

Day in the Life of the Hudson River 10/05/2023

Ferry Point Park, Bronx, NY

EAST RIVER MILE: 13.5

Salt Front: ~ 52

Dwight School-Emma Ryan & Shalini Bhavnani

NYSDEC HREP-Sarah Mount & Madeline McDonald

50 students, 7th grade, 7 adults

Latitude 73.832189°N & Longitude -73.32189°W

Location: Ferry Point Park Beach, Bronx, NY

Surrounding Land Use: Beach & Park

Sampling Site: Sandy beach, tidal marsh area covered with dense spartina

Shoreline: 50% Sandy & 50% Rocky

Water: NR

River Bottom: Sandy

Plants in the water: 55% Phragmites Australis, 30% Sea Lettuce & 15% Algae

*NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>	
<i>Physical</i>					
<i>Air Temperature</i>	10:00 AM	22.5°C	72.5°F		
	10:25 AM	25°C	77°F		
	10:38 AM	25°C	77°F		
	12:10 PM	33°C	91.4°F		
	12:49 PM	31°C	87.8°F		
<i>Wind Speed:</i>	<i>Time</i>	<i>Anemometer</i>	<i>Beaufort</i>	<i>Direction</i>	
	10:03 AM	0.7 m/s		South	
	10:42 AM	0.6 m/s			
	12:11 PM	1.97 m/s			
	12:45 PM	0.63 m/s			
<i>Weather today</i>	10:36 AM	<25% Cloud Cover	No Rain		
<i>Weather the past 3 days:</i>	Light rain, warmer than expected for September				
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>		<i>Height (cm)</i>	
	9:57 AM	-		17.78 cm	
	10:36 AM	Rising		35.5 cm	
	12:30 PM			14 cm	
	12:46 PM			58.42 cm	
<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Slack</i>
	10:08 AM	1.6			Flood
	10:58 AM	3.47			Ebb
	12:32 PM	3.2			Ebb
	1:05 PM	3.72			Ebb
<i>Water Temperature-</i>	9:38 AM	19°C	66.2°F		
	10:40 AM	18°C	64.4°F		
	12:12 PM	20°C	68°F		
	12:35 PM	20°C	68°F		
<i>Turbidity- Short Sight Tube (60 cm)</i>	10:27 AM	4.4 cm			
	11:00 AM	9 cm			
	12:22 PM	3 cm			
	12:50 PM	10.3 cm			
<i>Chemical</i>					

<i>Standardized Salinity- Refractometer</i>	1:36 PM	25,000 ppm	25 ppt			
<i>Student Salinity- Hydrometer</i>	10:09 AM 10:44 AM 12:14 PM 12:35 PM	34,000 ppm 19,000 ppm 20,000 ppm 21,000 ppm	34 ppt 19 ppt 20 ppt 21 ppt			
<i>DO – Hach Drop Count Kit</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>		
	10:23 AM 10:52 AM 12:30 PM 12:50 PM		10 ppm 19.5 ppm 14 ppm 10 ppm	100% 65% 50% 110%		
<i>pH – Color Match Kit</i>	10:09 AM 10:44 AM 12:24 PM 12:38 PM	8 8 5.5 8				
Biological						
<i>Fish- Seine (~16 Hauls)</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>Notes</i>		
10:00 AM-12:50 PM	1 46 1 1 120 5 1	Atlantic Menhaden Bay Anchovy Mummichog Striped Killifish (M) Atlantic Silverside Northern Pipefish Skilletfish				
Fish Totals	TOTAL: 175	Diversity: 7				
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>			
	12 1 42 3 81	Blue Crab (5M & 3F) Green Crab Hermit Crab Ctenophore spp. Palaemonetes Shrimp				
Macroinvertebrate Totals	TOTAL: 139	Diversity: 5				
<i>Sediment Core</i>	<i>Time</i>	<i>Oxid Top</i>	<i>H₂S Smell</i>	<i>Oil</i>	<i>Grain Size</i>	<i>Other Features</i>
20 cm	10:40 AM	No	Yes	No	<i>Abundant:</i> Sand, Clay <i>Common:</i> Mud <i>Rare:</i> Gravel, Pebbles	<i>Abundant:</i> Coal <i>Common:</i> Oyster shells <i>Rare:</i> Leaves, Mussel shells, Zebra mussel shells, Macroinvertebrates, Brick, Slag, Living Vegetation
20 cm	9:50 AM	No	Yes	Yes	<i>Abundant:</i> Clay, Sand <i>Common:</i> Mud <i>Rare:</i> Gravel, Pebbles	<i>Common:</i> Brick, Coal, Slag <i>Rare:</i> Oyster Shells
NR	12:51 PM	Yes	Yes	Yes	<i>Abundant:</i> Sand	<i>Abundant:</i> Coal <i>Rare:</i> Brick

					<i>Common:</i> Clay, Gravel <i>Rare:</i> Mud	
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Boats-NR					
Commercial/ Recreational	Time	Name	Color	Southbound/ Northbound	Light/ Loaded