

Day in the Life of the Hudson River 10/05/2023
Fort Wadsworth Beach, Staten Island, NY
RIVER MILE: -7.5
Salt Front: ~ 52
St. Clare School-Mary Lee
National Parks Service-Kathy Garofalo
DEP-Rob Brauman
60 students, 7th grade, 14 adults
Latitude 40.59905° N & Longitude -74.0527°W



Location: Fort Wadsworth Beach, Staten Island, NY
Surrounding Land Use: 65% Beach, 35% Forested
Sampling Site: Forested, Grassy, Rip Rap, Wood Bulkhead
Shoreline: 90% Sandy & 10% Rocky
Water: Calm
River Bottom: Muddy, Sandy & Rocky
Plants in the water: No Plants in the water
 *NR = Not read/recorded

ITEM	Time	Reading		Comments	
<i>Physical</i>					
<i>Air Temperature</i>	11:00 AM	23°C	73.4°F		
<i>Wind Speed:</i>	11:00 AM	<i>Anemometer</i>	<i>Beaufort</i>	<i>Direction</i>	
	11:50 AM	5 mph		Northwest	
	11:50 AM	10 mph			
<i>Weather today</i>	11:00 AM	<20% Cloud Cover	No Rain		
<i>Weather the past 3 days:</i>	It was between 60-70 degrees Fahrenheit. It was clear those days (following some bout with rain prior to that)				
<i>Tides- Tide Stick</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>		<i>Height (cm)</i>	
	10:56 AM	-		80 cm	
	11:39 AM	Rising		92 cm	
	11:54 AM	Falling		65 cm	
<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Slack</i>
	11:28 AM	3.6	0.07		Flood
	11:42 AM	0.42	0.008		Ebb* should all be flooding
	11:58 AM	3.7	0.072		Flood
	NR	0.08	0.002		
<i>Water Temperature-</i>	11:00 AM	20°C		68°F	

<i>Turbidity- Long Sight Tube (120 cm)</i>	10:48 AM	27 cm				
Chemical						
<i>Standardized Salinity- Refractometer</i>	12:05 PM	25,000 ppm	25 ppt			
<i>Student Salinity- Hydrometer</i>	11:11 AM	23,000 ppm	23 ppt			
<i>DO – Chemets Kit</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>		
	11:05 AM	20°C	9 ppm	100%		
		19°C	8.5 ppm	92%		
<i>pH – Color Match Kit</i>	11:18 AM	8				
<i>Nitrates- Color Match Test Kit</i>	11:17 AM	0 ppm				
<i>Phosphate- Color Match Test Kit</i>	11:17 AM	0.5 ppm				
<i>Ammonia</i>	11:18 AM	0.25 ppm				
Biological						
<i>Fish- Seine (5 Hauls)</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>Notes</i>		
10:45 AM-12:00 PM	1	Summer Flounder	7 cm			
	1	Atlantic Menhaden	4.5 cm			
	17	Atlantic Silverside	9 cm			
Fish Totals	TOTAL: 19	Diversity: 3				
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>			
	92	Mole Crab	3 cm			
	1	Asian Shore Crab	7 cm			
Macroinvertebrate Totals	TOTAL: 93	Diversity: 2				
<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>
25 cm	10:56 AM	No	No	No	<i>Abundant: Sand Common: Mud & Gravel Rare: Pebbles</i>	<i>Common: Coal</i>

Boats					
Commercial/ Recreational	Time	Type	Color	Southbound/ Northbound	Light/ Loaded
Recreational	11:30	Speed Boat	White/Blue	Southbound	Light
Recreational	11:31	Spped Boat	Red	Northbound	Light
Recreational	11:36	Yacht	White	Northbound	Loaded