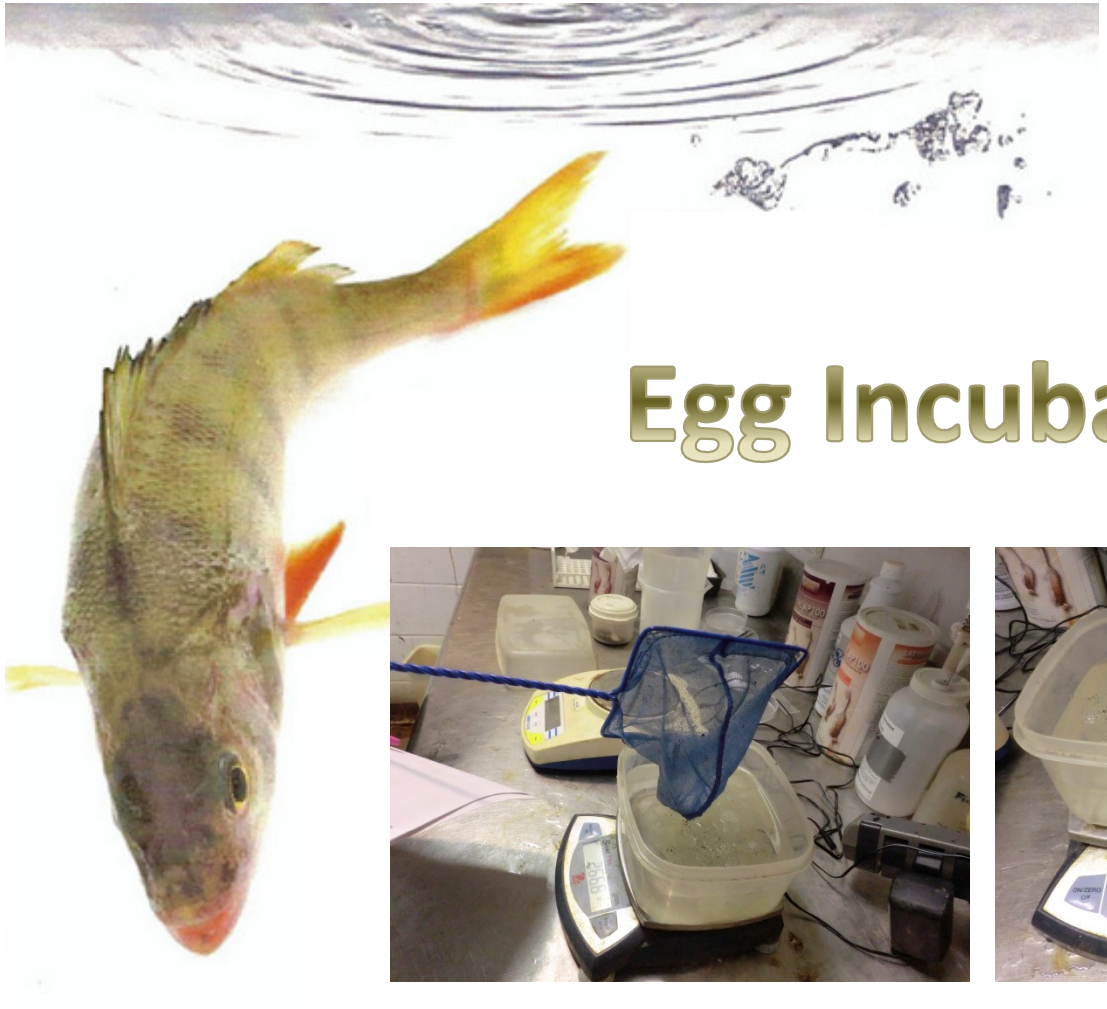
Yellow Perch Station 2

Before Egg Incubation



Yellow Perch Station 2

Egg Incubation

1) Estimate the number of eggs in a ribbon:
   Weigh the egg ribbon in grams (i.e. 150 g).

