

Meiofauna Diversity

Bilateria (Phyla):

Arthropoda: Crustacea (Copepoda, Ostracoda, Isopoda, Mystacocarida)

Tardigrada

Nematoda

Kinorhyncha

Loricifera

Priapulida

Gastrotricha

Platyhelminthes: turbellarian flatworms

Annelida: Polychaeta

Mollusca

Entoprocta

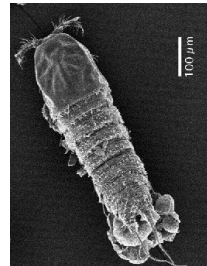
Protista (Phyla):

Sarcodina: Foraminifera

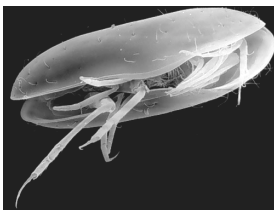
Crustaceans

Harpacticoid Copepods

Phylum: Arthropoda
Subphylum: Crustacea
Class: Maxillopoda
Subclass: Copepoda
Order: Harpacticoida



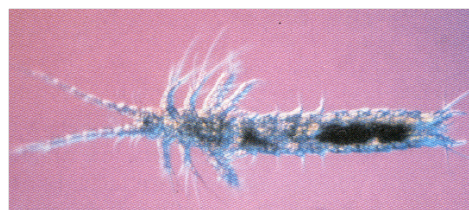
Other Crustaceans



Ostracoda



Isopoda

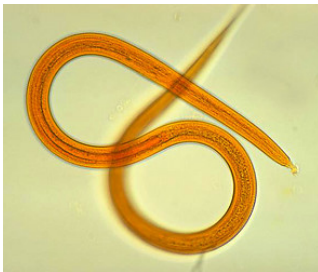
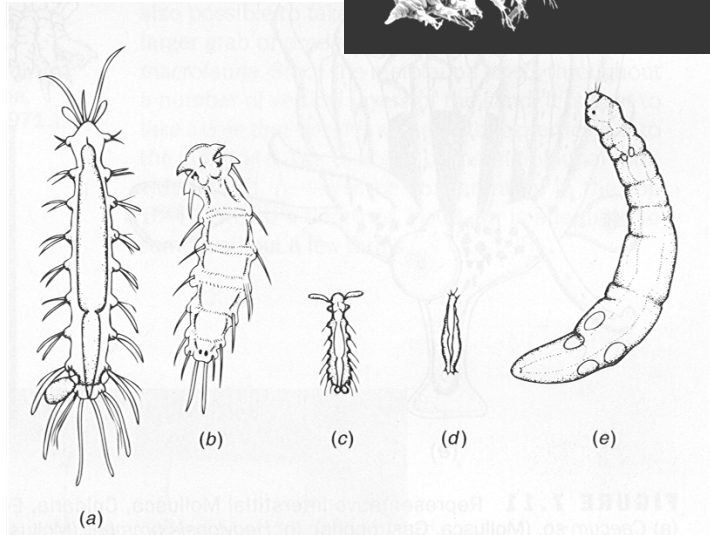
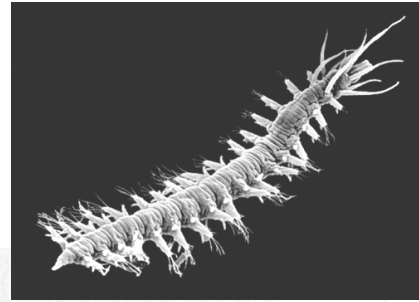


Mystacocarida

Polychaetes

Phylum: Annelida
Class: Polychaeta

- Segmented
- Parapodia
- True coelomates



Nematodes

Phylum: Nematoda

- Round worms
- Pseudocoelomates
- Estimated 500,000 species
- No motile cilia
- Mostly pointed “ends”; very long and thin
- often don’t move into clear direction, “wiggle”

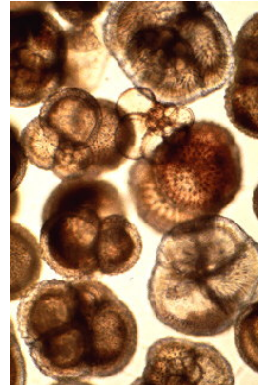
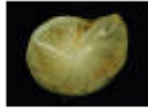




Foraminifera

Phylum: Sarcodina; Order Foraminifera

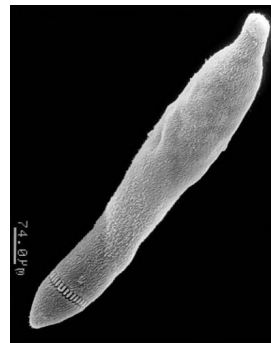
- Marine Protists
- Aproximately 4000 living species
- Many fossil species (since Cambrian)
- Multi-chambered shells, pseudopodia



