

Day in the Life of the Hudson River 10/22/19

STEAMBOAT DOCK, VERPLANCK

RIVER MILE: 41

Salt Front: ~ RM 53

Mahopac High School- Scott Rizzo and Trisha Johnson

18 students 9-12th grade, 2 adults

Latitude 41.24936 N & Longitude – 73.936474 W



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

Area: Located in a small cove between a point and a bulkhead- pier, beach, grassy, parking lot, banks altered, riprap, pipe entering the water

Surrounding Land Use: 70% Beach; 25% Urban; 5% Forest

Sampling Site: Beach and parking lot

Shoreline: 33% Sandy, 33% Muddy, 33% Rocky

River Bottom: Muddy

Plants in water: no plants in water area

Water: 2 ft, calm

ITEM	Time	Reading	Comments	
Physical				
Air Temperature	10:20 AM	55 ° F		
	11:11 AM	53 ° F		
Wind Speed:	10:21 AM	Beaufort 1		
Weather today	Mostly cloudy (75%) no rain			
Weather past 3 days:	No rain			
Tides-	Time	Rising, Falling, Unchanged	Water Height (cm)	Rate of Tidal Change (cm/min)
Lt 12:32 PM	10:03 AM	Falling	68	
	10:19 AM	Falling	63.5	
	10:34 AM	Falling	60.4	
	10:49 AM	Falling	55.7	
	11:04 AM	Falling	35 *anomalous	
	11:19 AM	Falling	50	
	11:36 AM	Falling	52.5	
Current- orange toss	Time	cm/second	North/South	Ebb/Flood/Still
	10:27 AM	1.967	South	Ebb
	11:10 AM	1.933	South	Ebb
	11:43 AM	2.167	South	Ebb
Water Temperature-	9:54 AM	17.4 ° C, 17.3 ° C, 17.35°C – Avg 17.35 ° C	63.32 ° F, 63.14 ° F, 63.23°F- Avg 63.23°F	*anomalous
	10:57 AM	14.6 ° C*	58.28 ° F*	
	11:36 AM	17.4 ° C	63.32 ° F	
Turbidity- long sight tube	10:06 AM, 11:03 AM	27.4cm, 25.5cm, 20.5cm, Avg: 24.46cm		Cloudy tan, silty

<i>Chemical</i>				
<i>Salinity- Meter</i>	9:54 AM 11:36 AM	2403 ppm 1900 ppm		
<i>DO – Meter Probe</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	9:54 AM 11:07 AM 11:54 AM	17.4 ° C 14.6 ° C 17.1 ° C	7 11 12	70% 107% 121%
<i>pH – Color Match Kit</i>	10:11 AM 11:13 AM 11:36 AM	8 7.5 8		
<i>Alkalinity- kit</i>	NR	80, 80 ppm		
<i>Nitrate- kit</i>	NR	0.4, 0 ppm		
<i>Phosphate- kit</i>	NR	0.41, 0.58, 0.35 ppm		
<i>Biological</i>				
<i>Fish</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>TOTALS</i>
Seine- 25' 10:12 AM	13	Atlantic Silverside	5 cm	Atlantic Silverside: 49 Striped Bass: 9
	2	Striped Bass	7 cm	
10:37 AM	35	Atlantic Silverside	6 cm	
	5	Striped Bass	8 cm	
1:10 PM	2	Striped Bass	8 cm	
	1	Atlantic Silverside	5 cm	
1:40 PM	3	Atlantic Silverside	4 cm	
Fish Totals	TOTAL: 58	Diversity: 2		
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>Totals</i>
10:37 AM	22	Comb Jelly		77 Comb Jelly 1 Blue Crab
11:10 AM	55	Comb Jelly		
11:35 AM	1	Blue Crab (F)		
Macroinvertebrate Totals	TOTAL: 78	Diversity: 2		
<i>Sediment Core</i>	<i>Time</i>	<i>Oxid Top</i>	<i>Grain Size</i>	<i>Other Features</i>
NR				
Boats	Time	Name/Color	North/South	Loaded/Light
Commercial	9:56 AM	Sea Toe, Yellow/white	South	Light
Commercial	10:05 AM	Mercury 350, White	North	Loaded
Commercial	10:48 AM	Barges RT106, red/black	North	Loaded
Commercial	11:26 AM	Barge, black	South	Loaded
Observations	Red Brick, mallard ducks, seagulls, Canadian geese, Coopers Hawk. Runoff could have impacted the data today			

Hudson River Journal Entry:

The Hudson River is such a beautiful place. When I sit down and close my eyes, I hear the sound of the chirping birds, as if they are greeting us. From the north I hear the chirping birds, however, from the south I hear the sounds of very loud ducks. All of a sudden I hear a boat engine speed past and it starts a tide of waves. Before I open my eyes I take a deep breath and smell a hint of salt. I shiver as a gust of air sweeps across me, blowing my hair with it.

I open my eyes and walk towards the river. To the north I see a pile of rocks that filter the water like it's a pool. I turn towards the shore and see the footprints of happy children running across the beach. A long brownish tan and red boat slowly swings by. The waves radiate through the river like a slow wave pool.

By: Gianna DeMauro