

PEOPLES ACAMEDY MIDDLE LEVEL GETS WET!

It was a beautiful November day at the Wild Branch in Wolcott, Vermont. Kim Komer from the Lamoille County Nature Center was there with Peoples Academy Middle Level 6th grade students from Ludington home team. We were testing the river water for water quality and macroinvertebrates. We went there to test the water to see if it is good or bad. Where we went was in Wolcott Vermont in the Wild Branch. When we went it was on November 7, 2008. We were there so we could have fun, learn about macroinvertebrates and to learn about the water quality. Now some more about the Wild Branch.

When we arrived at the sampling sight we split up into 2 groups; chemical testing and macroinvertebrate. The chemical group included Kyrsta, Sabrina, Meagan, Haley, Kaitlyn, Kelli, Sam, Colin, David and Patrick. These kids were with Kim Komer doing chemical testing. This chemical testing included temperature, turbidity, dissolved oxygen, phosphate, conductivity and PH. We found out that the spot where we were had very good water quality. That means that the water had good dissolved oxygen. This is very good for most stream fish. Most aquatic animals breathe the oxygen gas dissolved in the water. Our result was 27 mg/l which is good as I told you.

Our results on phosphate have no impact in this river. Phosphate is found at the bottom of rivers, lakes, and ocean. Another group of high school students got .37 PPM so we got a better result than when they went to the river. Phosphate can pollute the water and causes lakes to eutrophicate. When we go back in the spring we want to see if there is a change in the river for phosphate.

The result for the water temperature was about 44 degrees F. We got about what the other schools got so that is about average. Temperature is important because it affects the rate of the rivers biological and chemical process and the amount of oxygen gas that can dissolve in the water. Good thing our temperature was close to the other schools so it shows no problems. But it will be good to be able to go back in the spring and check it out then.

The day we went to the Wild Branch we didn't only do chemical testing we also caught macroinvertebrates this group was with our very own Mrs. Ludington. This group contained Alex, Nick, Mallory, Taylor, Ben, Maikala, Emma, Thomas and Matthew. Macroinvertebrates live in the leaves and under rocks. You can also tell how clean the water is by what insects are found in the water. When we went to the river we were going to see how good the water quality is and the macroinvertebrates can really help us find that out. The largest group of macros that we found is mayfly nymphs. The nymphs can really help us tell what the water quality is. To see more of the macros that we found you can check out our tables.



Nick studying the macros we found!

In conclusion, Ludington home team learned a lot about water quality and macroinvertebrates. We gained knowledge on what certain things-for example, pH- say about the water and what they are. We hope to learn more when we go back in the spring! Maybe you should go to Wild Branch too.

Our Results!

Chemistry Sample Results		Macroinvertebrate Sampling	
Temperature	45°F	Caddisfly larvae	5
Dissolved Oxygen	27 mg/L	Mayfly nymphs	10
Phosphate	0.22ppm	Water penny larvae	1
Conductivity	64.7us	Stonefly larvae	6
Turbidity	42.8cm	Riffle beetle adult	2
pH	7		
		Crayfish	1
		Damselfly nymphs	2
		Dragonfly nymphs	2
		Aquatic worms	2
		Blackfly larvae	1

Pictures



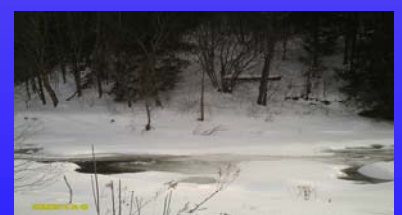
The chemical testing group!



Drawing by Sam Stancliff



Drawing from Kyrsta, and Taylor!



This is the river in the winter time!