

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

Concrete Plant Park, Bronx, NY

BRONX RIVER MILE: 4.5

Salt Front: ~ RM 52

Pelham Prep Academy-Zachary Itzkowitz

DEC Region 2: Urban Park Rangers

27 students, 11th-12th grade, 2 adults

Latitude 40.826677°N & Longitude -73.884901°W



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

Surrounding Land Use: 50% Forested

Sampling Site: Pier, Grassy, Covered in Vegetation, RipRap, Marshy

Shoreline: 50% Muddy & 50% Rocky

Water: Calm, approximate 60 cm deep

River Bottom: Muddy, Sandy, Weedy & Rocky

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>	11:19 AM	22.2°C	72°F		
	11:20 AM	22.7°C	72.9°F		
	11:35 AM	22.2°C	72°F		
	11:52 AM	22.8°C	73°F		
<i>Wind Speed:</i>	11:10 AM	<i>Anemometer</i> 2 mph	<i>Beaufort</i> 1	<i>Direction</i> North	
<i>Weather today</i>	10:33 AM	<25% Cloud Cover	No Rain		
<i>Weather the past 3 days:</i>	Hot for October/higher than average, sunny/clear				
<i>Tides- Tide Stick</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>		<i>Height (cm)</i>	
	10:42 AM	-		27 cm	
	11:18 AM	Slack		27.5 cm	
	11:03 AM	Rising		71 cm	
	11:50 AM	Rising		76 cm	
<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	42	0.82		Ebb
	11:32 AM	16.5	0.32		Ebb
	11:55 AM	0.4	0.008		Flood
<i>Water Temperature-</i>	11:19 AM	20.9°C		69.6°F	
	12:05 PM	22.8°C		73°F	
<i>Turbidity- Long Sight</i>	11:00 AM	35 cm			

<i>Tube (120 cm)</i>	12:11 PM	52 cm				
Chemical						
Standardized Salinity- High Range Quantabs	11:00 AM	2419 ppm Cl- 4,370 ppm Total Salinity		4.37 ppt	7 quantab reading	
Student Salinity- Hydrometer Refractometer	11:04 AM	10,000 ppm		10 ppt		
	11:27 AM 12:02 PM	3,000 ppm 2,500 ppm		3 ppt 2.5 ppt		
DO –Lamotte Drop Count Kit	<i>Time</i>	<i>Temp</i>		<i>ppm DO</i>	<i>% saturation</i>	
	11:05 AM			8 ppm	88%	
pH – Color Match Test Kit	11:36 AM 12:11 PM	8 7.9				
Biological						
Fish- Seine (3 Hauls)	<i>Number</i>	<i>Name</i>		<i>Length of longest</i>	<i>Notes</i>	
11:00 AM-12:00 PM	27	Banded Killifish		6 cm		
Fish Totals	TOTAL: 27	Diversity: 1				
Macroinvertebrates	<i>Number</i>	<i>Name</i>		<i>Length of longest</i>		
Macroinvertebrate Totals	TOTAL: 0	Diversity: 0				
Sediment Core	<i>Time</i>	<i>Oxid Top</i>	<i>H₂S Smell</i>	<i>Oil</i>	<i>Grain Size</i>	<i>Other Features</i>
30 cm	10:53 AM	No	No	Yes	Abundant: Mud Common: Sand Rare: Clay & Gravel	Rare: Living Vegetation

Boats-NR					
Commercial/ Recreational	Time	Name	Color	Southbound/ Northbound	Light/ Loaded