

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

Concrete Plant Park, Bronx, NY

BRONX RIVER MILE: 4.5

Salt Front: ~ 52

Bronx Center for Science and Mathematics-Patrick Callahan

DEC Region 2 Urban Park Rangers

12 students, 11th-12th grade, 1 adult

Latitude 40.826677°N & Longitude -73.884901°W

Location: Bronx River, Concrete Plant Park, Bronx, NY

Surrounding Land Use: 25% Urban/Residential, 75% Industrial/Commercial

Sampling Site: Pier, Beach, Altered Banks, Pipe entering the water

Shoreline: 80% Muddy & 20% Rocky

Water: Choppy

River Bottom: Muddy & Rocky

Plants in the water: NR

*NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature</i>	11:19 AM	22°C	72°F	
<i>Wind Speed:</i>	11:19 AM	<i>Anemometer</i> 2 mph	<i>Beaufort</i> 1	<i>Direction</i> North
<i>Weather today:</i>	9:00 AM	<25% Cloud Cover	No Rain	
<i>Weather the past 3 days:</i>	Unusually warm temperatures			
<i>Tides- Tide Stick</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Height (cm)</i>	
	10:42 AM		27 cm	LT @ 11:13 AM
<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i> <i>Ebb/Flood/Slack</i>
	11:04 AM	11.9	0.23	Ebb
<i>Water Temperature-</i>	10:57 AM	21°C	69.6°F	
<i>Turbidity- Secchi Disk (cm)</i>	10:45 AM	35 cm		
	11:50 AM	29 cm		
	11:51 AM	40 cm		
	12:06 PM	52 cm		
<i>Long Sight Tube (120 cm)</i>	11:50 AM			
Chemical				
<i>Standardized Salinity-High Range Quantabs</i>	10:20 AM	2235 ppm Cl- 4,038 ppm Total Salinity	4.038 ppt	6.8 quantab units
<i>Student Salinity- Hydrometer</i>	10:57 AM	10,000 ppm	10 ppt	
<i>Refractometer</i>	11:23 AM	3,000 ppm	3 ppt	
<i>DO – Lamotte Drop Count Kit</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	10:50 AM		10 ppm	95%
	1:54 PM	21°C	10 ppm	96%
	1:55 PM		8 ppm	66%
	1:57 PM	21°C	8 ppm	66%
<i>pH – Color Match Test Kit</i>	11:31 AM	7.5		
Biological				
<i>Fish- Seine (5 Hauls)</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>Notes</i>
9:30 AM-10:30 AM	7	Banded Killifish		

Fish Totals	TOTAL: 7	Diversity: 1				
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>			<i>Length of longest</i>	
	3	Blue Crab				
Macroinvertebrate Totals	TOTAL: 3	Diversity: 1				
<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>
	11:37 AM	No	Yes	No	Abundant: Mud Common: Clay & Gravel Rare: Sand & Pebbles	

Boats-NR

Commercial/ Recreational	Time	Name	Color	Southbound/ Northbound	Light/ Loaded