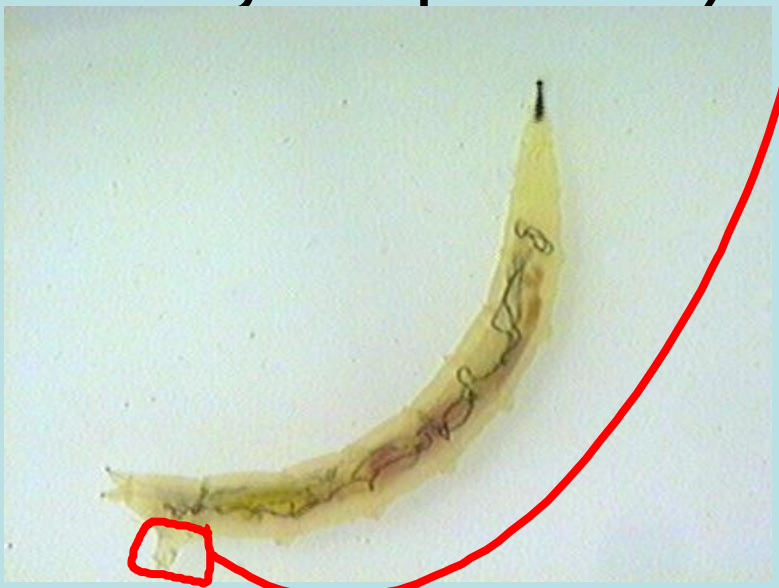
Aquatic Macroinvertebrates!

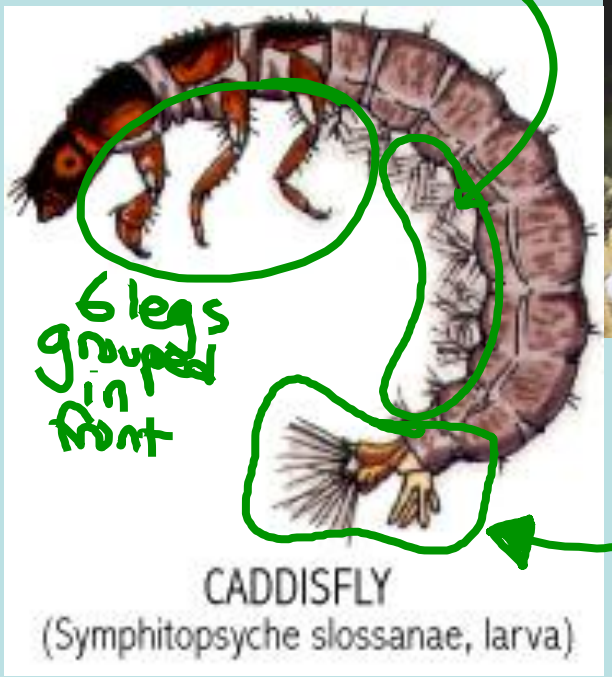
True flies! (order Diptera)

- Often headless or "head-reduced"
- No "true" legs ("prolegs" may be present)

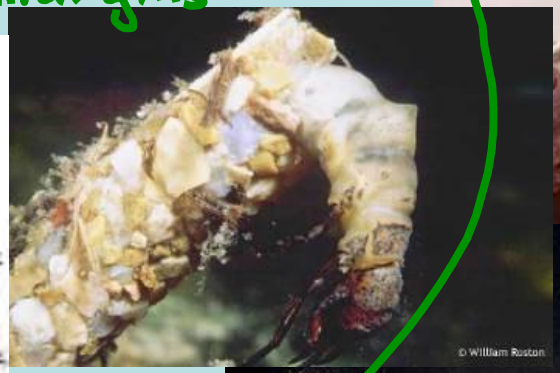


Caddisflies! (order Trichoptera)