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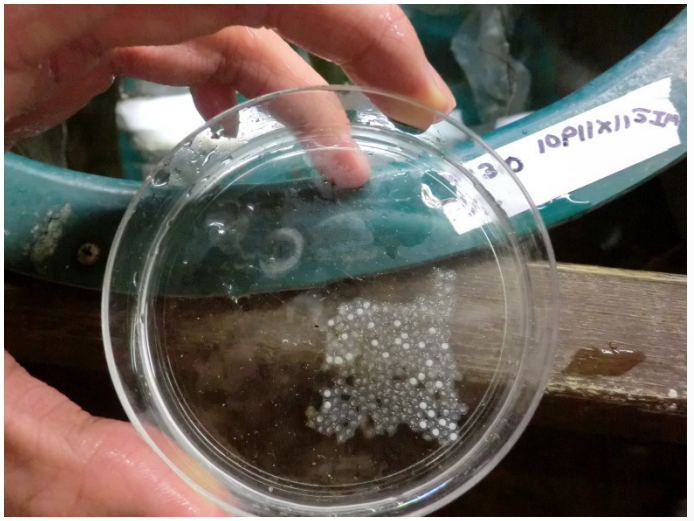
Egg Incubation



2) Snip off a small piece (i.e. 0.25 inch) of egg ribbon.

Yellow Perch Station 2

Egg Incubation

3) Weigh the small sample in grams (i.e. 10 g).

Divide sample weight by total ribbon weight (10/150 = 0.07 or 7%). Count the eggs in the sample (i.e. 54 eggs). Divide the number of eggs in the sample by 0.07 (i.e. 4/0.07=771). The egg ribbon has approximately 771 eggs. Egg ribbons contain 10,000 - 40,000 eggs/ribbon.

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Egg Incubation

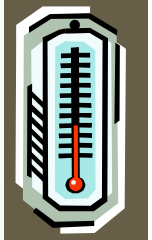
4) Check to see if egg ribbon is fertilized by examining a small piece (1/4 inch) of ribbon under a microscope.

Fertilized eggs will contain a small oil globule, and you may see beginnings of cell division (2 cells become 4, 4 divide to 8, 8 to 16, etc.), the formation of the fish embryo at the early stages. This also can be done 24 hours post fertilization. Divide total number of fertilized eggs in the sample by total number of eggs in the sample to get percent fertilization.

Yellow Perch Station 2

Egg Incubation

5) Transfer ribbon to incubation tank.



Egg ribbons incubated in tanks supplied with our nutrient-rich pond water grew fungus, did not hatch and died. Pond water without this rich nutrient load may be acceptable in your conditions.

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Egg Incubation

5) Transfer ribbon to incubation tank.

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Egg Incubation

Ribbons should be stretched out, somewhat, for good water circulation and oxygen contact around the eggs. We use circular incubation “crowns” constructed out of chicken wire (10” height x 2 feet long) and placed in our small round 10 gallon tanks. We weave the ribbon in and out of the chicken wire (every other gap), going around the crown. To attach end pieces of ribbon to the crown, simply cut/snip one of the wires, bend over, and slip end of egg ribbon onto it. The attaching wire does not need to pinch it down against the crown.
You can put it at a 45 degree angle, downward, to keep the ribbon end from coming off and floating up.

