

Class Malacostraca

Getting to know three ... Malacostracans.

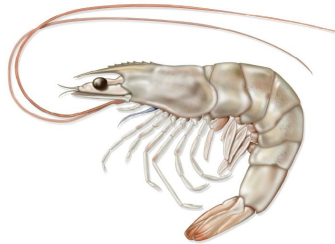
These malacostracans possess a defined carapace & a muscular abdomen.

The eyes of these malacostracans are pigmented and attached by movable stalks.

These malacostracans are important to the ocean ecosystem as predators and scavengers as they devour decaying animal and plant matter found on the ocean floor using their nifty food-gathering appendages.



Lobster



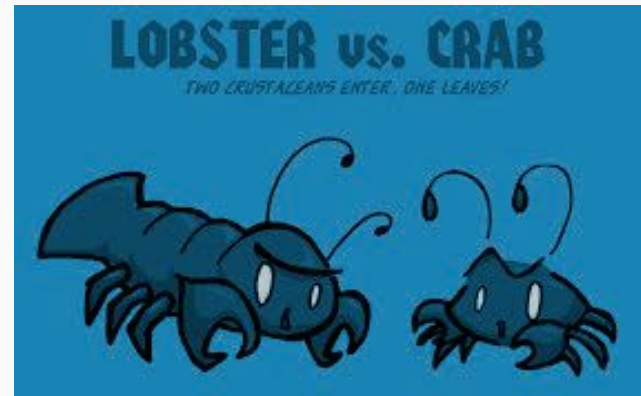
Shrimp



Crab

Class Malacostraca

- ❑ 20,000 species known worldwide
- ❑ Largest class of Crustacea
- ❑ Has 3 subclasses and 14 orders and many suborders



Order Isopoda



- Successfully invaded **terrestrial habitats** along with freshwater and seawater
 - Only Crustaceans to have become fully terrestrial
 - Flattened dorsoventrally
 - Lack a carapace
 - Have sessile compound eyes
 - Maxillipeds: **first pair of thoracic limbs**
 - Abdominal appendages bear gills, or lung like organs called **pseudotracheae**

Order Isopoda



- Common landforms: sow bugs, or pill bugs
 - Live under things why?
 - Lack efficient cuticular covering and other adaptations possessed by insects to conserve water, so they have to live in **moist environments**.
- *Caecidotea* is a common freshwater form found under rocks and among aquatic plants
- *Ligia* is common marine form that scurries about on the beach or rock shore
- Some Isopods are **parasites** of fish



Order Amphipoda

- They resemble isopods because they lack a **Carapace**, and have sessile compound eyes, and only one pair of **maxillipeds**.
 - However, instead of being dorsoventrally flattened, they are **compressed laterally**, and their gills are in the typical **thoracic position**.
 - Their thoracic and abdominal limbs are each arranged in two or more groups that differ from form and function.
 - There are many marine amphipoda
 - Include marine amphipods, freshwater genera, and parasites.



Order Euphausiacea

- Only 90 species
 - There are very important and known as krill
 - About 3–6 cm long
 - Have a carapace fused with all thoracic segments, does not entirely enclose their gills.
 - They have no maxillipeds, but have thoracic limbs with exopods
 - Eggs hatch as nauplii
- Most are bioluminescent, with a photophore
 - Photophore: light-producing substance in an organ
- Some species stay in giant swarms
 - These particular species are a major portion of the whale and many fish diets.



Order Decapoda



- Have three pairs of maxillipeds and five pairs of walking legs.
 - first legs to be modified as **pincers (chelae)**
 - Range in size
 - Largest of all Arthropods is the Japanese spider crab
 - Crayfish, lobster, crab, and “**true**” shrimp belong to order Decapoda
- **18,000** species of Decapods
 - This order is very diverse
 - There are many forms of crabs
 - They resemble crayfish, however they have a broader cephalothorax and reduced abdomen.

Class Malacostraca

Order Isopoda



Order Amphipoda



Order Euphausiacea



Order Decapoda



Just Keep Swimming!!!!!!!!!!

Since Finding Dory

comes out soon!!!!!!!!!!

