

Spring Snail Populations in Higgins Lake

Dr. Mark Luttenton,

**In Collaboration with Steve Sendek,
Northpoint Fisheries Management**

Current Research

- We began collecting snails in late April.
- We found large numbers of snails; snails are not evenly distributed around Higgins Lake.
- A few common snails collected include the following;



Lymnaeidae



Pleuroceridae



Viviparidae



Physidae

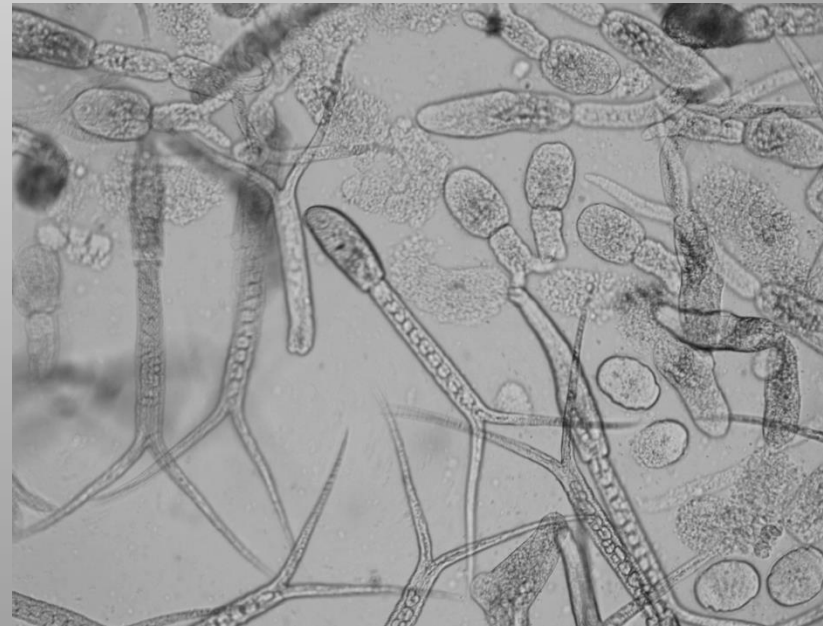
Current Research

- Snails are maintained in a controlled light/temperature incubator.



Current Research

- We have induced cercariae to emerge from snails.
- Dissected snails reveal early developmental stages of cercariae.



Current Research

- Of the snails examined, this snail has the highest infection rates.
- We are finding that infected snails carry large numbers of parasites.



Lymnaeidae

Current Research

- We are developing an automated method to count cercariae in snails and in the water using a flow cytometer.
- This quantitative method will allow us to quickly determine the number of cercariae in a sample.



Current Research

- Preliminary results indicate the method will provide a scientific approach to monitoring schistosomes in Higgins Lake.
- We will quantitatively monitor changes in snail infections and the number of cercariae in the lake during the summer.