Turbellarian Flatworms

Phylum: Platyhelminthes

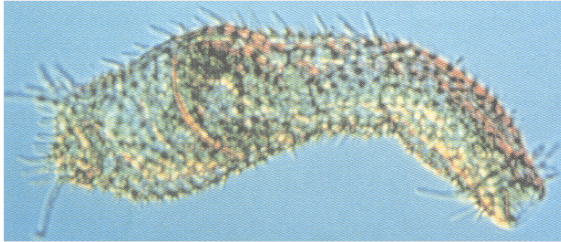
- Mostly freeliving
- Estimated 3,000 species
- vary body shape with circular, longitudinal and dorsoventral muscles
- Mostly round ends; not as long & thin as Nematodes
- Can move very fast



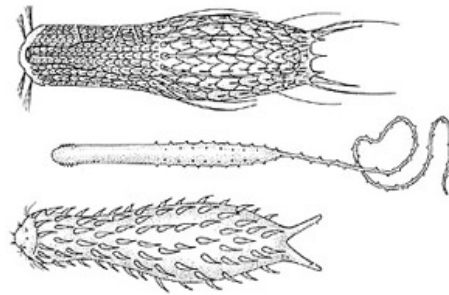


Gastrotrichs

Phylum: Gastrotricha



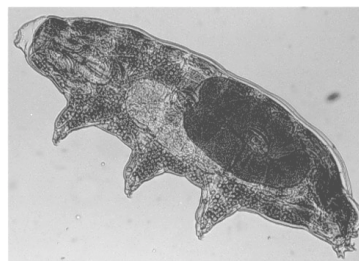
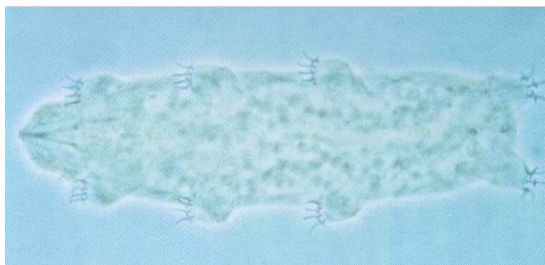
- Pseudocoelomates
- Aproximately 400 species
- Move on ventral cillia



Tardigrades

Phylum: Tardigrada

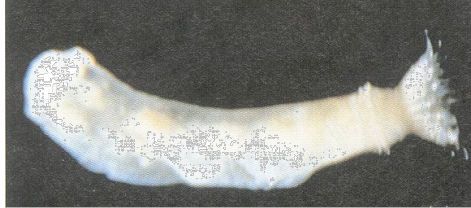
- “Water bears”
- Coelomate
- Estimated 300-400 species
- Eight clawed legs
- Cryptobiosis - suspended animation during dry conditions



Priapulans

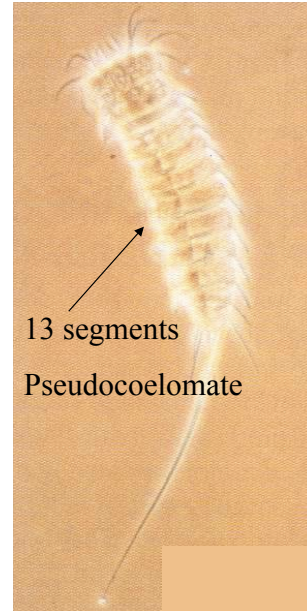
Phylum: Priapula

- **Coelomate**
- **Nine species**
- **Proboscis, trunk, caudal appendages**



Kinorhynchs

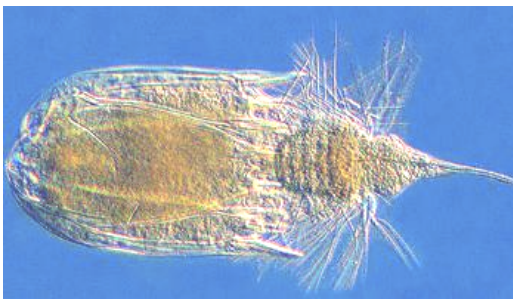
Phylum: Kinorhyncha



Loriciferans

Phylum: Loricifera

- **The “Brush Heads”**
- **New phylum in 1983**
- **Head and 6-plated trunk or “lorica”**



Entoprocts

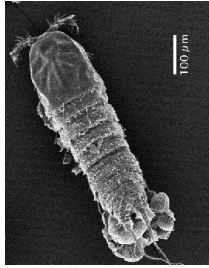
Phylum: Entoprocta

- **Pseudocoelomate**
- **Body cup-shaped**
- **Crown of ciliated tentacles**
- **Basal stalk**



Meiofauna in your sample

Copepod



Nematode



Forams



Polychaete



Gastrotrich



Flatworms