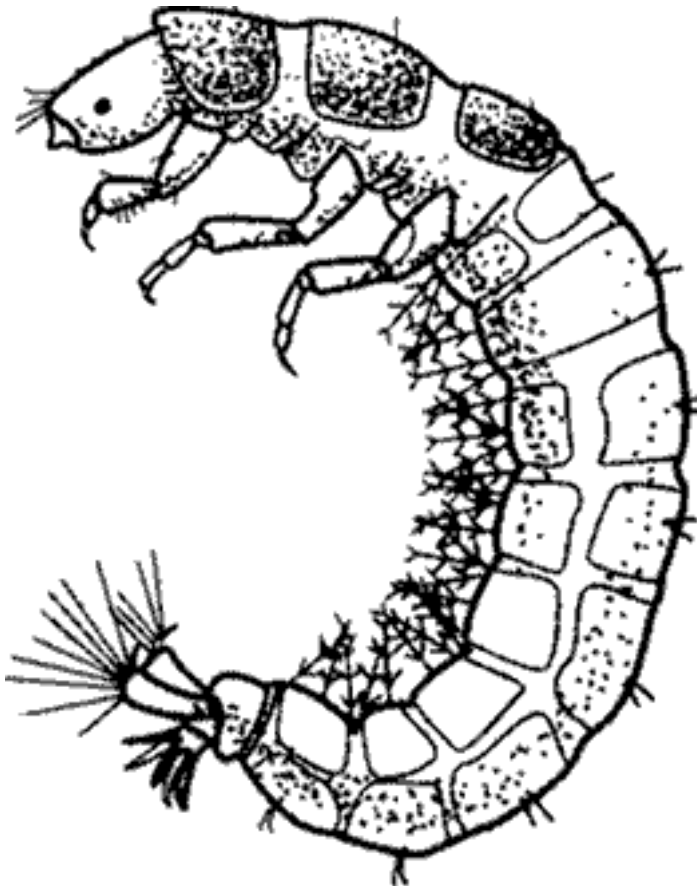


# Caddisfly larva

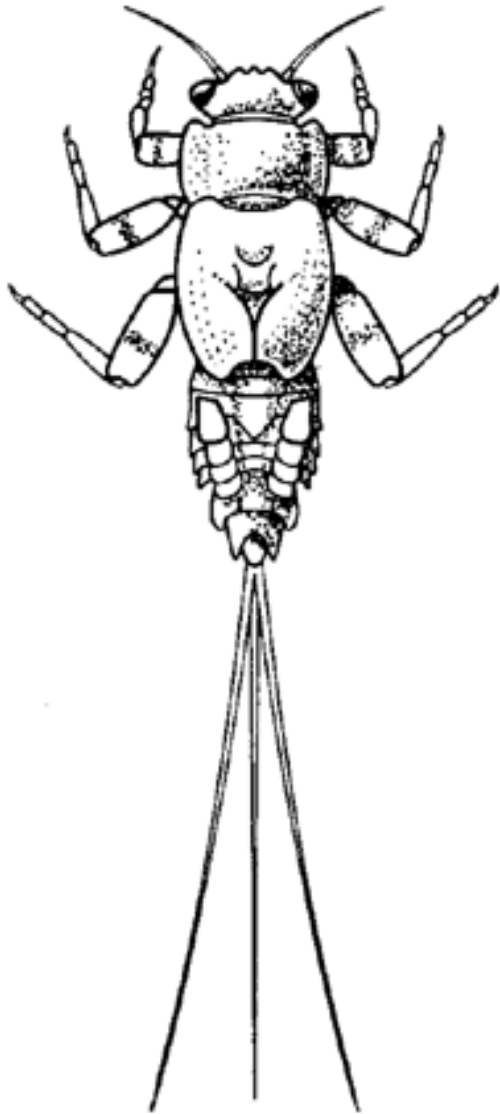
**Point Rating: 3**

- **Size: 10 mm**
- **Description:** Caddisfly larvae are builders. They make sticky silk from their spit and use it to spin webs for trapping other insects. Other species use the silk as glue that they mix with sand, twigs or grass to form a protective case. Most species have gills and get oxygen from the water that circulates through the case. They are most abundant near well-aerated streams and fast flowing water. When larvae morph and hatch into flying adults it is usually in a big group and the fish love it!



