## **Zooplankton Counting Method**

- 1. Pour sample out of jar and into a slightly larger jar that has been already tared on a scale and then weigh the sample. Record weight of sample.
- Guestimate a subsample so that there are ~100-200 critters in subsample (usually between 1-4 mls). With Hensen Stemple pipet, take subsample and put into plastic counting tray(the ones with 4 grooves Dave Harring has tons in the basement). You will count 4 separate subsamples from each sample. Record size of subsample.
- 3. Open the Polaroid DMC camera on the computer. Maximize the screen and adjust the exposure (500 works best).
- 4. Calibrate zoopomatic camera with micrometer(0.01mm) on the highest microscope power. The space between each number on the micrometer is 100 microns.
- 5. Hit New Sample and enter lake, date, sample size, subsample size, depth sample taken at, etc. When ready to start hit Start Counting and then hit Count It at the bottom of the screen. Computer will beep 3 times and the measurement screen should appear. Pick a spp to start with, click over the the camera and right click the mouse on either end of the critter and a measurement should appear. Then you just have to continue onto the next critter of the same spp and continue clicking until you are finished with that spp.
- 6. Measure one spp at a time at the highest magnification. The program is set up to count 20 of each spp. After 20 critters have been measured(computer will tell you it has reached 20 critters) you only need to COUNT the rest of that spp in the sample( hit the Count It button).
- 7. To do the 4 subsamples for the one sample it should take 4-5 hours total.
- 8. To access the data: In the Zoopomatic Access file, open Queries and then AllMeasurementAndSampleData. Copy and paste the data into an Excel file and manipulate it from there.
- 9. The format for organizing the data is found in Groups/ Cascade/ 2002Data folder. It is called MATLABzoops2002.