

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

Pier 1 Lighthouse Museum, Staten Island, NY

RIVER MILE: -4.5

Salt Front: ~ 52

Curtis High School-Edita O'Brien & Dave Scheffler

64 students, 10th-12th grade, 4 adults

Latitude 40.640951°N & Longitude -74.073463°W



Scup (Porgy) caught rod & reel

Location: Pier 1 Light House Museum, Staten Island Pier, Staten Island, NY

Surrounding Land Use: 50% Urban/Residential, 50% Industrial/Commercial

Sampling Site: Pier, Wood Bulkhead, Rip Rap, Parking Lot, Grassy

Shoreline: Rocky

Water: Calm, Depth around 200 cm

River Bottom: Muddy & Weedy

Plants in the water: No Plants in the water

*NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<i>Physical</i>				
<i>Air Temperature</i>	10:20 AM	24°C	75.2°F	
<i>Wind Speed: NR</i>		<i>Anemometer</i>	<i>Beaufort</i>	<i>Direction</i>
<i>Weather today</i>	10:00 AM	<25% Cloud Cover	No Rain	
<i>Weather the past 3 days:</i>	Cloudy & Rainy for past 3 days			
<i>Tides- NR</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>		<i>Height (cm)</i>
<i>Current- NR</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>
				<i>Ebb/Flood/Slack</i>
<i>Water Temperature-</i>	9:24 AM	22°C	71.6°F	
	9:49 AM	21°C	69.8°F	
	12:13 PM	21°C	69.8°F	
	12:14 PM	21°C	69.8°F	
	12:24 PM	21.5°C	70.7°F	
<i>Turbidity- Long Sight Tube (120 cm)</i>		55 cm		

Chemical						
Student Salinity- Hydrometer	9:29 AM 9:32 AM 9:35 AM 12:29 PM	17,000 ppm 18,000 ppm 17,000 ppm 17,667 ppm	17 ppt 18 ppt 17 ppt 17.7 ppt	<i>Each reading is an average of 3</i>		
DO -	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>		
Hach Drop Count Kit	9:20 AM 12:35 PM	21°C 21.5°C	7.2 ppm 7.8 ppm	85% 85%		
Meter/Probe	9:40 AM	22°C	11 ppm	125%		
pH - <i>*test strips do not work well in a marine environment</i>	9:25 AM 12:39 PM	<i>Color Match Kit</i> 7.5 7	9:25 AM 12:35 PM	<i>*Test Strips</i> 5 4.7		
Nitrates-	9:47 AM	0 ppm				
Phosphates-Test Stripes	9:47 AM	30 ppm*		*Misread/Issue with equipment		
Biological						
Fish- Rod & Reel	Number	Name	Length of longest	Notes		
9:30 AM-2:00 PM	1 30 6	Striped Bass Tautog (Blackfish) Porgy (Scup)	40 cm 29 cm 22 cm			
Fish Totals	TOTAL: 37	Diversity: 3				
Macroinvertebrates	Number	Name	Length of longest			
	3 1 1	European Sea Squirt Chain Tunicates Red Sponge	1.5 cm 2.3 cm			
Macroinvertebrate Totals	TOTAL: 5	Diversity: 3				
Sediment Core -NR	Time	Oxid Top	H₂S Smell	Oil	Grain Size	Other Features

Boats					
Commercial/Recreational	Time	Name	Color	Southbound/Northbound	Light/Loaded
Commercial	9:22	Grim	Blue & White	-	Light
Commercial	9:23	Staten Island	Orange	Southbound	Light
Commercial	9:33	One	Red	Southbound	Loaded
Recreational	9:35	Speed Boat	Grey	Northbound	Light
Commercial	-	Grima lot	Green & White	Northbound	Loaded
Commercial	-	One	Pink	Southbound	Loaded
Commercial	9:21	-	Blue & Red	Southbound	Loaded
Commercial	9:51	-	Blue	Southbound	Light
Commercial	9:30	SI Ferry	Orange	Northbound	Light
Recreational	9:53	-	White & Grey	Northbound	Light