- **Point value : 3**  
Larvae are especially sensitive to pollution. Found only in streams that are clean and have high levels of dissolved oxygen.
- **Key characteristics:**
  - Segmented legs
  - Six legs
  - Elongated body
  - Hooked, tail-like extensions
  - Protective mud and rock, or grass casing
  - Adults have wings that are covered with fine hair

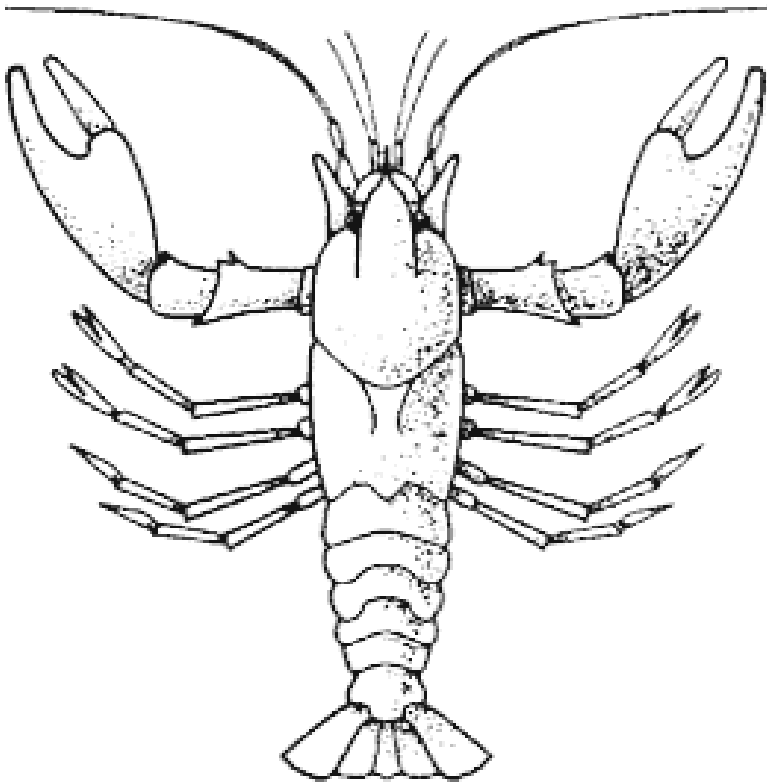
# Mayfly larva



- **Point Rating: 3**
- **Size: up to 1 inch**
- **Description:** A detritivore, (eater of rotting leaves and twigs) or herbivore who grazes on tiny algae. This insect is crucial prey for salmon. The larvae hang out on rocks in fast currents, or they bury themselves in soft bottoms. They have abdominal gills that range from plates to feathery depending on the species. The greatest diversity of mayflies are found in cool, swift flowing streams.
- **Point value : 3**  
They are very sensitive to pollution. Found only in clean and moving streams.
- **Key characteristics:**
  - Segmented legs
  - Six legs
  - Elongated body
  - Two to three tails
  - Feather-like gills, or plate-like gills

# Crayfish

- **Point Rating: 2**
- **Size: 40 mm**
- **Description:** Also known as “crawdads,” crayfish hide under rocks and leaves during the day, and forage on the stream bed at night. They run backward when threatened and use their front claws for protection. They also use their claws to cut up food. Unlike other insects, crayfish do not metamorphose into flying forms. They complete their entire life cycle in the water.  
**Point value : 2**

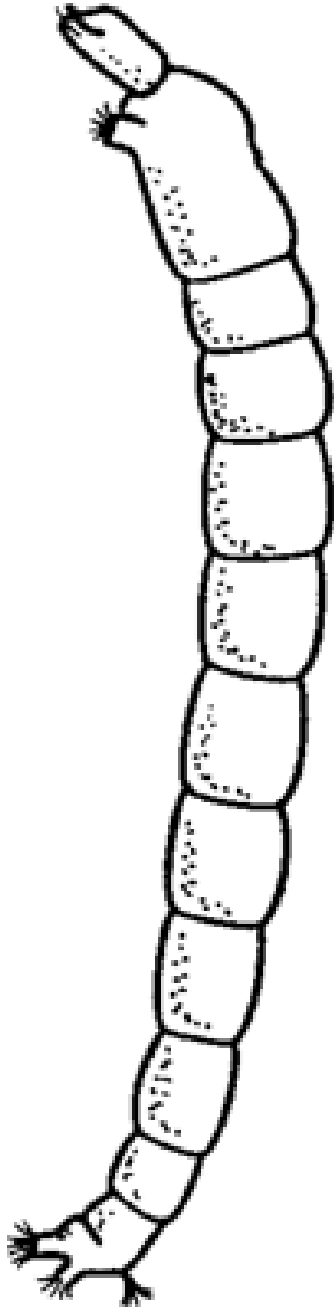


Somewhat sensitive to pollution. Find them in fair quality water.

