Leeches: Class Hirudinea
Notable Body Characteristics

- Sucker at rear end
- Sucker at head end
- Sucker at the rear larger than the front sucker
- Segmented body
- No hard head capsule
Distinguishing Leeches by Body Shape

Family: Glossiphonidae
- Body pear shaped
- Generally smaller than other leech families

Families: Erpobdellidae and Hirudinidae
- Body elongated
- Generally larger than Glossiphonidae
Distinguishing Among Glossiphonidae

Key Features

- Eyes (1-4 pairs)
- Body Patterns (Stripes, Spot, Papillae)
- Length
Finding Eyes in Glossiphonids

Eyes may disappear between folds of body segments. Using forceps, press down on top of head to view under a microscope. Look for 1-4 pairs.
Example 1
Glossiphonia

- Eyes: 3 pairs
- Body Pattern: Pigmented stripes
- Length: Less than 20mm
Example 2
Helobdella stagnalis

- Eyes: 1 pair
- Body Pattern: Dark patch near head
- Length: 9-14mm
Example 3
Placobdella ornata

Eyes: 1 Pair

Body Pattern: Decorated with papillae, pigmented pattern on back

Length: 2-4 cm
Other Glossiphonidae

This is a variable family of leeches. You may find other Glossiphonidae than those in the examples. Record as many different kinds as you observe. Use distinguishing characteristics to identify as many different genera or species as possible.
Families Erpobdellididae and Hirudinidae
Identifying Characteristics

smallest
Erpobdella punctata

Nephelopsis

Macrobdella decora

Haemopis grandis

Largest
Erpobdella Punctata

Body coloration varies from dark to light.

Body is wormlike with patterns of lines on the back of the leech.

In dark erpobdella the color pattern may not be visible.

Color pattern is always darker than the body of the leech.

Length 1-3 inches preserved
(2-4 inches alive)
Nephelopsis

Body coloration is mottled and irregular some Nephelopsis may be so mottled that they appear totally dark.

Body shape is ribbon like

Length: 1-4 inches preserved
(2-5 inches alive)
Haemopis Grandis

Ribbonlike leeches much thicker than the other leeches

Length: 3-4 inches when preserved
(5-10 inches alive )

Irregular mottled coloration
Macrobeldella Decora

- Ribbonlike body shape
- Length 2-3 inches preserved (4-7 inches alive)
- Regular pattern of coloration which is lighter than the rest of the body.
- Underside of leech lighter in color than the dorsal side
Nephelopsis vs. Haemopis

Nephelopsis
Thin bodied slightly smaller leech

Haemopis
Heavy bodied leech thicker and larger than Nephelopsis
Haemopis vs. Macrobdella

**Haemopis**
- Color is uniform from top to bottom with irregularly spaced color patterns. Body is heavier and larger.

**Macrobdella**
- Color is dark on top and light on bottom with a thinner smaller body.