

Day in the Life of the Hudson River 10/14/21

MATTHIESSEN PARK, IRVINGTON

RIVER MILE: 25

Salt Front: ~ RM 49

Irvington Middle School- Amy Panitz, Karen Bodnar

145 students, 6th grade

Irvington High School- Alex Lengers

55 students, 11-12th grade

20 adults total

Latitude 41.04164 N & Longitude – 73.87398 W

Sampling Site: Matthiessen Park, Irvington NY

Area: The sampling beach has a pier, grassy area, large parking lot to the south. Area is primarily used for boating, jogging, walking, picnicking, and fishing.

Sampling Site: Pier, forested, grassy, parking lot, beach, banks altered, riprap, wood bulkhead, pipe entering the water

Surrounding Land Use: 30% Forested, 10% Beach, 60% Grass with playground

Shoreline: 90% sandy and 10% rocky.

Plants: few plants in the water

Water: 180cm depth, calm by the beach

River Bottom: sandy and rocky

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<i>Physical</i>				
<i>Air Temperature</i>	10:15 AM	19 ° C	66 ° F	
	10:30 AM	21 ° C	70 ° F	
	11:30 AM	21 ° C	70 ° F	
	1:30 PM	23 ° C	74 ° F	
<i>Wind Speed:</i>	10:15 AM	8 mph	North	
	10:30 AM	9 mph	North	
	11:30 AM	6 mph	North	
	1:30 PM	7 mph	North	
<i>Weather today</i>	Light cloud cover throughout the day, no rain			
<i>Weather the past 3 days:</i>	3 days prior: Sunny. 2 days prior: sunny. 1 day prior: overcast			
<i>Tides- tide stick</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>		<i>Height (cm)</i>
LT: for area 11:44 AM Seems it should be ebbing through this whole time but possible wave activity distorted this?	8:15 AM	Ebb		-
	8:45 AM	Ebb		40 cm
	10:00 AM	Rising		45 cm
	10:30 AM	Rising		50 cm
	11:00 AM			*wave knocked over
<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>
*This probably is a flood although currents along the shallow edges of the Hudson can behave differently than the tides.	10:15 AM	29.4	6.98	South
	10:45 AM	28.6	7.8	South
	11:30 AM	29.4	4.3	South
	1:30 PM	20	6.1	South
<i>Water Temperature-</i>	9:45 AM	21 ° C	69 ° F	
	10:15 AM	22 ° C	66 ° F	
	11:15 AM	20 ° C	71 ° F	
	12:15 PM	23 ° C	71 ° F	
	12:30 PM	22 ° C	71 ° F	
	1:30 PM	20 ° C	70 ° F	
				<i>Ebb/Flood/Still</i>
				Ebb
				Ebb
				Ebb
				Ebb* (LT was at 11:44AM)

Turbidity- long sight tube	9:45 AM 10:15 AM 10:45 AM 11:15 AM 12:15 PM 12:30 PM 1:30 PM	45 cm 48 cm 31 cm 38 cm 29 cm 35 cm 43 cm			
Chemical					
Salinity-	9:45 AM 10:15 AM 10:45 AM 11:15 AM 12:05 PM 12:15 PM 12:30 PM 1:30 PM	6 ppt 5.5 ppt 6 ppt 6.5 ppt 6 ppt 6 ppt 6 ppt 6 ppt			
DO –	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>	
	9:30 AM 10:15 AM 10:45 AM 11:15 AM 12:15 PM 12:30 PM 1:30 PM	21 ° C 22 ° C 22 ° C 20 ° C 23 ° C 22 ° C 20 ° C	8 8 8 9 8 8 8		
pH –	9:30 AM 10:15 AM 10:45 AM 11:15 AM 12:15 PM 12:30 PM 1:30 PM	6 6 8 6 6 6 6			
Biological					
Fish	Number	Name	Length of longest	Length of smallest	
	9 4 17 25 2 1	White Perch Hogchoker Striped Bass Atlantic Silversides American Eel Pipefish	20 cm 10 cm 13 cm 8 cm 45 cm 7 cm	-	
Fish Totals	TOTAL: 58	Diversity: 6			
Macroinvertebrates	Number	Name	Length of longest	Length of smallest	
	46	Blue Crab			
Macroinvertebrate Totals	TOTAL: 46	Diversity: 1			
Sediment Core					
Water Depth	H2S smell	Oxid Top	Oil	Grain Size	Other Features
50 cm	No	Little to none	No	Abundant- clay Common- mud Rare- Sand, gravel, pebbles	
Boats					
	Time	Name	North/Southbound	Light/Loaded	
Commercial	Early AM Early AM	Barge Barge	North South		
Recreational	All day	Small boats moving	North and South		

		throughout the day		
<i>Observations</i>	Upon arrival, there were small pieces of trash in the area, including a small sand shovel. The beach was covered in driftwood. There were some geese flying over head throughout the day.			