

Day in the Life of the Hudson River 10/05/2023
Verplanck Steamboat Dock, Westchester County, NY

RIVER MILE: 41

Salt Front: ~ 52

Mahopac High School- Scott Rizzo

33 students, 9th-11th grade, 3 adults

Latitude 41.24927°N & Longitude -73.96431°W



Location: Steamboat Dock Park Beach, City of Verplanck, Westchester County, NY

Surrounding Land Use: 30% Urban/Residential, 35% Beach & 35% Parking Lot

Sampling Site: Beach, pier, riprap & parking lot.

Shoreline: Sandy & Rocky

Water: Calm

River Bottom: Sandy & Rocky

Plants in the water: 10% Water Chestnuts

*NR = Not read/recorded

NOTE: Lots of Spotted Lantern Flies noted during sampling

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<i>Physical</i>				
<i>Air Temperature</i>	10:42 AM 11:13 AM	20°C 21.17°C	68° F 71° F	
<i>Wind Speed:</i>	10:42 AM	<i>Anemometer</i> 1 mph	<i>Beaufort</i> 1	<i>Direction</i>
<i>Weather today</i>	8:45 AM 10:44 AM 11:19 AM	>75% Cloud Cover 26-50% Cloud Cover 26-50% Cloud Cover	No Rain	
<i>Weather the past 3 days:</i>	Sunny, fog			
<i>Tides- Tide Stick</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Height (cm)</i>	
	9:49 AM 10:06 AM 10:27 AM 10:47 AM 11:14 AM 11:28 AM	- Rising Rising Rising Rising Rising	62.5 cm 73.4 cm 75 cm 80 cm 86 cm 90 cm	

<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Slack</i>
	10:07 AM 10:30 AM 10:44 AM 11:16 AM	45.7 53.34 52.4 62			
<i>Water Temperature-</i>	9:30 AM 10:15 AM 11:10 AM	20.2°C 20.2°C 20.9°C		68.5°F 68.5°F 69.6°F	
<i>Turbidity- Long Sight Tube (120 cm)</i>	9:46 AM 10:27 AM 11:28 AM	28.9 cm 28.6 cm 23 cm			

Chemical

<i>Standardized Salinity- High Range Quantabs</i>	9:30 AM	939 ppm Cl- 863 ppm Cl-	1,696 ppm TS 1,559 ppm TS	1.7 ppt -4.6 units 1.6 ppt -4.4 units	Read @ LDEO Read @ Norrie
<i>Student Salinity- Meter/Probe</i>	9:30 AM 10:15 AM 11:10 AM	1,400 ppm 1,400 ppm 1,500 ppm		1.4 ppt 1.4 ppt 1.5 ppt	
<i>DO – Hach Drop Count Kit</i>	<i>Time</i>	<i>Temp</i>		<i>ppm DO</i>	<i>% saturation</i>
	9:30 AM 10:15 AM 11:15 AM	20.2°C 20.2°C 21.1°C		8 ppm 4 ppm 10 ppm	90% 42% 116%
<i>pH – Color Match Kit</i>	9:30 AM 11:30 AM	8 8			
<i>Nitrates-</i>	9:30 AM 10:15 AM 11:10 AM	0.28 mg/l 0 mg/l 0 mg/l			
<i>Phosphates-</i>	10:15 AM 11:10 AM	0.24 mg/l 0.24 mg/l			
<i>Alkalinity-</i>	9:30 AM	100 mg/l			
<i>Iron (Fe)-</i>	10:15 AM 11:00 AM	0.4 mg/l 0.6 mg/l			

Biological

<i>Fish-Seine (3 Hauls)</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>Notes</i>		
	203 7	Atlantic Silverside Striped Bass	8.5 cm 11.4 cm	*Some Atlantic Silversides had anchor worms with egg sacs		
Fish Totals	TOTAL: 210	Diversity: 2				
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>			
Macroinvertebrate Totals	TOTAL: 0	Diversity: 0				
<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>
		No	No	No	Abundant: mud Common: sand, gravel & pebbles	Common: brick

Boats

Commercial/ Recreational	Time	Name	Color	Southbound/ Northbound	Light/ Loaded
Commercial	9:51		Blue/White	Northbound	Light

Commercial	11:34	Flying High	White/Green	Northbound	Loaded
Recreational	9:35		White	Southbound	Light
Recreational	10:12		White	Southbound	Light
Recreational	10:46		White	Northbound	Light
Recreational	10:51		White	Northbound	Light
Recreational	11:04		Grey	Northbound	Light
Recreational	11:07		Blue	Southbound	Light