

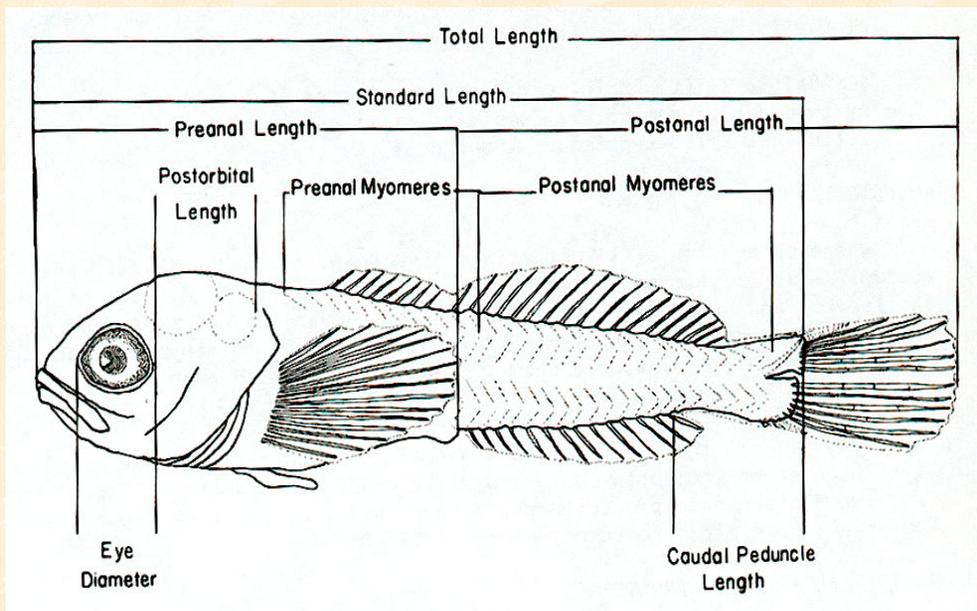
Larval Fish in Onondaga Lake

Why is Sampling Larval Fish Important?

- Larvae are the most sensitive life stage of fish; therefore they are likely most affected by pollution.
- Since larval fish are most affected by pollution, they may also be most affected by improving water quality.
- Unlike adults, which move freely to and from the Seneca River, larval fish in the lake likely originated there, making them an excellent indicator of changes in the lake.
- Presence of larvae is evidence that species can reproduce.
- Natural reproduction is key to a self-sustaining fishery.

How are Larval Fish Identified?

- Larvae are much more difficult to identify than adults.
- Measurements such as eye diameter and lengths of different body segments are often used (see diagram below).
- Presence and location of pigmented cells called chromatophores can also be important.
- Myomeres are zigzag shaped body muscle divisions along the fish's side (see the diagram below). The number and location of myomeres are good identifying characteristics.



Yolk Sac



Diagram from Auer et al. 1982. Identification of larval fishes of the Great Lakes basin with emphasis on the Lake Michigan drainage. Special publication 82-3 Great Lakes Fishery Commission.