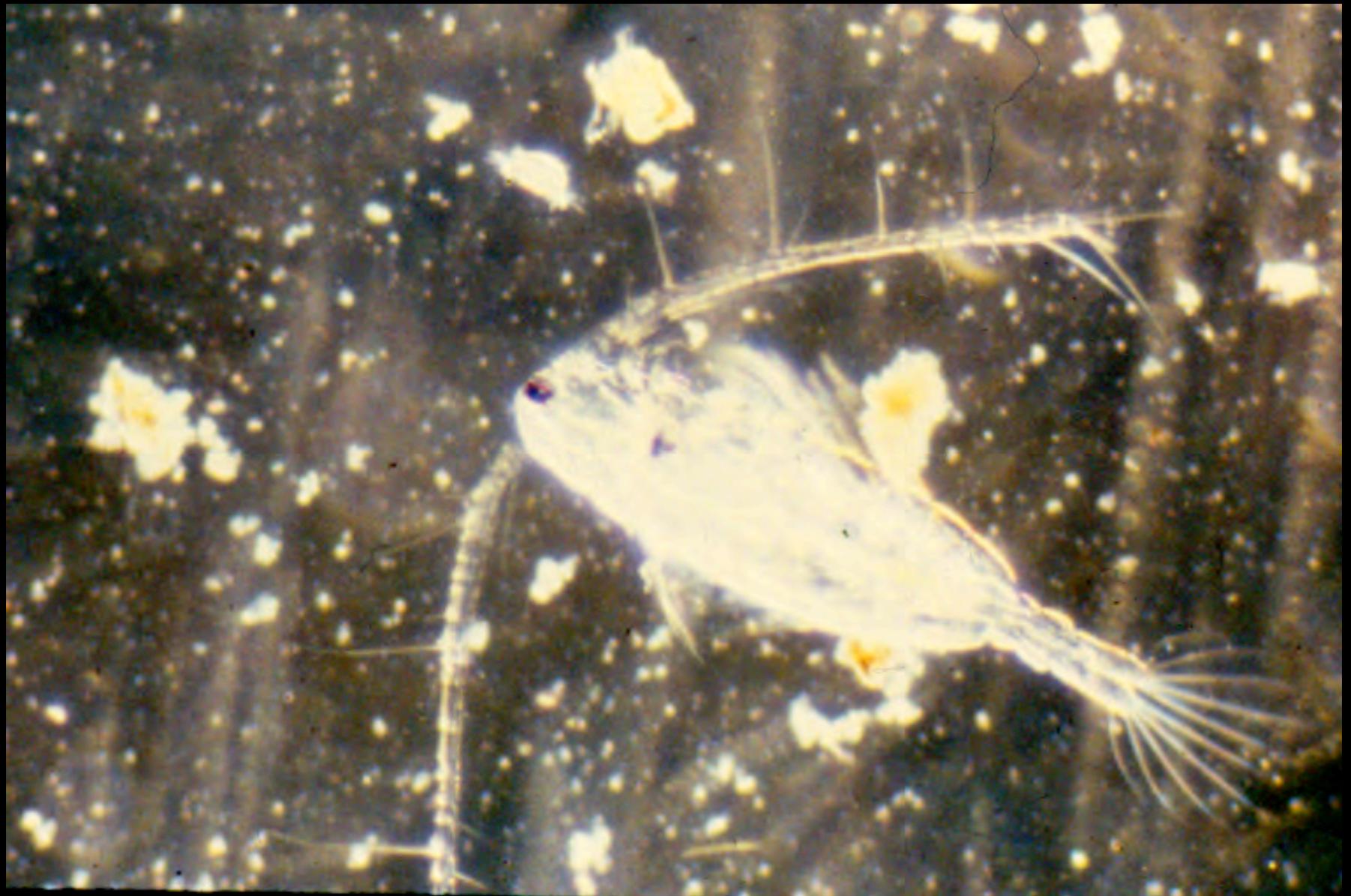




Phylum Arthropoda: The Joint-Legged Animals

- ❖ Largest phyla, extremely diverse
 - ◆ Approximately 900,000 identified species
 - ◆ 80% of all known animals are arthropods
- ❖ Segmented bodies and jointed appendages
- ❖ Exoskeleton made of chitin - very strong - molting
- ❖ Class Crustacea - barnacles, copepods, isopods, amphipods, crabs, shrimp and lobsters











