

**Ballentine Elementary-Wake County School District**  
**Fuquay Varina, NC**  
**Mrs. Wall's 4<sup>th</sup> grade class**  
**April 19, 2014**

- Number of students in the class: 18 students
- Staff members from Ballentine Elementary and volunteers brought in the supplies to collect and identify our macroinvertebrates.
- Students worked in groups of 3, 4 or 5.

**Project Question:** Will macroinvertebrates be the same in pond water all over the United States?

**Class Hypothesis:** Because of the type of water and algae at Bass Lake , we expect that most of the organisms we find here will be different from those in other ponds, but there will be some organisms common to all ponds.

**Investigation:**

- Pond water brought from off campus at a local park, we collected some data about the pond. We discussed how these non-living factors can have an impact on the living organisms in the pond.

<b>Time</b>	2:15 p.m.
<b>Conditions</b>	Sunny, clear day; little wind; algae was covering the surface of the pond
<b>Air Temperature</b>	83 degrees F
<b>Water Temperature</b>	53 degrees F
<b>pH</b>	7
<b>Dissolved Oxygen</b>	

- Then we gathered our materials for the investigation: kitchen strainer, pond water, spoon, Macroinvertebrate Identification Chart.
- We used our materials to find the macroinvertebrates and examine them closely.
- We identified the macroinvertebrate and tallied each on our identification sheets.

**Results:**

<b>Macroinvertebrate Indicator of Good Water Quality</b>	<b>Total Found</b>
Mayfly larvae	
Caddisfly larvae	
Stonefly larvae	
Grill Snails	

<b>Macroinvertebrate Indicator of Fair Water Qu</b>	<b>Total Found</b>
Scuds	4
Damselfly Nymph	2
Crayfish	
Cranefly Larvae	
Giant Water beetle	1
Snails	
Water Spider	4

<b>Macroinvertebrate Indicators of Poor Water Qualities</b>	<b>Total Found</b>
Midge fly Larvae	
Black fly larvae	
Leeches	
Aquatic worms	1

<b>Microinvertebrates Others</b>	<b>Total Found</b>
Cyclops	4
Cypris	2
Diatoms	5
vorticella	1
alga	Floating
Paraniceum	19
Hydra	1
spyrogyra	8
Duck Weed	4
Rotifer	1
Protozoa	2
Euglena	9
ostricod	5