

Day in the Life of the Hudson River 10/10/13 Data
(Salt Front RM 69.3)
RIVER MILE 5
59th Street/Riverside Park
N 40.76408 W-74.001893
Kimberly Schwab, Speyer Legacy School Plus 3 adults
18 students 6th graders



Location: Pier 84, is an educational pier used for picnics, boating, jogging, fishing
Area: We sampled on a pier and the adjacent shoreline appearance included: shore with bulkhead, shoreline RipRap
Surrounding Land Use: 100% urban/parkland in immediate area but residential behind that
Sampling Site: Recreational pier – rocks near the edge, banks altered – all hard edged
Depth: 7 meters at nearly high tide off pier
River Bottom: Soft sediments
Plants in area: No plants

<i>ITEM</i>	<i>Time</i>	<i>Readings</i>		
<i>Physical</i>				
Air Temperature	10:42 AM 12:05 PM 1:12 PM	14°C 15°C 14°C	56°F 61°F 59°F	
Wind Speed	Morning	Beaufort 3		
Cloud Cover	Overcast	100%		
Weather today	Overcast with rain and drizzle early	Drizzle stopped mid day	<i>Water surface</i>	choppy
Weather recently	Seasonably cool and rainless – we have not had significant rain for a long time			
<i>Water Temperature</i>	11:11 AM	13°C	58°F	
<i>Turbidity Turbidity tube</i>	All Day long	60 cm		
<i>Chemical</i>	Time	mg/l	Temp	% Sat

DO Estuary wide monitoring Kit –	10:30 AM 1:00 PM	8 mg/l 9 mg/L	13° C 13° C	75% 85%
pH kit as above	1:15 PM 1:47 PM	7.4 7.4		
Salinity - refractometer	1:30 PM 2:00 PM 2:10 PM	13 ppt 13 ppt 13 ppt		
<i>Fish Catch - pots</i>	<i>Number</i>	<i>Species</i>	<i>Size</i>	
	1	Cunner	3 inches	
	3	Blue Crab	153 mm	male
	1	Blue Crab	150 mm	male
	1	Blue Crab	150 mm	Male
	1	Blue Crab	73.5 mm	Male
	1	Blue Crab	70 mm	Male
	1	Blue Crab	65 mm	Male
	50+	Mnemiopsis leidy (Comb Jelly) - ctenaphores		
<i>Tides (from pier to water)</i>	<i>Time</i>	<i>Distance to water</i>	<i>Rate of change</i>	<i>Flood or Ebb</i>
<i>Unable to check lost equipment</i>				
<i>Currents</i>	<i>Time</i>	<i>Meter/sec</i>	<i>Cm/sec</i>	<i>Ebb/Flood</i>
	Late AM	No movement	n/a	Still
	Early afternoon			Flood
<i>Shipping</i>	<i>Time</i>	<i>Type</i>	<i>Name</i>	<i>N/S/ Loaded?</i>
	10:50 AM	Small Yacht	Atlantica	N – Passengers
	11:02 AM	Passenger Ferry	NY Waterways	N - Passengers
	11:02 AM	Passenger Ferry	NY Waterways	S Passengers
	1:30 PM	Tug Boat	Maryland	N - Light
	1:40 PM	Barge	NYC	N – Loaded Garbage
	1:56 PM	Tug with Barge	Atlantic Salvor	S - Light
<i>Observations</i>	The tossing of the orange by the first team was an awesome example of a discrepant event. The wind was blowing pretty strong and it's effect were very evident on the surface of the water. All of the students			

	<p>predicted that the orange would be pushed swiftly by the wind. They were amazed when the orange simply sat in place for a very long time. I don't think I have ever done this with a group when the current was right smack dab at slack. In this moment they really saw the complexity of the water column movements and got that wave direction and current direction were two very different things. The other teams tossed their oranges at slack tide also, and decided that there was no current to measure. I encouraged the teams to measure the current later, as it would change. They were doubtful but were then amazed to see how fast the orange moved south. I have not found this measurement in the data sheet, but they sure got the point. Our sounding line that went overboard stood still for a long time also (the rope was wound around a wooden handle). When the current began to move south with force, it too moved. We were almost able to scoop it up with a bucket, but not quite.</p>
	<p>The blue crabs stole the show! The students fell in love with them.</p>