### **Key characteristics:**

- Eyes stand out from the body
- Two or four antennae
- Plate-like shell covering body
- Dark red, orange or brown
- 10 legs, two are claws!
- Females may be seen with eggs or young clinging to the underside of their abdomen
- May live to be seven years old!

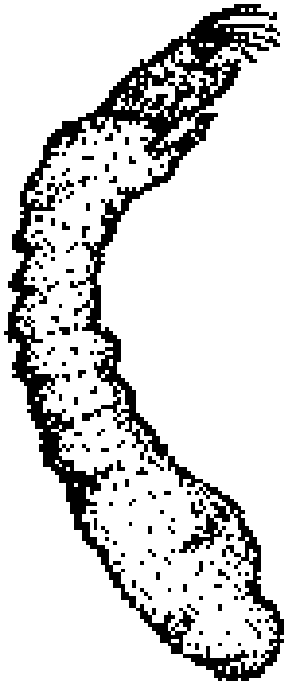
# Midge Larva



- **Point Rating: 1**
- **Size: 8 mm**
- **Description:** The midge is a fly of the class Dintera, meaning having two wings. Like nearly all true flies, midges hatch as aquatic maggots. They are usually about a centimeter long.
- **Point value : 1**

They are not sensitive to pollution and are found in all but the most polluted aquatic conditions.
- **Key characteristics:**
  - One pair of tiny, fleshy legs below the head and one pair on the back end
  - Digestive tract can be seen inside the body as a thin dark line
  - Thin, slightly curved, segmented, inch worm-like body
  - Distinct, dark head

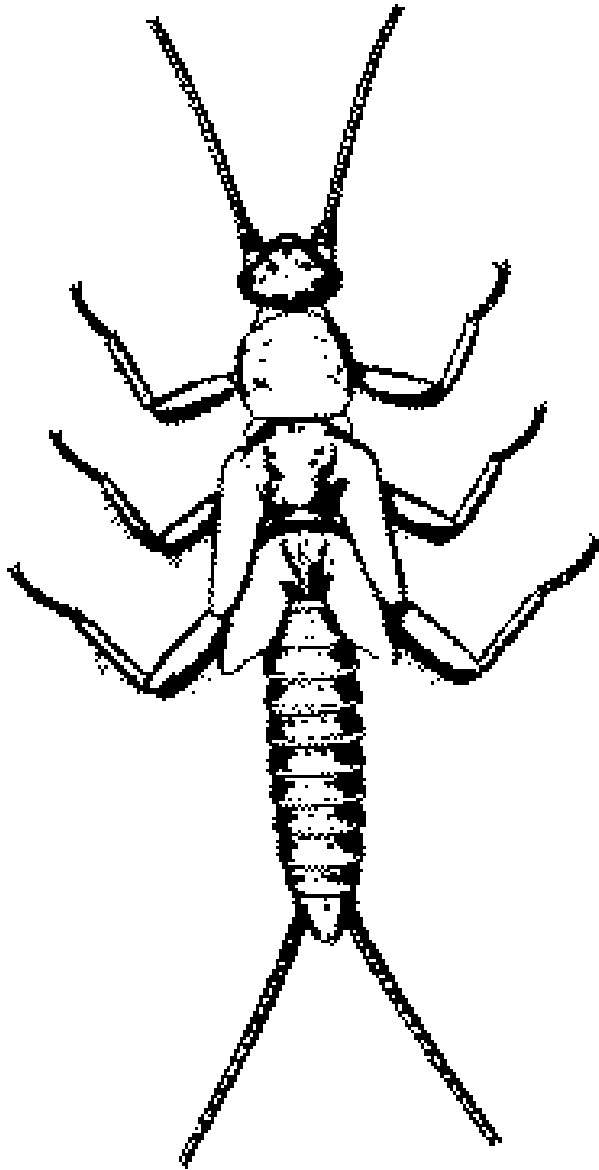
# Black Fly Larva



- **Point Rating: 1**
- **Size: 10 mm**
- **Description:** They move by drifting downstream on silken threads that extend from the tip of the abdomen. You can find them stuck with an attachment disk to rocks, sticks or other debris in streams.
- **Point value : 1**

