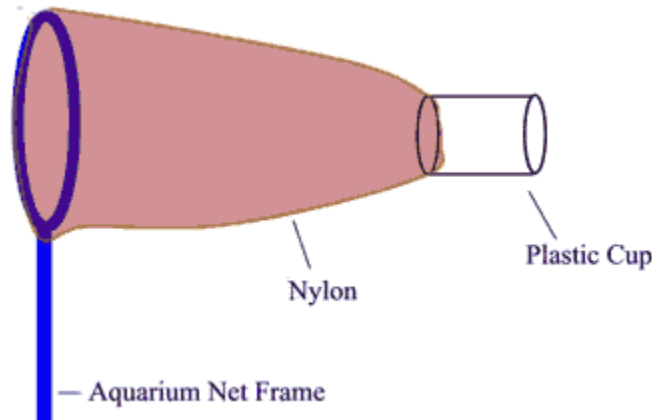




## How to Obtain a Pond Water Sample

Adapted from Jim Sollows' work at <http://www.greatscopes.com/act014.htm>

1. Purchase a simple net. The cheaper the better and cut off the net leaving only the frame. Take an old nylon or silk stocking and cut a section of it to form a tube. Attach one end of the tube to the frame of the aquarium net and to the other end of the tube, attach a clear plastic jar (approx. 1.5 - 2" in diameter).



2. When using the specimen net, drag it back and forth through the water for at least one full minute. This will ensure that as many creatures as possible settle into the jar at the bottom of the net.

3. On returning home from the specimen collecting excursion, avoid the temptation to immediately drop a sample on a slide and pop it on the stage. Doing this can be quite frustrating because the specimens will be lively and may move around so fast it's difficult to see them in any detail.

4. First, let the sample sit for a couple hours so the contents can stabilize and settle to the bottom. After this time you should see a "sludge" of material on the bottom of the jar. This "sludge" is where the critters reside but it may also contain some other thick material (sand, debris etc) that can make viewing difficult because it leaves too much room between the slide and coverslip. There is a way to filter out this material.

- Draw a sample into an eyedropper and let it sit in an upright position for a few minutes. This will cause the heavier material to settle near the tip of the dropper.
- Place a drop of material on a white plate or petri dish. Do this until you have the contents of the dropper dispersed into a number of individual droplets scattered on the plate. Each successive drop will have less of the debris. This can also help you to isolate some of the larger critters like water fleas and Daphnia.
- Select a drop with fine debris that is just barely visible to the eye.
- Siphon up the selected drop with an eyedropper and place it on a clean slide. Put a coverslip onto the drop by resting one side against the slide and then slowly lower the other end onto the

drop. If there is too much water draw out the excess by touching a piece of tissue to the edge of the coverslip. The less depth the better, as this will prevent organisms from moving out of focus.

The movement caused during slide preparation may cause some of the critters to go into hiding. If you allow the slide to sit still, they will eventually show themselves so keep watching.