Speyer Legacy A Day in the Life Journaling

Well, the first thing you do is *set up*. We need to set up the fish traps, crab traps, buckets, ph bottle, ph strips, the ropes the lines and much more. That will take around 10-15 min. Then, my favorite part, *the doing*. You throw the traps, lower the buckets, throw oranges into river, bring the buckets up, test the ph of the water, check the traps, see the salinity of the water, etc. That takes about an hour or two. During that time, you feel great rushing around doing everything you have to do, I felt like a business man, running around with a briefcase, checking my watch, you feel *alive*. Then, *the waiting*. You wait an hour for the fish traps, you record found data for an hour, then *the doing* all over! I loved going to the Hudson River and hope to do it again sometime.

Tiago Manuel Gonzalez

The Hudson is a one-of-a-kind river. The murky, brackish water. The double-direction currents. The feeling of just being there to witness its wonders. Many, even those who live by it, have no idea what's going on. The Day in the Life of the Hudson River not only gave data to scientific studies, but gave understanding and pleasure to those working to accumulate that data. Throwing the fish and crab traps in. Performing tests on the water. Reeling in the fish and crabs. The joy of a first look at a live crab, right from the depths of the Hudson. Observing and classifying the fish. The brilliant blue of the blue crabs in their varying sizes. All this together. A one-of-a-kind understanding. A one-of-a-kind experience.

Gabriel Jacoby-Cooper

Our trip to the Hudson river was very fun. When we got there, we set up traps first so the animals would have more time to come in. After, we experimented on the water on the tides, currents, oxygen and many more data tests. We found six crabs, a fish, and too many comb jellies to count. I don't think we got a lot of fish because a lot of the fish that

came in were probably small enough to get out. The comb jellies didn't survive the night at school sadly, but overall the trip was a success.

Thank you!

Harper Learmouth

On Thursday October 10th, 2013, sixteen sixth graders set out to the Hudson River on a perilous journey to find the crabs and the other various aquatic creatures dwelling in the selected part of the Hudson, have fun, and give the water a check-up. They caught many crabs, and risked their lives--sort of--to catch a lot of comb jellies and a fish. Two of the sacrificial fish traps had to be saved by the kids. Almost all of the chicken legs got lost in the rapid--or not so rapid--waters of the river. In the end, though, having lost a bucket, a sounding line, and numerous oranges (that was intentional), they were satisfied with the data they collected. Rated PG-7--for 2nd graders and up.

Aaron Lieberman

The experience was one of a kind. I always thought that a river was a dark murky place where all the deep dark disgusting stuff stays. But now I look at it differently; a place where the most amazing creatures live and thrive. As soon as we got there the wind was blowing, and the air was crisp and chilly. We set down our bags and supplies and got straight to setting up our crab and fish traps. But of course, all the problems started. My group had two wildly tangled crab traps, as other groups had tangled traps too. With all the other tasks to get accomplished it took us about an hour to an hour and a half to get all our traps into the water. Finally, after getting at least one trap in, we could get a bucket of water and drag it down the pier to where we were working, and we took a pH test. That was easy because it was only dipping a piece of paper in the water and then matching it carefully to another picture. After that, everyone was slightly lost. It got windy and our papers started to blow away. We saved everything, but we were all keeping a close eye on whatever was near us. Animals were a whole different story. Everyone knew when a crab or fish was caught. There would be quite the amount of commotion around a small bucket of water. And of course there were tests to be done as well as looking at all the

cool animals. We did turbidity and salinity, we had to record all the boats that went by, and check the currents every hour. As you can tell, the Hudson River brought up challenges and problems to overcome, but the most memorable part of that day was when we all worked together to pull out our two stuck fish traps. The whole class gathered in a line and we heaved and hoed until we felt something come loose. We were so happy because besides the great result of the traps, we got a tone of comb jellies. I think that left us leaving the pier after a long days work with a happy feeling.