They are not sensitive to pollution and can live in any quality of water.
- **Key characteristics:**
  - segmented body
  - head is usually black, brown, tan or green
  - Attachment disks, like small suckers on the end of the abdomen
  - one leg-like appendage directly under the head
  - back end of body widens and is bulbous
  - no legs
  - tiny gills by head filter food from water

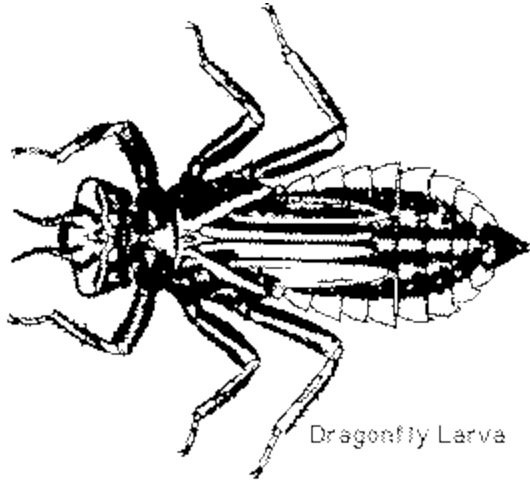
# Stonefly larva



- **Point Rating: 3**
- **Size: up to 1 inch**
- **Description:** There are about 500 known species in North America, they predate on other insects, and also feed on fungi, and bacteria on rotting organic material. They spend three months to three years maturing in cool, clean streams with high levels of dissolved oxygen. Stonefly nymphs have fixed gills that can only extract oxygen in moving water. If they get trapped in still water they will die quickly.
- **Point value : 1**

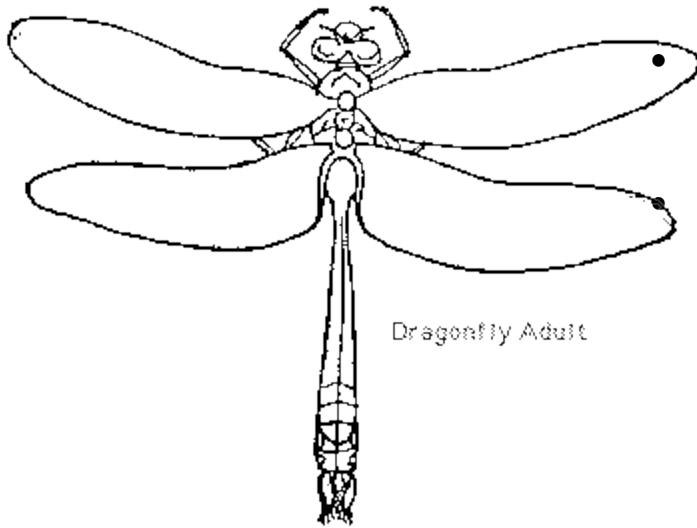
They are very sensitive to pollution and only survive in clean, cool, riffled water.
- **Key characteristics:**
  - Six segmented legs on middle section of body.
  - Each leg has two hooks on the end
  - Gills often located on or behind each leg
  - Two long antennae
  - Two hair-like tails that are sensory feelers

# Dragonfly larva



Dragonfly Larva

- **Point Rating: 2**
- **Size: 10 mm**
- **Description:** They eat mosquitoes, midges, flies, bees and butterflies. Most of their life is spent in the aquatic larval stage, breathing through internal gills and using extendable jaws to catch other insects, or even tadpoles. The larval stage may last as long as five years, and when the larva is ready to metamorph it climbs up a reed at night. Exposure to the air causes the larva to begin breathing, the skin splits behind the head, the adult crawls out of its old larval skin, and as the sun rises the wings start to pump and it flies off to feed on insects.



