

**Day in the Life of the Hudson River 10/20/16 Data**  
**(Saltfront ~ RM 83)**  
**RIVER MILE 117 (b)**  
**Shelley Forester, Cary Institute of Ecosystem Studies**  
**Jenny Jeffrey, Taconic Hills High School, Taconic Hills, NY**  
**4 students, AP Environmental Science, 1 adult**  
**Latitude – N 42°25' Longitude – W -73°80'**

**Location:** Hudson River Waterfront Park, City of Hudson, Columbia County

**Area:** 1<sup>st</sup> dock in the waterfront property used for fishing, marina, picnics, large grassy area, just north of the old quarry site, has a parking lot

**Surrounding Land Use:** 50% Industrial/Commercial, 50% grassy park

**Sampling Site:** waterfront with banks altered to include wooden & concrete bulkheads and large riprap on shoreline,

**Plants in area:** Moss covering approximately 20% of shoreline

**Water -** Calm

**River Bottom –** bottom rocky

	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<b><i>Physical</i></b>				
Air Temperature	9:55 AM	18.8°C	66°F	
Cloud Cover	9:52 AM	Partly cloudy		
Wind –	<b>Time</b> 9:48 AM	<b>Beaufort</b> 1	<b>MPH</b> 0.5 m/s	<b>Direction</b> NE
Weather today	No Rain			
Weather recently	Warm and dry			
Water	calm			
<b><i>Water Temperature –</i></b>	9:22 AM 9:24 AM 9:35 AM	16.6 16.8 16.8	62°F 62°F 62°F	
<b><i>Turbidity –</i></b>	9:13 AM	130 cm 130 cm 100 cm		<b><i>Secchi – 120 cm avg</i></b>
	9:13 AM	40 JTU 40 40		<b><i>Short site tube – 40 JTU avg.</i></b>
<b><i>Chemical</i></b>	<b>Time</b>	<b>Temp C</b>	<b>DO ppm</b>	<b>% sat.</b>
DO -	9:22 AM 9:24 AM 9:35 AM	16.6 16.8 16.8	8.0 7.0 10.0	40% 35 100
pH – <i>Color</i>	10:38 AM	6, 5, 6		Avg. 5.75

<i>Match</i>				
<b>Salinity Quantabs</b>	<b>Time</b> 10:41 AM	<b>%</b>	<b>Chloride ppm</b> 46 ppm	<b>Total Salinity ppm</b> 83 ppm
<b>Alkalinity</b>	10:51 am 10:42 am 10:48 am	40,40,40 ppm 20 ppm 15, 15, 15 ppm		Average 26 ppm
<b>Fish Catch</b> Seine net 20 feet X 4 ft., 1.4 inch mesh	<b>Time</b>	<b>Species</b>	<b>number</b>	<b>Size of largest</b>
<b>Diversity 4</b> <b>Total Catch 181</b>	12:50 PM	<i>Banded Killifish</i>	147	10 cm
		<i>Spottail Shiner</i>	23	11 cm
		<i>Bluegill Sunfish</i>	10	25.4 cm
		<i>White Perch</i>	1	20.3 cm
<b>Tides</b>	10:05 AM	80 cm	NR	
<b>Currents</b>	<b>Time</b>	<b>Cm/30sec</b>	<b>Cm/sec</b>	<b>Kts - E/F/S</b>
	10:00 AM.	495/30	16.5cm/sec	0.32 kts Ebb
<b>Core Sample</b>	<b>Length/</b>	<b>Rare</b>	<b>Common</b>	<b>Abundant</b>
	10 cm oil top	Clay Sand Living Vegetation	Gravel Pebbles	Mud
<b>Traffic - commercial</b>	<b>Time</b>	<b>Name</b>	<b>Color</b>	<b>Direction/Loaded or Light</b>
	10:17 AM	Noelle Cutler	Black & Teal	Southbound, light