Sarah Weiner

My Hudson River adventure

As we arrived at the Hudson River with all of our buckets and interesting materials, (water and air thermometers, P.H. tabs, and many more wondrous items) unsurprisingly, I grew more and more excited. We set everything up and completed many tasks when we all heard a group yell "CRAB!" We all rushed to that group's station and were amazed how quickly we had gotten a beautifully small but dangerous little monster. We all rushed to our traps to see if we had caught anything else and I believe a group had caught another crab! About an hour or two passed, with many more crabs caught, my group had finally caught a fish! By the way, the fish my group caught was named Conner. It was a cunner fish. We screamed and squealed in delight as we had caught our first fish. But we knew there were other projects to be taken care of. We attended those as well; P.H. testing, ship name searching, taking the water temperature of the Hudson, and video taping the activities of our group. There were many other projects but I can't name them all. By the time we had left, we had gotten to "borrow" animals from the Hudson River (a humongous crab, that was just about to mold; a crab baby, that had a big attitude; the only fish we caught, and about five thousand non-stinging jellyfish). But my hopes and dreams for them were crushed as I found out that we were to return them the next day.

Laura Gonzalez

Overall the trip was fantastic. We got through most of the things we needed to and we caught some pretty big crabs. Our PH readings were about 6.25 to 7.00. We also caught a fish named Coner. Actually it is a Coner fish so we named it Coner., The day was pretty light in the morning but around 12:00 the sun came out. We saw some Barges and some pretty awesome boats.

Andy Weng

This day was surprisingly better than I thought it would be; I thought we would only catch one *single* crab. The last time we went to the river, we caught no crabs at all. When we arrived, I gazed across the river, and my team and I planned our day. I really liked the weather, the wind blowing some our papers and lightweight bags occasionally, but it was just pure *exciting*. We set up a bunch of traps, both fish and crab, and hoped for the best. A few minutes later, I heard a shout of victory, signaling a catch. As we rushed over to the trap, the group that caught the creature was trying to catch the crab. After that, we started to test PH, dissolved oxygen, turbidity, currents, and a lot more interesting tests to fuel the scientists' knowledge, and more importantly, *our* knowledge. Soon, my group caught a small crab, and we dashed around, trying to catch him. He was the smallest crab yet, though we treasured him greatly and named him "Herbie Henry Hudson VII" because of Henry Hudson, and I thought of the name Herbie, and we just thought VII went well with the name. We caught three *even bigger* crabs. After those wonderful experiences, we found out our fish trap was stuck. And our bucket was in the river, no rope in sight. And our sounding line went overboard. Just my group. It felt horrible, and I felt uncomfortable, since it must have been the other teams' fault. As we discussed the matter, everyone looked concerned. I felt a small bit wistful, until they offered us their bucket. My group took it gratefully, and the other teams tried to help as much as they could. Then we all participated in pulling the fish trap, and after a few grunts and shouts, we freed the trap, but sadly, didn't catch anything. Personally, I thought that competition would be a major problem, but it wasn't the problem at all. The teams worked together as one, and as soon as one team made a new intriguing discovery, we would all crowd them, anxious to see. We wouldn't get mad, or ignore them. It was *such* a great thing for me to

see. As we walked back to school, I thought about this astounding trip, and how much I appreciated this experience.

Paige Linzo

The day was not off to the greatest start in the world, it was cold, and windy, AND it was slightly raining, not the ideal day to be out. It was better when we got out, at least no longer raining, so on we went. We had many equipment to carry along the way, enough for the mere 16 of us to carry anyway, we held crab traps, fish traps, bait, PH testers, water temp. thermometers, buckets, oranges, etc. The wind was still whistling as strong as it could be that day, it was finally the moment a lot of us have been waiting for the whole week.

Our team had planned out things pretty well, or at least we thought so because other teams were already catching crabs when we haven't even thrown in our crabs yet! It wasn't the best start, but no giving up. As a team we worked together to put the traps together and throw them in. After, we split up into random teams and went through as many tests as we could and we actually found many surprising results such as, even in a strong wind, the orange we used to test just stayed afloat in the same spot! Frankly, I had thought the orange would sink in the first place, let alone stay afloat.

We even caught many crabs and our group named ours, Herby Henry Hudson the Seventh in honor of our trip. The other groups caught things as well, our crab was a very feisty one indeed. In the end, our legs were very tired, and sore, but it was worth it!

Nayu Lee