

Screening for polystomes.

Frogs

- Collect frogs by hand and place individuals of the same species together in a transparent plastic bag containing water to a depth of 10 mm.
- Leave overnight

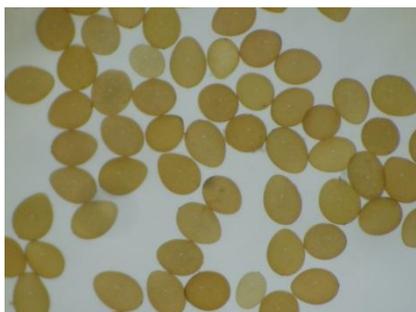
Now follow A or B

A

- Pour water in a tall (narrow) glass beaker.
- Wait for at least 5-10 minutes and decant most of the water. Polystome eggs are heavy and will sink to the bottom.
- Pour remainder of water in a petri dish and observe under a dissecting microscope.
- Gently move the petri dish in a circular motion to concentrate eggs in the middle.
- Study under the dissecting microscope.

B

- Pour water through a set of two soil sieves with respective mesh sizes of 500 and 100 micron.
- The 500 micron sieve will retain larger debris while the 100 micron sieve will retain the eggs and fine debris.
- Rinse the contents of the sieve and carefully wash down into a Petri dish.
- Study under a dissecting microscope.
- Polystome eggs are about 200 micron, round to oval in frogs, shiny golden in color. The eggs of *Wetapolytoma* are smaller and whitish.



If you do find eggs you have to identify the infected frog.

- Place frogs individually in bags overnight and screen again.
- Dissect the frog to retrieve the parasites
- Put the frog to sleep using a small amount (size of a pea) of MS222 (ethyl-4-aminobenzoate) or chlorobutanol or benzocaine in water. Chloroform will also work but not as good.
- If you do find the parasites in the bladder follow procedure as on "fixing polystomes" PDF that I attach.

Caecilians

Follow same procedure as for frogs but for aquatic caecilians you have to use a baited trap as for turtles or a baited bucket trap as for aquatic frogs. (See picture). Use meat, fish or crayfish as bait.

Turtles

For turtles we use baited crayfish traps for smaller species or fyke nets for bigger species.



Place captured turtles individually in boxes and screen for eggs. Remember that turtle polystomes produce only about 10 eggs per day. I find method B described above much better for turtles than method A. They tend to mess the water and the 500 micron sieve to remove the debris is very important. Turtle polystome eggs from the mouth or bladder are pear shaped (below) while polystomes from the eye has fusiform eggs. (below in the middle).



Screening turtles



Turtle polystome eggs. Eggs from eye in middle

Safety:

As you know the dendrobatid frogs from South America are poisonous. Some turtles are aggressive and will bite.