Phylum Bryozoa: The Bryozoans or Moss Animals

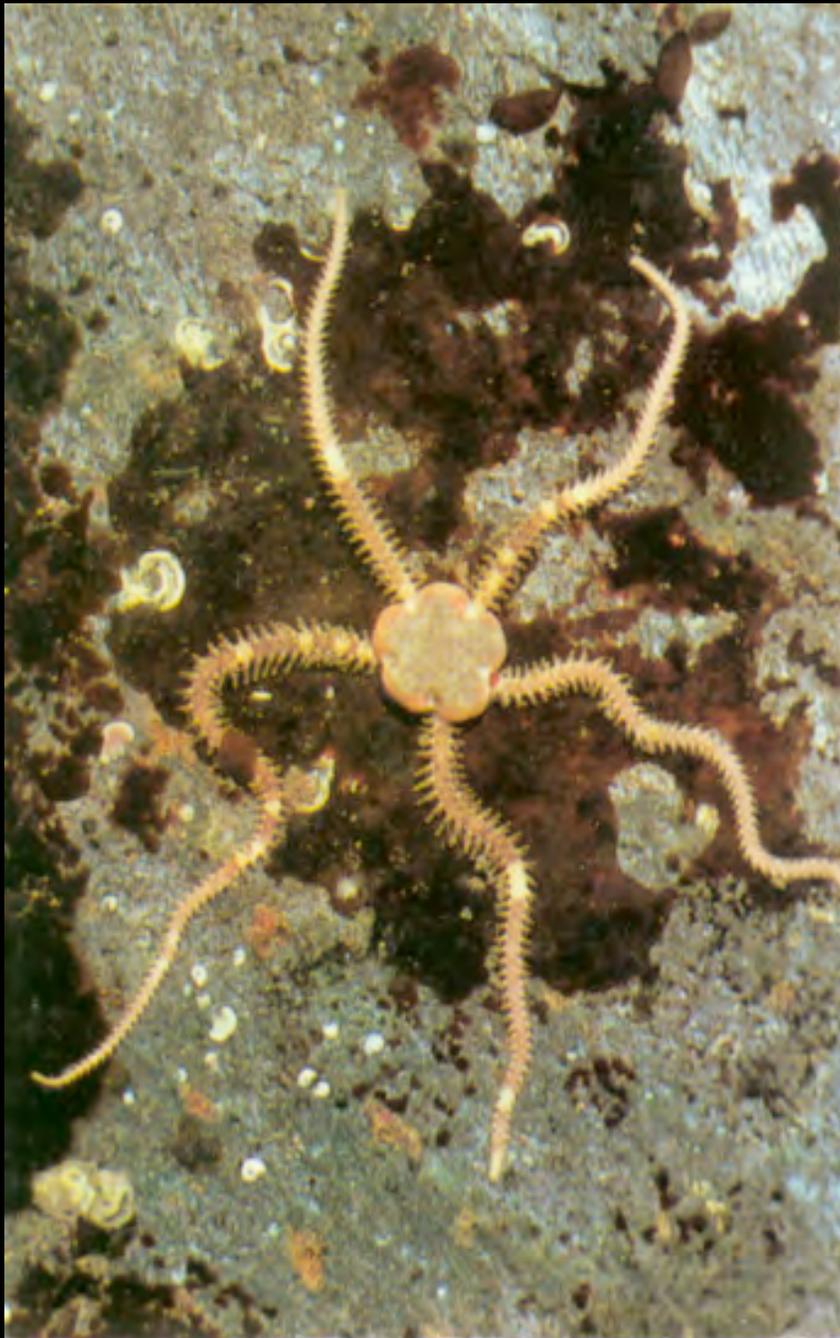
- ❖ Very small, complicated colonial animals
 - ◆ Thin crust (sometimes heavily calcified)
 - ◆ Busy growths
 - ◆ Branching
- ❖ Zooid - an individual animal
- ❖ Zooecium - the “house” a zooid secretes around itself
- ❖ Tentacles around the mouth bring in food

