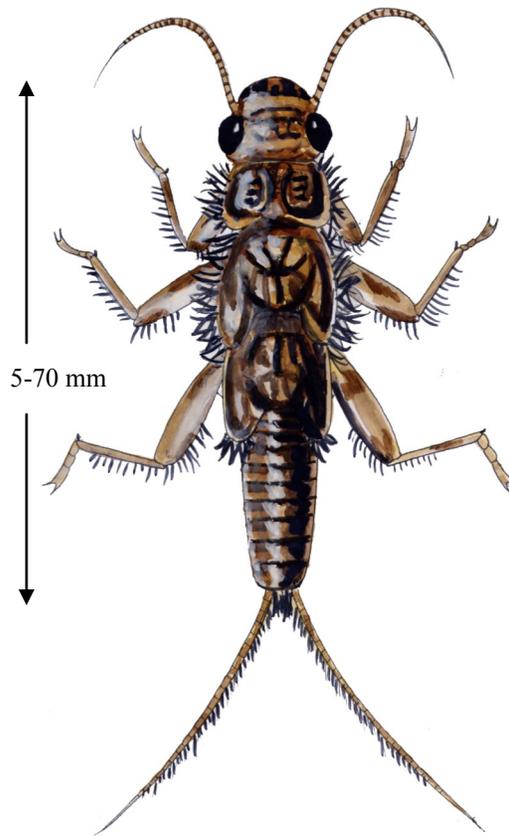
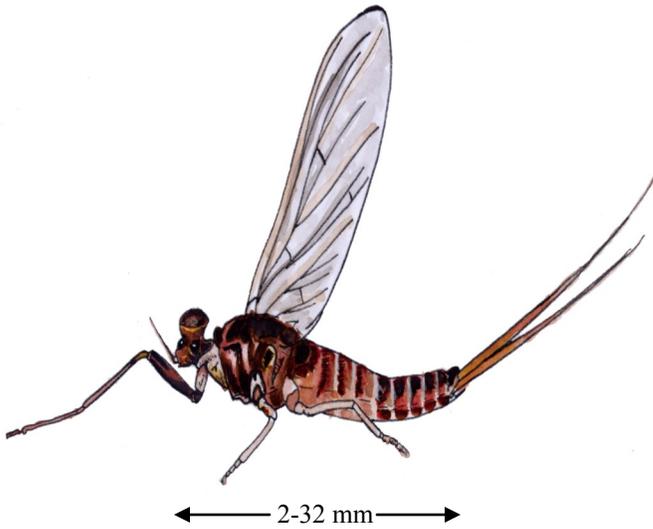


- Stoneflies are very sensitive to pollution and only live in the very cleanest of streams
- Stonefly larvae have 2 tails & 2 claws on the end of their legs.
- Some Stoneflies live in the water for 3 years before becoming adults.
- Stoneflies can be either herbivores or predators.
- Stoneflies have hairy looking gills under their arms and on their thorax. When there isn't adequate oxygen in the water, they will do "push-ups" to move the water past their gills.