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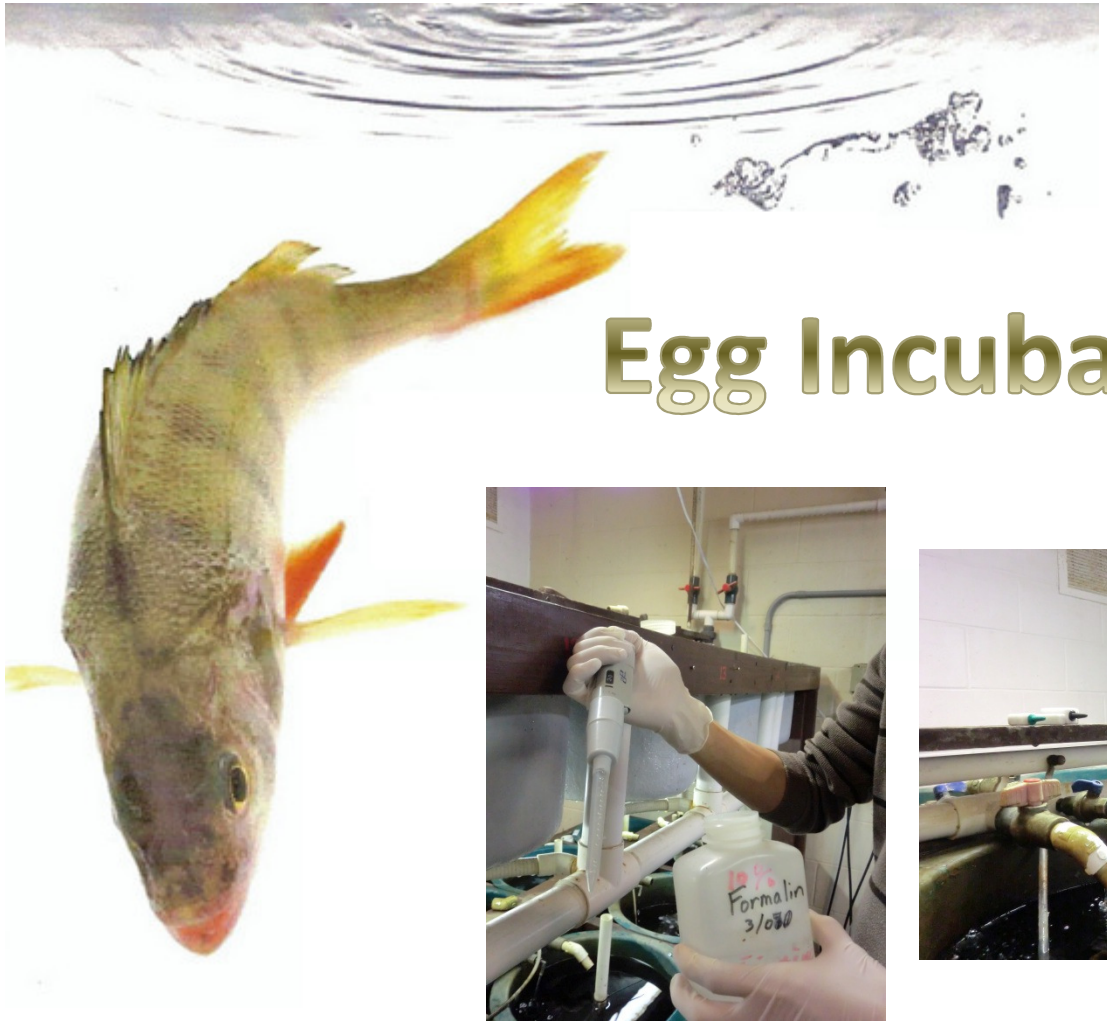
Egg Incubation

6) Oxygen (small airstones) and sufficient water flow should be supplied to maintain good water quality.

The ribbon should be well secured because as it incubates, in our water, it can give off air or gas bubbles that will make the ribbon float up. A section of ribbon exposed to air will fungus, and cause problems with survival of the whole ribbon.
USE NEW CHICKEN WIRE EACH SEASON. Rusted metal irritates the eggs, and causes fungus problems.



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Egg Incubation

7) 25-50 ppm formalin may be added to incubation tanks daily to combat fungus buildup. Be sure to have good water flow. Stop formalin when eggs are eyed. “Eyed eggs” refer to the darkening of the eyes during development, indicating final development stages of the eye. This can be seen with the naked human eye. In our water conditions (50-55 o F /10 -12°C) this usually begins to occur 8 to 10 days post-spawn.

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Egg Incubation Stages