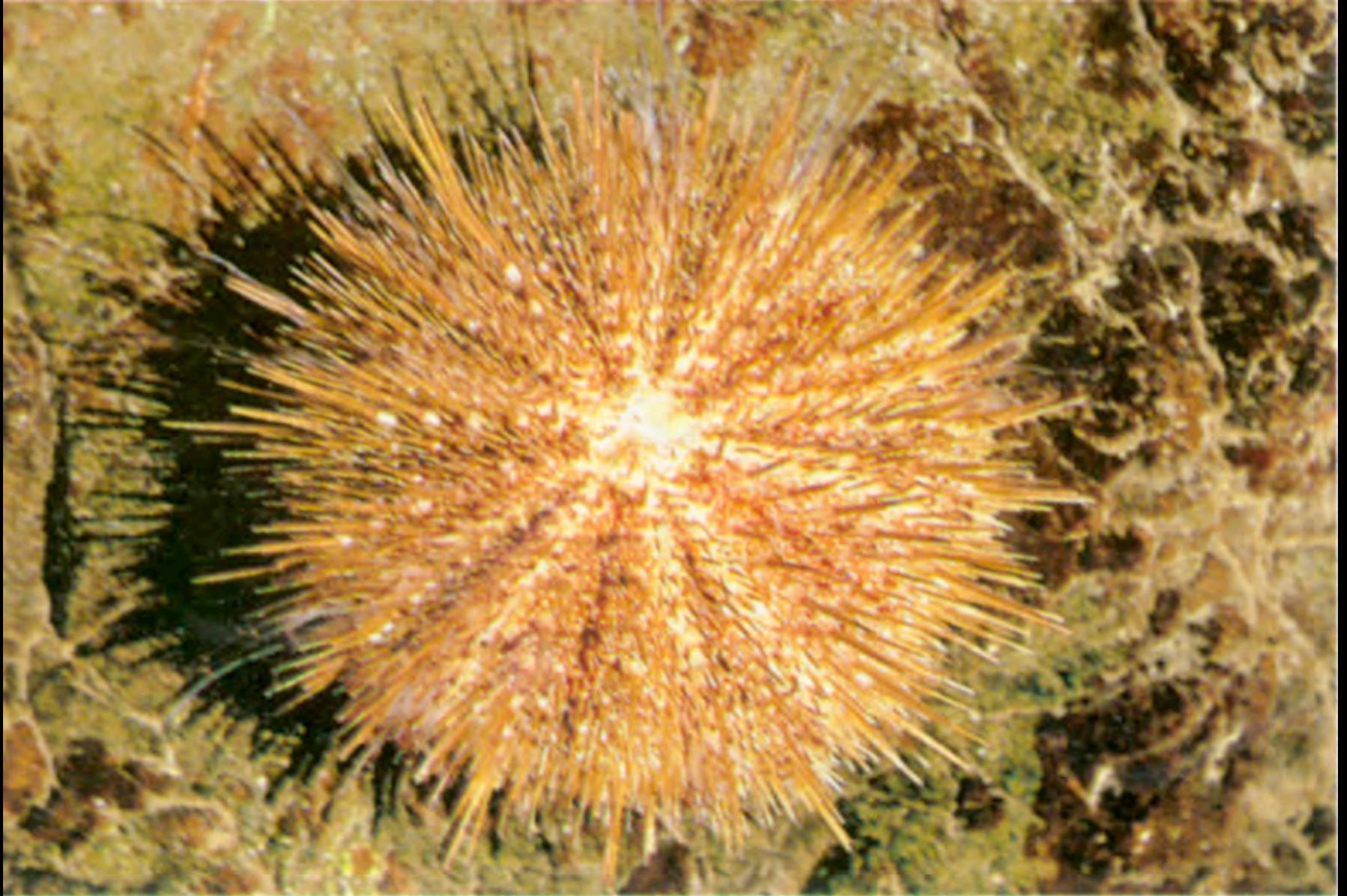


Phylum Echinodermata: The Spiny-Skinned Animals

- ❖ Includes sea stars, brittle stars, sea urchins, sea cucumbers and sand dollars
- ❖ Calcareous skeletal structure
- ❖ Tube feet - used for movement, operated by a water vascular system
- ❖ Radial symmetry

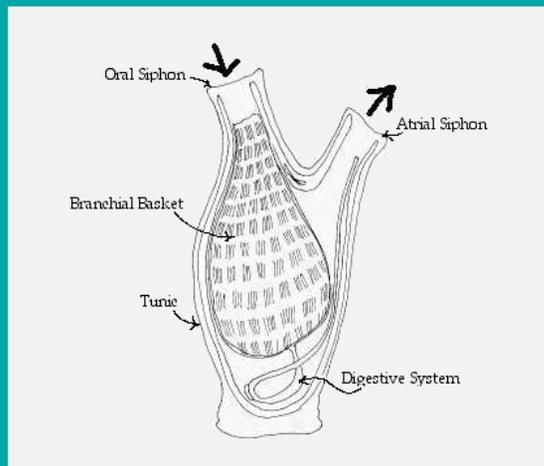






The Chordates

Urochordata, Sea squirts or tunicates



Didemnum sp.

Vertebrata



