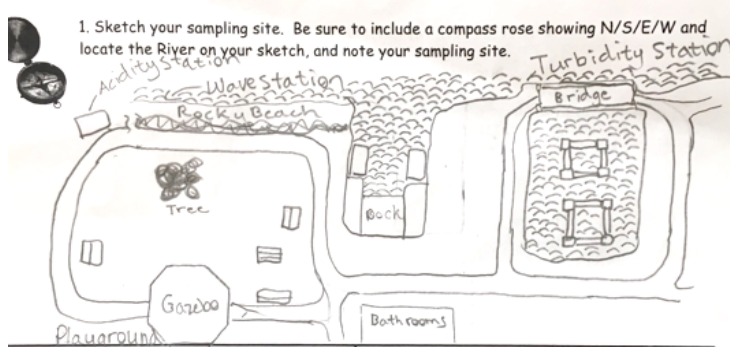


Day in the Life of the Hudson River 10/16/18 Data
HAYERSTRAW BAY COUNTY PARK
RIVER MILE: 38
Salt Front: ~RM 24

Albertus Magnus High School- Beth Michaluk, Millie Mendelson
41 students 11th and 12th grade, 4 adults
Latitude 41.212559 N & Longitude – 73.963759 W



Location: Haverstraw Bay County Park, Village of Haverstraw, Rockland County, NY

Area: North Beach, dock/pier, grassy, forested, parking lot

Surrounding Land Use: 70% Forested; 20% Parkland; 10% Industrial/Commercial; 20% Urban/Residential; 15%

Sampling Site: Small Beach, banks altered, large riprap, concrete bulkhead, covered in vegetation

Shoreline: 20% Muddy, 30% Sandy, 50% Rocky

River Bottom: Muddy, sandy, rocky

Plants in area: Waterchestnuts

Water: 5-18 inches, Choppy

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>	
Physical					
<i>Air Temperature:</i>	9:49 AM	8.34 °C	47 °F		
	10:30 AM	8.896 °C	48 °F		
	11:10 AM	10.008 °C	50 °F		
<i>Wind Speed:</i>	9:45 AM	7.9 knots	Beaufort 1-2	Northwest	
	11:10 AM	2.5 knots	Anemometer: 3.9 mps 14.04 km/hr		
<i>Weather Today:</i>	9:50 AM Partly cloudy (26-50%), no rain				
<i>Weather Previous:</i>	Rain Monday, Overcast Sunday				
<i>Water Temperature</i>	9:55 AM	16.2 °C	61.16 °F		
	10:34 AM	15.4 °C	59.72 °F		
	11:23 AM	17 °C	62.6 °F		
<i>Turbidity-</i>	9:55 AM	50 cm		Secchi Disk	
	10:35 AM	40 cm		Secchi Disk	
	10:48 AM	45 cm		Secchi Disk	
	9:55 AM		24 cm	Long sight tube	
	10:35 AM		33 cm	Long sight tube	
	10:48 AM		26 cm	Long sight tube	
	9:55 AM			25 cm	Small sight tube
	10:35 AM			25 cm	Small sight tube
	10:48 AM			25 cm	Small sight tube

Chemical					
<i>Salinity-</i>	10:00 AM	Quantab	Hydrometer		
	10:42 AM	<28 ppm Cl-	1 ppt TS		
	11:59 AM	NA	1 ppt TS		
<i>Dissolved Oxygen –</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>	
	10:15 AM	15.7 °C	8 ppm	80%	
	11:00 AM	15.4 °C	10 ppm	100%	
	11:33 AM	16.6 °C	10 ppm	100%	
	11:45 AM	15.7 °C	8 ppm	80%	
<i>pH - pH pen</i>	10:05 AM	7.4, 7.5		avg. 7.45	
	10:34 AM	7.3, 7.6, 7.7		avg. 7.5	
	11:10 AM	6.9, 7.4, 7.6		avg. 7.3	
	11:35 AM	7.3, 7.5		avg. 7.4	
Biological					
<i>Fish – seine</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>		
	1	Banded Killifish	8.9 cm		
	3	Herring spp.	7.6 cm		
	2	Yellow Perch	12.7 cm		
	1	Spottail Shiner	5 cm		
	1	Blue Fish	5 cm		
	2	Atlantic Silverside	7.6 cm		
	4	White Perch	12.7 cm		
	TOTAL: 14	DIVERSITY: 7			
<i>Macroinvertebrates- Seine</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>		
	1	Blue Crab			
	TOTAL: 1	DIVERSITY: 1			
<i>Tides</i>	<i>Time</i>	<i>Rising, Falling, Still</i>	<i>Height (cm)</i>	<i>Rate of Tidal Change (cm/min)</i>	Measure from Dock to water
	9:30 AM	-	70	-	
	10:00 AM	Still	70	0	
	10:25 AM	Falling	75	0.2	
	10:50 AM	Falling	80	0.2	
	11:15 AM	Falling	83	0.12	
<i>Currents Flow</i>	<i>Time</i>	<i>Cm/second</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Still</i>
	9:44 AM	9.5	0.18467	South	Ebb
	10:40 AM	13	0.2527	South	Ebb
	11:10 AM	55	1.06912	South	Ebb

<i>Sediment Core</i>		<i>Water depth</i>	<i>Length</i>	<i>Oxid Top</i>	<i>Grain Size</i>	<i>Other</i>
<i>Boats</i>	<i>Time</i>	<i>Name</i>	<i>Color</i>	<i>North/South</i>	<i>Loaded/Light</i>	
Commercial	9:40 AM	Barge	Dark Color	North	Loaded	
Commercial	10:50 AM	Cargo	Black	North	Loaded	
Commercial	11:25 AM	Cargo	Navy	North	Loaded	
Recreational	9:30 AM	Speedboat	White	South	Light	
Recreational	9:40 AM	Sailboat	White	Docked	Light	
<i>Other Observations</i>		Many Bricks, coal, glass, crab shells, rock, sand, driftwood, water chestnuts, crab, fish, birds, gulls, geese, squirrels, and butterflies. Bowline powerpoint, Indian point, old brickyard industry, tilcon, coal transport and use, and local industry pollution all could have an impact on data.				