

Day in the Life of the Hudson River 10/11/17 Data
(Salt front ~ RM 65)
RIVER MILE 58.1

Plum Point/Kowawese, New Windsor, Orange County, NY
Janet DeStefano & Krista Espinoza, Vails Gate School
Jack Caldwell and Black Rock Forest
34, 5th grade students, 9 adults
GPS Latitude 41.471 N Longitude -74.016 W

Location: Northern Sandy beach at Plum Point, New Windsor, Orange County, Public Shore, Picnic Area

Area: Sandy beach bordered by forested area and parking lot. Used for picnic, fishing, kayaking

Surrounding Land Use: Forested 25%, Beach 75%,

Sampling Shoreline: 75% sandy, 25% rocky

Sampling Site: sandy beach (cove), rip rap in area of sampling site, debris in the area such as broken concrete, docking

Plants in area: 10% water chestnut

Shoreline: beach and then grass behind

River Bottom – sandy, rocky, muddy

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	9:40 AM 10:45 AM 11:18 AM	15.2°C 16.6 18.4	59.3°F 61.9 65.1	
Wind Speed	10:41 AM	Wind meter 14.7 mph	SW	
Cloud Cover	11:00	Partly cloudy	26-50%	
Weather today	No rain but very overcast by afternoon			
Weather recently	Gentle rain night before sampling, sunny before that in 70s			
<i>Water Surface</i>	choppy			
<i>Water Temperature</i>	9:40 AM 11:03AM 11:24 AM	19°C 19.5 °C 20	66°F 67 68	
<i>Water Surface</i>	Choppy			
<i>Turbidity</i> <i>Long sight tube</i>	10:20 AM	32.2 cm 25.4 25.2	Average – 27.6 cm	Water was turbid most likely from the choppiness of the water
<i>Chemical</i>				
DO (drop kit)	9:51 AM 10:53 AM 11:26 AM	14.5°C 15.5 15.5	12 ppm 12 ppm 12 ppm	115% Sat 118 118
pH – indicator	9:34 AM	7.5, 7, 7		Average 7.2

	10:41AM 11:10 AM	8,7,7 7.7,7		
Salinity – Quantab	HR 4.4 LR 8.0	HR 821 ppm Cl- LR Off the chart	HR 1483 Total Salinity	
<i>Fish Catch</i> 48” X20 ft. with ¼ inch mesh	<i>Species</i>	<i>Count</i>	<i>Size of largest</i>	<i>Totals</i>
Fish 12:30 PM	American Shad	8	8 cm	Seine 1 DIV 2
	Atlantic Silverside	1	2.5 cm	TOTAL 9
	Striped Bass	1	8 cm	Seine 2 DIV 2
	American Shad	12	8 cm	TOTAL 13
DIVERSITY	3	TOTAL CATCH	22	
Macros	Blue Crab	1		
	Clam	1		
	Zebra Mussels	~75		
DIV	3	TOTALS	78	
<i>Tides</i>	Time	Height in cm	Rate of change	Rising/falling
	NR			
<i>Currents</i>	9:36 AM 10:53 AM 11:18 AM	90 cm/30 sec 110 cm/30 sec 100 cm/30 sec	3.0 cm/sec 3.7 cm/sec 3.3 cm/sec	0.058 kts 0.071kts 0.64 kts
<i>Core</i>	Time	Description	Common	Rare
	NR			
<i>Shipping – commercial</i>	9:30 AM 10:57 AM	Cargo ship Barge	Northbound Southbound	loaded
<i>Shipping – Recreational</i>	10:57 AM 11:00 AM 11:00 AM	3sailboats small fishing boat jet ski	Southbound Northbound Both	
<i>Observations</i>	Water chestnuts are on the beach, a dead ground hog was found on the beach in the AM. Some debris also – cigarettes, paper etc. Some crows flew by			