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## ORDER: PLECOPTERA



**M**

**A**

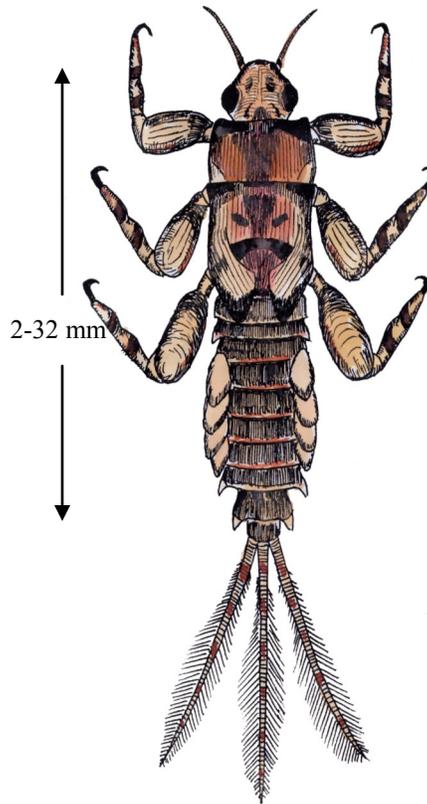
**Y**

**F**

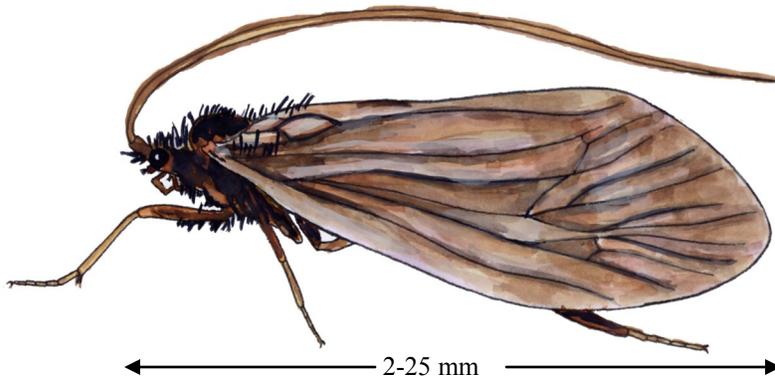
**L**

**Y**

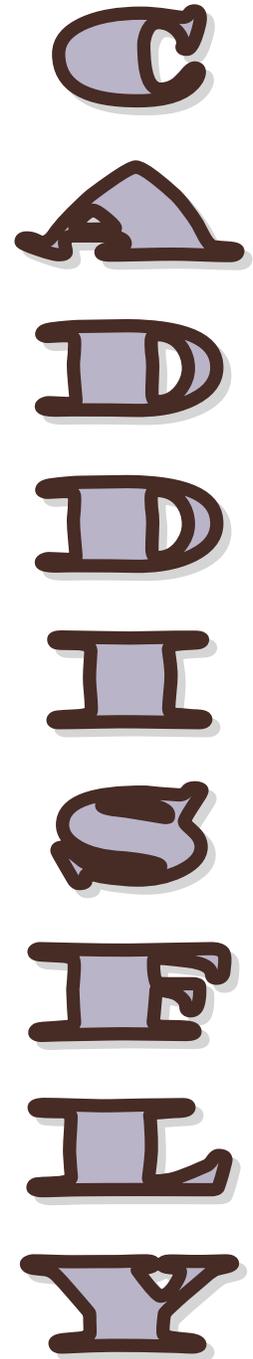
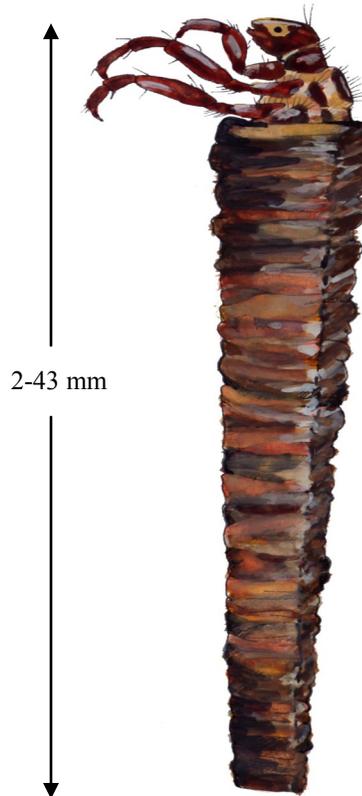
- Some Mayflies live in water for 2-3 years as larvae. When they hatch they can have as little as 24 hours to find a partner, mate and lay eggs before they die. Usually they don't even have time to eat.
- Most Mayfly larvae feed on microscopic algae and small bits of organic matter, making them herbivores.
- Mayfly larvae have gills down the sides of their abdomen, large eyes, 1 claw at the end of each leg and 2-3 tails.



