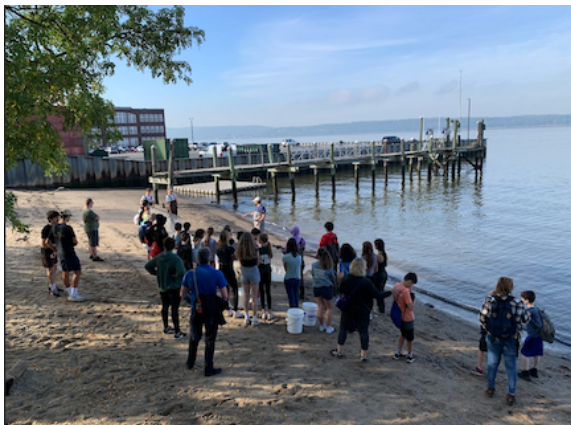


Day in the Life of the Hudson River 10/05/2023
Matthiessen Park, Irvington, NY
RIVER MILE: 25
Salt Front: ~ 52
Irvington Union Free School- Amy Panitz & Alex Lengens
242 students, 11th & 12th grade, 34 adults
Latitude 41.04164°N & Longitude -73.87398°W



Location: Matthiessen Park, Irvington, Westchester, NY
Surrounding Land Use: 60% Industrial/Commercial & 40% Urban/Residential
Sampling Site: Beach, banks altered, riprap, wood bulkhead, pipe entering the water, area covered in vegetation
Shoreline: Rocky, RipRaps
Water: Calm
River Bottom: Muddy & Rocky
Plants in the water: No Plants in the water
 *NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		
<i>Physical</i>				
<i>Air Temperature</i>	9:40 AM	18°C	64.4°F	
	10:08 AM	18°C	64.4°F	
	10:36 AM	20°C	68°F	
	11:05 AM	21°C	69.8°F	
	11:33 AM	21°C	69.8°F	
	12:10 PM	22°C	71.6°F	
	12:34 PM	23°C	73.4°F	
<i>Wind Speed:</i>	9:40 AM	<i>Anemometer</i> 0 mph	<i>Beaufort</i>	<i>Direction</i>

	10:08 AM 10:36 AM 11:05 AM 11:33 AM 12:10 PM 12:34 PM	0 mph 2.2 mph 0 mph 1.2 mph 2.5 mph 3 mph			Southeast Southeast Southeast Southeast
Weather today	9:40 AM 10:08 AM 10:36 AM 11:05 AM 11:33 AM 12:10 PM 12:34 PM	>75% Cloud Cover >75% Cloud Cover 51-75% Cloud Cover 26- 50% Cloud Cover 26-50% Cloud Cover <25% Cloud Cover <25% Cloud Cover	No Rain all day		
Weather the past 3 days:	No Rain, not a lot of wind, temperatures in the high 50s to 70s				
Tides- Tide Stick	Time	Rising, Falling, Unchanged		Height (cm)	
	7:15 AM 9:32 AM 10:15 AM 10:45 AM 11:15 AM 11:45 AM 12:15 PM 12:45 PM	- Falling Rising Rising Rising Rising Rising Rising		27 cm 23 cm 41 cm 50 cm 59 cm 74 cm 88 cm 96.5 cm	
Current-	Time	Cm/sec	Knots	North/South	Ebb/Flood/Slack
Expect the prolonged slack reading is the result of where the current was measured. It does not seem to line up with the tide.	9:40 AM 10:08 AM 10:36 AM 11:05 AM 11:33 AM 12:10 PM 12:34 PM				Slack Slack Slack Slack Slack Slack Ebb
Water Temperature-	9:46 AM 10:08 AM 10:32 AM 11:02 AM 11:35 AM 12:05 PM 12:34 PM	22°C 23°C 25°C 23°C 22°C 19°C 28°C		71.6°F 73.4 °F 77°F 73.4°F 71.6°F 66.2°F 82.4°F	
Turbidity- Short Sight Tube (60 cm)	9:46 AM 10:08 AM 10:32 AM 11:02 AM 11:35 AM 12:05 PM	15.8 cm 22.6 cm 23 cm 23.5 cm 18 cm 21.7 cm			
Chemical					
Standardized Salinity- High Range Quantabs –QT unit 7.2	9:55 AM	4,735 ppm total salinity		4.7 ppt TS	2621ppm Cl-
Student Salinity-	9:46 AM 10:08 AM 10:32 AM 11:02 AM	6,000 ppm 10,000 ppm 3,000 ppm 6,000 ppm		6 ppt 10 ppt 3 ppt 6 ppt	

	11:35 AM 12:05 PM 12:34 PM	3,000 ppm 5,000 ppm 3,000 ppm	3 ppt 5 ppt 3 ppt			
<i>High Range Quantabs 7.0 unit</i>	11:15 AM	4,370 ppm total salinity	4.4 ppt TS	2419 ppm Cl-		
DO – Lamotte Drop Count Kit	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>		
	9:46 AM 10:08 AM 10:32 AM 11:02 AM 11:02 AM 11:35 AM 12:05 PM 12:34 PM	22°C 23°C 25°C 23°C 23°C 22°C 19°C 28°C	11 ppm 7 ppm 9 ppm 8 ppm 10 ppm 9 ppm 9 ppm 9 ppm	115%		
pH – Color Match Kit	9:46 AM 10:08 AM 10:32 AM 11:02 AM 11:35 AM 12:05 PM 12:34 PM	6 6 6 7 6 7 6				
Biological						
Fish- Seine (12 Hauls)	Number	Name	Length of longest	Notes		
10:00 AM-12:30 PM	24 3 33 5 1 1 2 1	Mummichog Hogchoker Atlantic Silverside Striped Bass Northern Pipefish Shiner* Bluefish Porgy (scup)	1 cm 10.5 cm 7 cm 11 cm 6.5 cm 6 cm 9 cm 16 cm			
Fish Totals	TOTAL: 70	Diversity: 8				
Macroinvertebrates	Number	Name	Length of longest			
	8 7	Blue Crabs Palaemonetes Shrimp	6 cm 5 cm			
Macroinvertebrate Totals	TOTAL: 15	Diversity: 2				
Sediment Core	Time	Oxid Top	H₂S Smell	Oil	Grain Size	Other Features
NR	12:45 PM	No	No	No	Abundant: Sand Common: Mud, Gravel, Pebbles Rare: Clay	Rare: Wood, Brick
30 cm	NR	No	Yes	No	Abundant: Sand Common: Mud, Gravel, Pebbles Rare: Clay	Common: Brick Rare: Macroinvertebrates, Slag
NR	NR	NR	NR	NR	Common: Clay, Mud, Sand, Gravel Rare: Pebbles	

Boats					
Commercial/	Time	Type	Color	Southbound/	Light/

Recreational				Northbound	Loaded
Commercial	9:25	Barge			
Recreational	9:46	2 Boats			
Commercial	9:52	Tugboat		Northbound	
Commercial	10:28	Barge	Red/Yellow		
Commercial	10:28	Tugboat		Northbound	
Recreational	10:40	Speedboat		Northbound	
Recreational	10:40	Speedboat		Southbound	
Recreational	11:05	Speedboat		Southbound	
Commercial	11:26	Barge		Northbound	
Recreational	11:57	Kayak	Blue	Northbound	