

**Day in the Life of the Hudson River 10/20/16 Data
(Salt Front ~ RM 83)**

RIVER MILE 41

Steamboat Dock Park, Verplanck, Westchester

Bob Connick, Sott Rizzo, Trisha Johnson - Mahopac High School;

Environmental Research and Field Biology - Genesis Group 9th - 12th graders –

31 students, 4 teachers

Latitude N 41°14958 - Longitude W 73°936474

Location: Steamboat Dock Park beach, City of Verplanck in Westchester County
Area: located in a small cove between a point and a bulkhead – Pier, Grassy, Parking Lot
Surrounding Land Use: Boating, Picnics, Swimming, Fishing, Jogging
Sampling Site: beach, covered in vegetation, riprap, banks altered, dock, bottom rocky, bulkhead, pipe south of the sampling site 10-15 m.
Shoreline: Sandy, muddy, rocky
Plants in area: Valissneria found on the shore, water chestnut seed pods
Other: No plants in water but plants in the area noted above
Water depth: 3 ft.
River Bottom – muddy, sandy, rocky

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature				
Wind Speed	11:30 AM	Beaufort 3	South	6 mph
Cloud Cover	12:00 PM	Clear <25%	5 contrails & few cirrocumulus	
Weather today	11:30 AM –cloudy, rainy			
Weather recently	Humid and wet			
<i>Water Surface</i>	Calm			
<i>Water Temperature</i> 9 YSI SCI meter	9:57 AM	20.3°C, 20.4 °C	68.6°F, 68.4 °F	
	10:09 AM	20.8 °C	68.4°F	
	10:13 AM	20.8, 20.8	69.4	
	10:30 AM	20.8	69.4	
	10:33 AM	20.8	69.4	
	10:40 AM	20.7	69.4	
<i>Turbidity –</i> <i>Water very clean, no smell</i>	11:30 AM	~31 cm 27.9 26.1 Transparency tube	Average 28.3	14 NTU LaMotte
<i>Chemical</i>				
DO (drop kits)	9:50 AM	20.5 °C	8 ppm	85%
	9:48 AM	20.5	10 ppm	95%
	9:52 AM	20.4	8 ppm	85%

	10:10 AM 11:26 AM	20.4 20.0	8 ppm 15 ppm* air bubble?	85% Saturation
pH Indicator solution	11:45 AM 12:00 PM 12:15 PM	7.5 8.0 8.0		
Salinity YSI SCT meter	9:51 AM 9:54 AM 9:55 AM 10:01 AM 10:13 AM 10:13 AM	8.2, 8.2 ppt 8.2, 8.2 ppt 8.2, 8.2, 8.3 ppt 8.4, 8.4, 8.4 ppt 7.9 ppt 8.4, 7.9, 7.9 ppt	Averages	8.2 ppt 8.2 ppt 8.2 ppt 8.4ppt 7.9 ppt 8.1 ppt
Alkalinity – Hach kits - titration	10:01 AM 10:12 AM	100 ppm X 3 80 ppm, 100ppm	Averages	100 ppm 90 ppm
Nitrates - colormetric	10:21 AM 10:45 AM 11:10 AM 11:24 AM	0 mg/L 0.8 mg/L 0 0		
NO2	10:21 AM	0.2 mg/L		
Phosphates - colormetric	10:29 AM 10:32 AM 11:11 AM 11:28 AM	0.09 ppm 1.13 ppm 1.14 ppm 2.0 ppm		
<i>Fish Catch- 10:30 AM</i>	<i>Number Caught</i>	<i>Species</i>	<i>Size of largest</i>	<i>Seine</i>
50 ft net X 4ft	27	Striped Bass	8 cm	DIV 2
2 seines	4	Atlantic Silversides	8 cm	TOTAL CATCH 56
	25	Striped Bass	8 cm	
<i>Macros</i>				
	1	Blue Crab		DIV 2
	1	Jelly		TOTAL 2
<i>11:30 Seine</i>				
	43	Striped Bass	12 cm	DIV 4
	6	Atlantic Silversides	12 cm	TOTAL CATCH 51
	1	*Yellow Perch	18 cm	*discussion on ID but samplers felt confident
	1	Shiner	10 cm	
<i>12:05 Seine</i>				
	2	Atlantic	8 cm	DIV 1

		Silversides		CATCH 2
Total Fish Catch	109	TOTAL DIV	5	
Coring	Unable to collect – need new corer			
Tides* <i>Meter stick kept coming out of bottom</i>	TIME - Amt. Rise/ Fall			
Tides* <i>Meter stick kept coming out of bottom</i>	11:05	7 cm		
	11:20	7 cm		
	12:14	28 cm		
Current *	Time	Direction	Ebb/Flood	Speed
Full sampling time	FLOOD			
Traffic - commercial	Name	Type	North/South	Loaded/Light
10:30 AM	White	Tugboat	South	Light
Traffic Recreational	Type	Name/color	North/South	Loaded/Light
10:01 AM	Sail	White	North	Light
10:20 AM	Speedboat	White	South	Light
10:25 AM	Sail	White	South	
10:30 AM	Unkown	White	North	
Birds	Geese, House Sparrows, Gulls, Monarch Butterflies			
Anthropogenic	Bricks, broken shells, water chestnut seeds			