



Ms. Max's Third Grade
The Park School of Baltimore
Oct. 3-10th, 2013

What we did:

Collecting:

Our class did practice sampling to learn how to collect samples from our school pond. We used nets, looked under leaves and rocks, and used a rope to collect a bucket full of water from the patio that goes out a bit over our pond. We also observed how a Secchi disk can help us measure how clear the water is.



Counting:

The samples that we actually looked at in the class were collected by another third grade class, just before us, who did the same sampling we had just learned. When we got the samples in the classroom, we observed them first and then took out the macro-invertebrates using eye-droppers or small nets. We organized them into ice-cube trays so they would be easier to identify and count. We also put some into petri dishes and looked at them under the stereomicroscope. Then we put our totals onto the identification sheets. We had to add a few things that were not on the Bucket Buddies pages, but we found on other papers. The samples were later returned to the pond.





Our results:

3M sampling numbers

Macroinvertebrates	Numbers in our sample
Mosquito Larvae	40+
Midge Larvae	30+
Crayfish	1
Mayfly Larvae	12
Snails and lots of eggs	44+
Water Fleas	200+
Water Beetles	6
Dragonfly larvae	3
Flatworms	10
Aquatic Sowbug	5

The Hypothesis:

Once we knew what type of macro-invertebrates were in our pond we thought about the hypothesis. All fifteen people in our class agree with the hypothesis "we do not think that the organisms found in ponds all over the country will be exactly the same. Some of them may be the same, but not all of them".

The reason we all think "no" is because we first thought about the environment and needs of the organisms living in our pond. Our list of needs includes:

- different types of habitats for the different organisms; some of the animals we found under the leaves, some we found in the water sample, some we found under rocks at the shore, and some we found near plants.
- since there are different habitats there will be different amounts of sunshine and heat.
- certain foods for the ones we found and some of them are food for other organisms; there is some sort of food chain.

- our pond is warm in the summer and sometimes freezes for part of the winter. Our pond organisms must be able to survive the changes in temperature.
- the air temperature is probably important to what lives in our pond.
- fresh water and our pond has a fountain to keep it mixed and it bubbles air into it.
- the water in our pond stays at the same level pretty much the whole year.
- not a lot of pollution, like trash and harmful chemicals.

We then looked at where some of the schools are found on a map and decided that the needs of our pond organisms might not be possible in some of the places. We thought that Texas and Florida would not get as cold as Baltimore in the winter and would be hotter in the summer. Other places might get much colder in the winter and not be as warm in the summer. We thought that some places might be closer or farther from the ocean and that could make a difference.



- 📍 Pembroke Park, Florida
- 📍 Boise, Idaho
- 📍 Show Low, Arizona
- 📍 North Bennington, Vermont
- 📍 Henderson, Kentucky
- 📍 New London, Wisconsin
- 📍 Salt Lake City, Utah
- 📍 Huntington Park, California
- 📍 Houston, Texas
- 📍 Baltimore, Maryland

Other observations:

We put a sample of pond water under the compound microscope to see the algae that gives our pond a green color.