- Generally build “houses” of stones, sticks, mud
- “Tail claws” w/tail hairs



abdominal gills

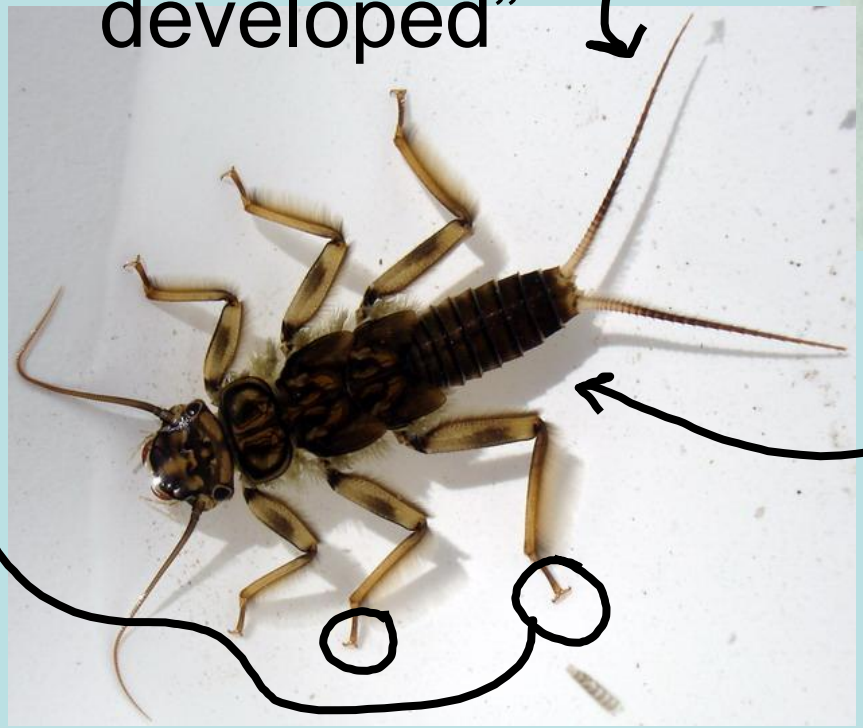


Mayflies! (order Ephemeroptera)

- Usually have three tails
- Abdominal gills
- Indistinct chewing mouthparts

Stoneflies! (order Plecoptera)

- Legs end in two claws
- Usually two tails
- Mouthparts not “well-developed”



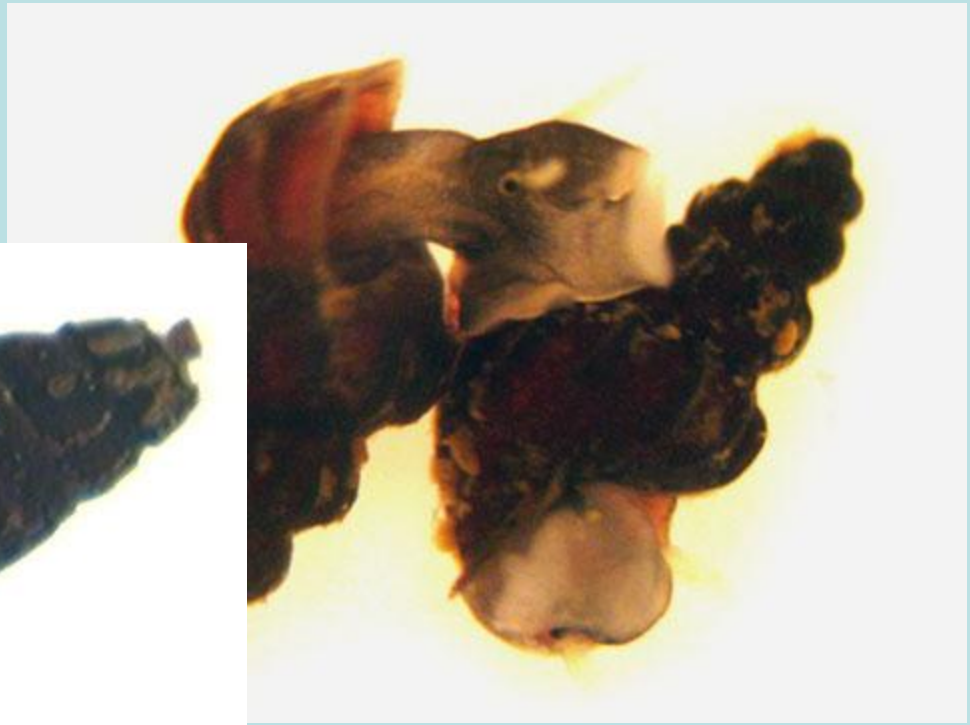
No abdominal gills

Dragonflies! (order Odonata)

- Large, wide head
- Large body size; wing buds; reduced tails

Snails! (Genus Juga)

- Shells ...



Why Study MI's?

- Aquatic macroinvertebrates play an important role in aquatic ecosystems
- Recyclers / decomposers
- Different anatomy -> different feeding styles
- Different feeding styles -> different ecological function

Aquatic MI's are Indicators

- "Inidicator species" are organisms that tell us specific information about their environment through their presence or absence
- Aquatic MI's are very useful indicators of water quality – in particular, temperature, pH, DO, and chemical pollutants