Dragonfly Adult

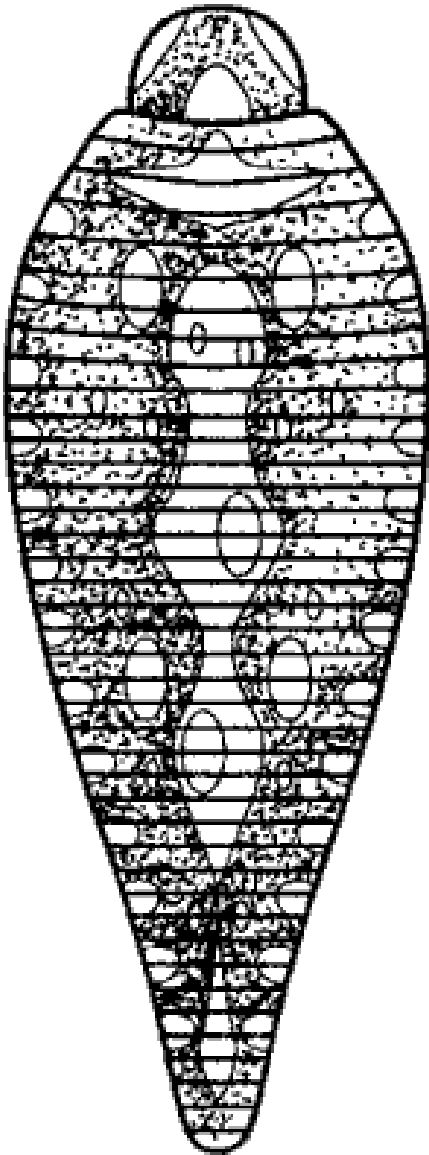
## Point value : 2

They are mildly sensitive to pollution.

## Key characteristics:

- Large scoop-like lower lip
- Large eyes
- Wide oval or round abdomen that may end in three wedge-shaped extensions
- Internal gills
- Six long segmented legs on upper middle section of body

# Leech

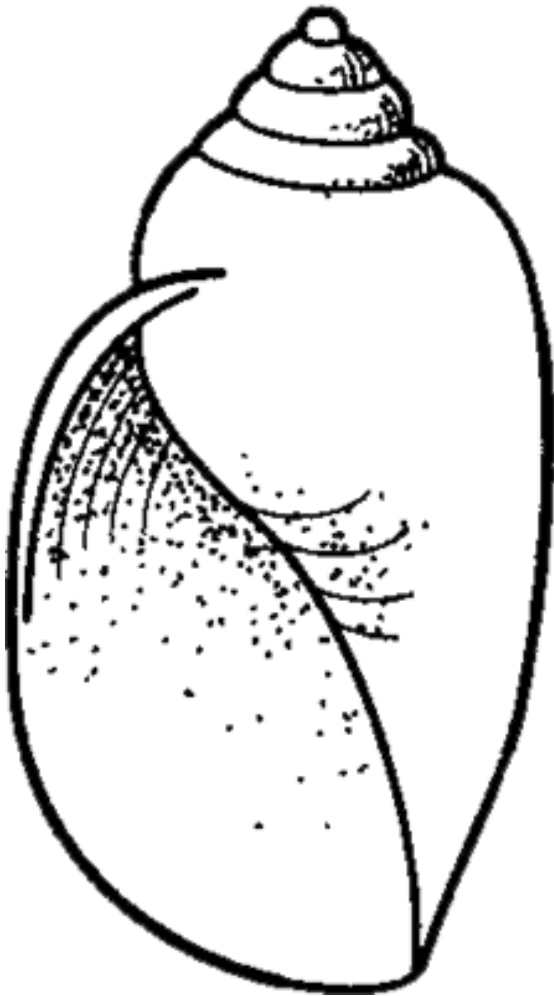


- **Point Rating: 1**
- **Size: 20 mm**
- **Description:** There are more than 64 species of freshwater leeches. Find them swimming in slow-moving water. A scavenger, and parasite that lives by attaching itself to other animals and sucking their blood, usually fish and frogs. Only a few species parasite on humans, and the leeches that do attach to humans are not found in fast moving water or riffle areas. In the past doctors thought they could cure a patient's illness by sucking out the bad blood with leeches and they are still used today to speed the healing of wounds.
- **Point value : 2**

They are not sensitive to pollution and can live in almost any quality of water.
- **Key characteristics:**
  - Worm-like segmented body
  - No segmented legs
  - No distinct head
  - No hard shell
  - Suckers at each end of wide, flat body



# Pond snail



- **Point Rating: 1**
- **Size: 20 mm**
- **Description:** Some snails have gills that are sensitive to pollution, but the pond snail has no gills. It gets its oxygen directly from the air and stores it in its shell. This means that the pond snail is not as sensitive to polluted water as are other types of snails.
- **POINT VALUE: 1**  
Pond Snails are not sensitive to pollution and can live in almost any water.
- **LISTING OF KEY CHARACTERISTIC**
  - No segmented legs
  - No distinct head
  - Hard shell
  - Single coiled shell
  - Shell opens to the left