

**Day in the Life of the Hudson River 10/16/18 Data
RANDALL'S AND WARD'S ISLAND, MANHATTAN
RIVER MILE: 1**

Salt Front: ~RM 24

The Dwight School- Emma Ryan & Michelle Watch, 45 students 7th grade, 6 adults

Randall's Island Park Alliance- Chris Girgenti

Latitude 40.789087 N & Longitude – 73.932869 W

Location: Randall's Island Park, Manhattan, NY

Area: Randall's Island Park, Harlem River Waterfront (North of 103rd St. Bridge/Ward's Island Bridge), sandy adjacent to shore, increasingly muddy with depth; sporadic rocks

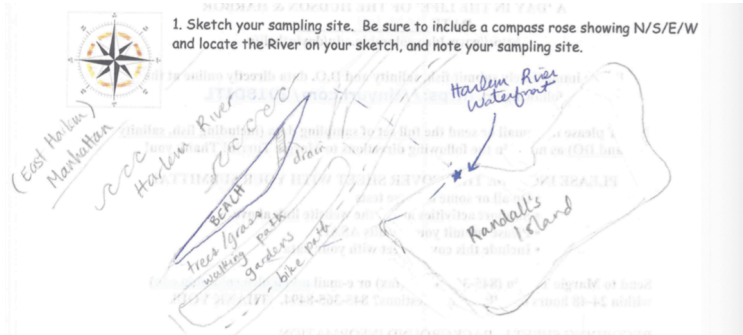
Surrounding Land Use: 100% Park

Sampling Site: Grassy; beach; concrete bulkhead; pipe entering the water.

Shoreline: 90% Sandy; 10% Rocky

Plants in area: 2% sea lettuce (*Ulva sp.*)

Water: Choppy, ~30 foot depth



River Bottom: muddy, sandy, rocky

ITEM	Time	Reading		Comments
Physical				
<i>Air Temperature:</i>	11:05 AM	11.4 °C	52.5 °F	
	11:40 AM	11.4 °C	52.5 °F	
	12:15 PM	11.4 °C	52.5 °F	
<i>Wind Speed:</i>	11:09 AM	4.8 mph	Beaufort 2	
	11:50 AM	2 mph		
	12:20 PM	0.8 mph		
	12:42 PM	0.8 mph		
<i>Weather Today:</i>	No Rain, Mostly cloudy (60-75%)			
<i>Weather Previous:</i>	Slight rain the past few days			
Water Temperature	10:49 AM	17 °C	62.6 °F	
	11:25 AM	18.9 °C	66.02 °F	
	12:05 PM	18.9 °C	66.02 °F	
	12:45 PM	19 °C	66.2 °F	
Turbidity - Long sight tube	10:49 AM	10.3 cm		
	11:25 AM	11.3 cm		
	12:05 PM	24.6 cm		
Chemical				
<i>Salinity- hydrometer</i>	10:49 AM	Avg: 16.7 ppt		
	11:25 AM	Avg: 15 ppt		
	12:05 PM	Avg: 14.5 ppt		
	12:45 PM	Avg: 14 ppt		
<i>DO –</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	11:25 AM	18.9 °C	6	46
	12:05 PM	19.18 °C	6.66	52
	12:45 PM	18.90 °C	7.33	62
<i>pH - test strips</i>	10:49 AM	7		
	11:25 AM	7		
	12:05 PM	6		
	12:45 PM	7		
<i>Nitrates- LaMotte Estuary Kit</i>	10:49 AM	0 ppm		* Estuary kit is low resolution. 2 nd , 3 rd , and 4 th readings are very high
	11:25 AM	5 ppm		
	12:05 PM	8.3 ppm		
	12:45 PM	10 ppm		

<i>Phosphates- LaMotte Estuary Kit</i>		10:49 AM NR 12:25 PM 12:45 PM	1.75 ppm 0.5 ppm 2 ppm 10 ppm		<i>* Estuary kit is low resolution. Last reading is very high</i>
<i>Fish – Seine</i>		<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	
		1 107 3	Oyster Toadfish Atlantic Silverside Striped Bass		
		TOTAL: 111	Diversity: 3		
<i>Macroinvertebrates</i>		<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	Male blue crabs
		4 1 4 13	Shrimp Moon Jelly Comb Jelly Blue Crab (M)		
		TOTAL: 22	Diversity: 4		
<i>Tides- tide stick</i>		<i>Time</i>	<i>Rising, Falling, Still</i>	<i>Height (cm)</i>	<i>Rate of Tidal Change (cm/min)</i>
		10:45 AM 11:00 AM 11:15 AM 11:45 AM 12:00 PM 12:15 PM 12:30 PM	- Still Still Falling Falling Falling Falling	28 27 27 24 21 17 15	- 0.067 0 0.1 0.2 0.267 0.133
<i>Currents Flow</i>		<i>Cm/second</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Still</i>
10:50 AM 11:30 AM		14.73 13.20 2	0.29 0.26 0.04	South South Still	Ebb Ebb Still
<i>Sediment Core – Time</i>		<i>Description - Length cm</i>	<i>Grain Size Abundant</i>	<i>Grain Size Common</i>	<i>Other Items Common</i> <i>Other Items Rare</i>
10:45 NR		20.32 25.4	mud, sand, gravel mud, sand, gravel, pebbles	clay, pebbles clay	shells/oysters brick, coal
					brick, coal, slag, living vegetation wood, shells/oysters
<i>Boats</i>	<i>Description</i>	#	<i>Type</i>		<i>North or South</i> <i>Loaded or Light</i>
Group 1	Commercial	2	NYPD Boat		
	Recreational	2	Tour boat		
Group 2	Commercial	2	NR		
	Recreational	2	NR		
Group 3	Recreational	5	Speed boat, tour		
Group 4	Commercial	2	NYPD, cargo		
	Recreational	1	Speed Boat		
<i>Other Observations</i>		Use to have factories; lots of waste and trash; tall buildings and houses			