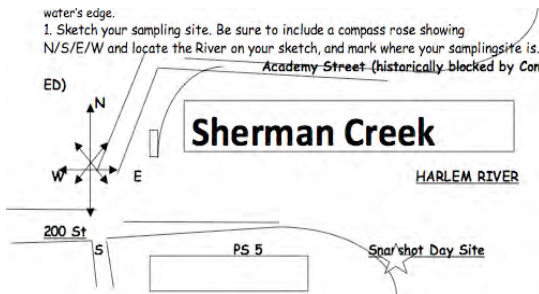


Day in the Life of the Hudson River 10/4/12 Data
HARLEM RIVER MILE 13b
Sherman Cove Park saltmarsh flats, Harlem River
Obed Fulcar, Friends of Sherman Creek
MS319 Middle School/Children's Aid Society Afterschool program 6th/7th
8 students, 1 adult – afterschool sampling start time 3:30 PM
GPS Latitude 657452.5 E (aprox) Longitude 766785.8 N (aprox)



Location: Saltmarsh/mudflats at Sherman Cove Park next to a side road/school building, adjacent to Swindler Cove next to the north end of Harlem River Drive, Manhattan – a forever wild area.

Surrounding Land Use: Parking lot - 50% urban/residential, 20% forested, 5% beach, 5% Industrial/commercial, 5% other

Sampling Site: Beach area, covered with vegetation - Sampled in salt marsh covered with phragmites on one side and a mudflat with gravel on the shore



Plants in area: 50% of site is invasive Phragmites, 5% native spartina, 10% native milkweed, 35% other, and some oak trees

River Bottom: muddy bottom



Rocky shore , sand mixed with lumps of coal, mudflats. Shore covered with rocks on one side and mud on the other. Expect rain increased turbidity, and affected DO and salinity.

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature				
Wind Speed				
Cloud Cover	overcast			
Weather today	Clouds	Rain by end		
Weather recently	Rain last few days			
Water				
<i>Water Temperature</i>	5:50 PM	20.9°C	12 inch water depth	
<i>Turbidity – Short site tube</i>	5:50 PM	100 JTUs		Water was very turbid from rain and upcoming high tide
<i>Chlorophyll</i>				
<i>Chemical</i>				
DO – LaMotte greenforce kit – (note: this is a low resolution sample kit)	5:55 PM	0mg/L	Temp. 20.9°C	0% sat.
pH –	5:50 PM	6		
Salinity	Not read			
Phosphate		2.0 ppm		
Nitrate		0.5 ppm		
Ammonia		0 ppm		
<i>Fish Catch *see journaling below</i>	<i>Number Caught</i>	<i>Species</i>		<i>Size</i>
	6	Silversides	3 inches	
	1	Winter Flounder	3 inches	juvenile
	4-5	Jellyfish		
	1	Blue Crab	2 inch	Juvenile
	1	Fiddler Crab		
	Few	Shrimp		
Total Catch	14	Diversity	6	
<i>Tides</i>	3:45 PM	Tide was low exposing large areas of mudflat (see above photo)		
<i>Currents</i>	Not read			

<i>Core Sample Sediments</i>	<i>Unable to collect due to weather & tide</i>			
<i>Commercial Traffic</i>	5:00 PM	Circle Line	White/Red	Northbound – fully loaded
	5:10 PM	Coast guard	Orange/White	Southbound/ light
	5:20 PM	Tugboat/barge	Black	Southbound/ empty
<i>Recreational Traffic</i>	4:50 PM	Jet Skis	White	Northbound
	5:30 PM	Rowing shell	White	Southbound
<i>Other Items</i>	<p>We observed upon arriving a juvenile crown night heron foraging for fish or small crustaceans in the tide pools left on the mudflats by low tide (photo)</p>			
				
<i>E-Coli Bacteria Test:</i>	<p>We tested the water quality of the site by using the LaMotte Greenforce tablet reagents. We followed the protocol by pouring the sample to 10mm in the glass vial containing the tablet, and mixing it until the tablet dissolved. We stored the sample upright, covered from any light source for 24 hours, and when we compared the color (yellow with foam in the top layer) to the ID card the sample showed positive for the presence of E-coli. Friends of Sherman Creek have tested the site for the past 4 years, and the last 5 tests have come out positive. Several NYCDEP (NYC Dept of Environmental Protection) CSOs (Combined Sewer Overflow) that drains and discharge raw sewage into the Sherman Creek and the Harlem River seriously impact the Harlem River with this level of pollution.</p>			
<i>Journaling</i>			<p>Dots in sketch show seine site. We were able to cast our seine nets and conduct the Fish & Macro invertebrate activity. About 4 of the boys donned their waders with assistance from Chris, Steve and Laura. They had a blast, and it was going on 6pm and they wanted to keep going, even as the rain started to fall. I call this a successful Snapshot Day 2012!</p>	