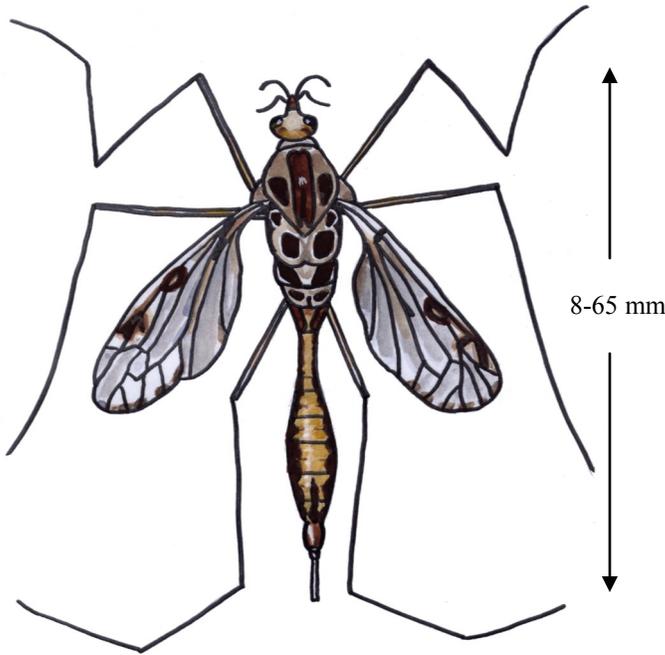
**ORDER:  
EPHEMEROPTERA**



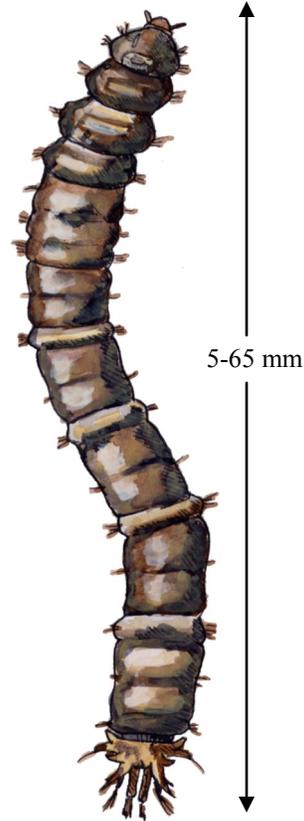
- Many Caddisfly larvae build cases to live in. The case protects them from predators as well as increases their weight allowing them to live in fast moving water without being washed down stream. The cases are made out of plants, sticks, and rocks found on the streambed.
- Some Caddisflies create nets of silk to catch food floating in the water.
- Others swim freely and eat other macroinvertebrates. They also scrape algae or eat leaf pieces from stream bottoms.



# ORDER: TRICHOPTERA



C  
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- Crane fly larvae survive under rocks and debris, or on muddy stream bottoms.
- The Crane fly larva head can be hard to see, because they can retract it back inside their body.
- Crane fly larvae can be up to 4 inches long.
- Crane fly adults are often called “mosquito hawks” or “mosquito eaters.”

**ORDER: DIPTERA**

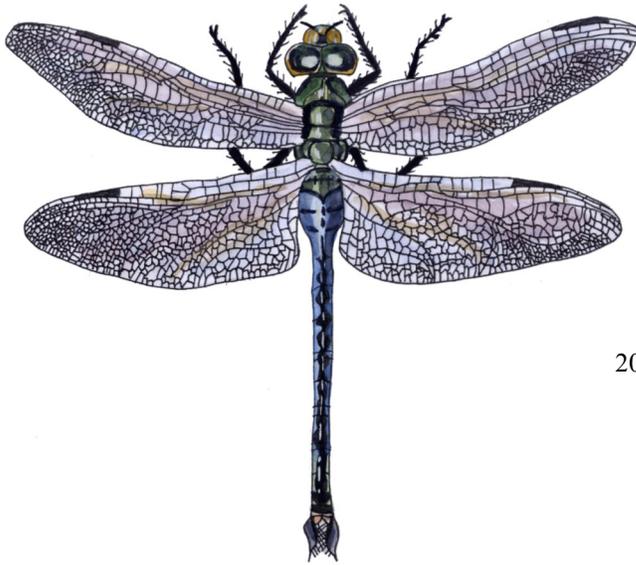


- Blackfly larvae are found on gravel, rocks, driftwood, and vegetation in medium to fast moving water.
- Sometimes rocks are covered so thick with Blackfly larvae they look slimy!
- The body of Blackfly larvae is often shaped just like a “bowling pin.”
- As adults, these insects are the small, black, buzzing flies that get into your eyes, ears, mouth, and nose. They rarely bite humans, but they do bite horses, cattle, deer, and other wildlife.



