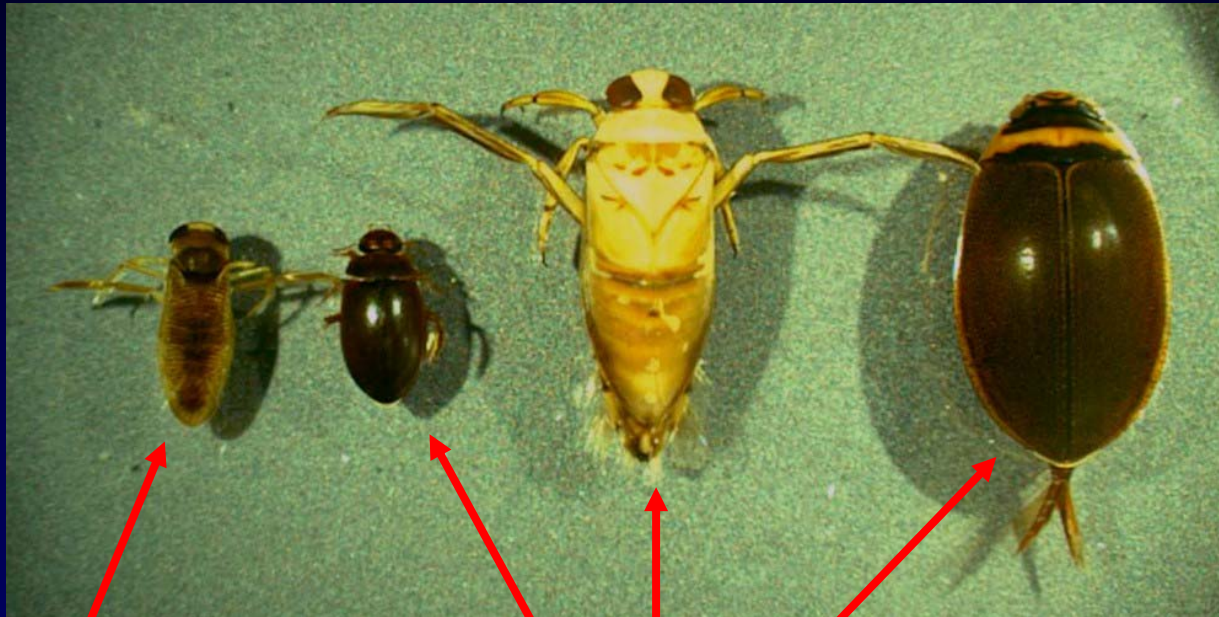


Beetles and Bugs

Coleoptera and Hemiptera



Corixidae Proportion Metric



Corixid

Non-Corixid Beetles and Bugs

For the metric scoring you only need to distinguish corixids from all other non-corixids in each sample

Corixidae

Dorsal View



Ventral View



Adult vs. Immature



Adult: Wing pads
cover abdomen

Immature: Abdomen
exposed

Distinguishing Corixidae from other bugs

The bug most commonly confused with corixids are the backswimmers (Notonectidae)



Four primary distinguishing features are: Mouthparts, Legs, Wing Shape and Pattern, and Eyes

Corixidae vs Notonectidae

Mouthparts



Wide beak for rasping



Sharp beak for piercing

Note: all other aquatic bugs
have piercing mouthparts

Corixidae

vs

Notonectidae

Legs



Front legs

Swimming leg

Corixidae also have swimming legs, but the front legs are proportionately much shorter.



Notonectid swimming legs are elongated for faster swimming while hunting. Their front legs are long and thin.

Corixidae vs Notonectidae

Wing Shape and Pattern



Wing Pads Brown or
Patterned, lying flat on
abdomen



Wing Pads Whitish/Tan or
Semi-transparent, tucked
tightly around abdomen

Corixidae vs Notonectidae

Eye Size



Eye

The eyes of the Notonectide take up a proportionately greater area of the head, and are proportionately wider, than those of Corixidae.

Locate all Beetles and Bugs



Many of the beetles and bugs are very small and are often missed when sorting your sample

Beetle larvae

vs

Dragonfly and
Damselfly larvae



Beetles

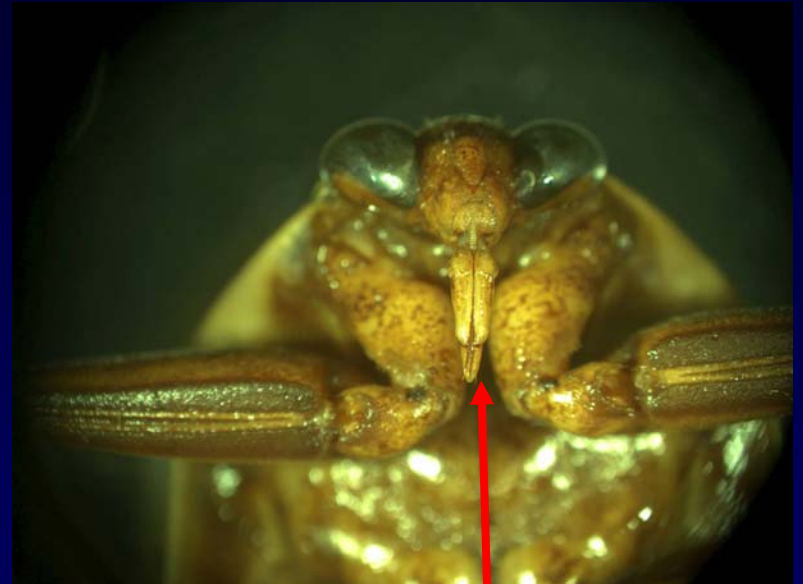
vs.

Bugs

(non-corixids)



Chewing Mouthparts



Piercing Mouthparts

Beetles

vs.

Bugs



Wings are hard, shiny



Wings are leathery, dull