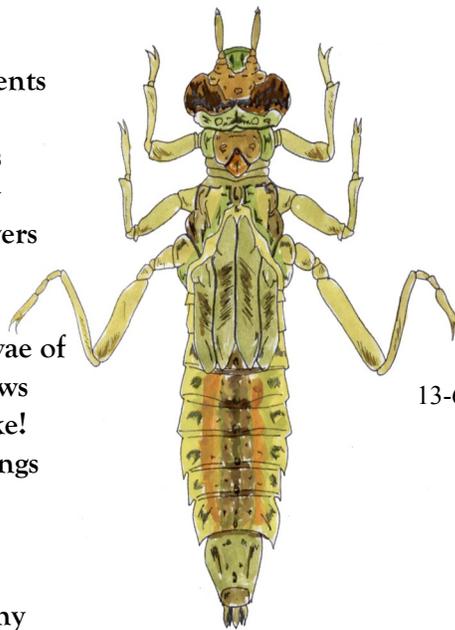
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# ORDER: DIPTERA



20-85 mm

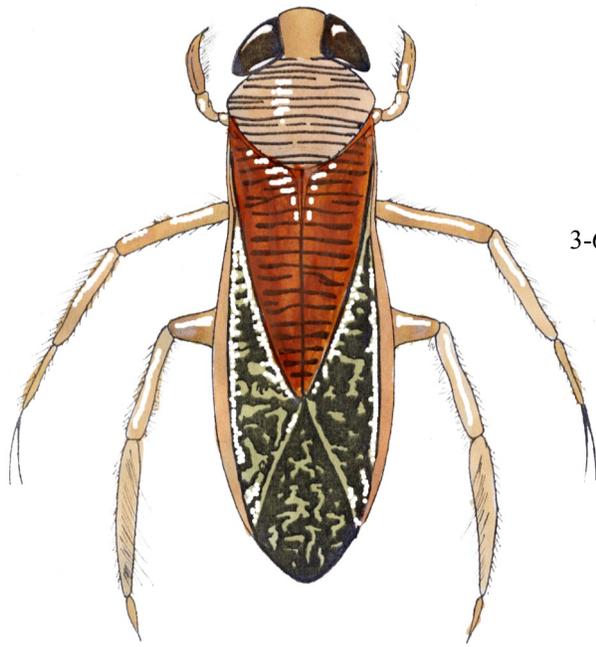
- Dragonflies are common residents of ponds, lakes, marshes, and at times rivers. Large numbers of Dragonflies can occasionally be seen flying together near rivers and lakes.
- You may not recognize the larvae of a Dragonfly, but everyone knows what adult Dragonflies look like! They are large with 4 broad wings and a long tail.
- Dragonfly larvae often stalk their prey which consist of many types of insects and fish!



13-68 mm

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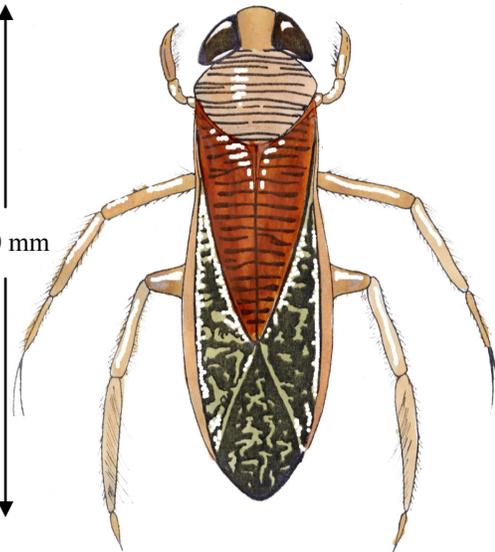
**ORDER: ODONATA**



3-65 mm

- Water Boatmen's back legs have long hairs which make them look like oars and help the Water Boatmen swim.
- Water Boatmen breathe air from the surface of the water by trapping it in hairs on their abdomen.
- Water Boatmen are very common and can live in almost every type of water

2-60 mm



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**ORDER:  
HEMIPTERA**