

**Day in the Life of the Hudson River 10/20/15 Data  
RIVER MILE 118**

**Shelley Forester, Cary Institute of Ecosystem Studies  
Ms. Jeffrey, Ms. Kneller, Mrs. Fischer, Mr. Pearson, Mr. Kullman, Mr. V.,  
Chatham & Taconic High School, Chatham NY  
39 students 10<sup>th</sup> -12<sup>th</sup> grade, 9 adults  
Latitude – N 42°15' Longitude – W -73°48'**



**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:** 75% urban/residential, 10 % forested, 15% Industrial/Commercial  
**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 –** muddy, rocky

	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<b><i>Physical</i></b>				
Air Temperature	9:30 AM. 10:00 AM 10:35 AM 12:23 PM 12:54 PM	9°C 8.8 8 13 13	49°F 48 47 56 56	
Cloud Cover	9:30-1:00 PM >75%			
Wind – wind picked up	<b>Time</b> 9:30 AM.	<b>Beaufort</b> 1	<b>MPH</b> 2	<b>Direction</b>

during day	9:57AM 10:35 AM 12:23 PM 1:00 PM	1 1 1 1	0.6 2.5 1.3 2.1	
Weather today	No Rain			
Weather recently	Cool Temperatures, below 50°F and snow within last 3 days			
Water	calm			
<b>Water Temperature – In 3 meters depth of H2O</b>	9:13 AM 9:27AM 10:01 AM 10:41 AM 12:20 PM 12:49 PM	13.2°C 14.0 13.1 13.3 13.5 14.5	55.76°F 57.20 55.58 55.94 56.3 58.1	
<b>Turbidity –</b>	NR	92.5 cm		<b>Secchi</b>
	NR	40 JTU		<b>Short site tube</b>
<b>Chemical</b>	<b>Time</b>	<b>Temp C</b>	<b>DO ppm</b>	<b>% sat.</b>
DO -	10:10 AM 10:41 AM 12:03 PM 12:39 PM 12:50 PM	13.1 13.3 13.4 14.5 14.7	10.1 9.6 11.4 11.4 13.0	95% 91 135 110 130
pH – <i>Color Match</i>	9:15 AM 10:00 AM 10:26 AM 12:17 PM 12:43 PM	7 7 7 7 7		
<b>Salinity Quantabs</b>	<b>Time</b>	<b>%</b>	<b>Chloride ppm</b>	<b>Total Salinity ppm</b>
	10:46 AM 12:00 PM	0.006 0.006	38 32	69 ppm 69 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 2</b> <b>Total Catch 7</b>	9:25 AM	<i>Largemouth Bass</i> <i>Shiner</i>	1 6	15 cm bass
<b>Diversity 5</b> <b>Total Catch 30</b>	9:55 AM	<i>Largemouth Bass</i> <i>Shiner</i> <i>Striped Bass</i> <i>Yellow Perch</i> <i>Bluegill Sunfish</i>	1 26 1 1 1	13 cm bass
<b>Diversity 3</b> <b>Total Catch 10</b>	10:52 AM	<i>Largemouth Bass</i> <i>Shiner</i> <i>Banded Killifish</i>	1 4 5	19 cm shiner
<b>Diversity 5</b>	12:11 PM	<i>Largemouth Bass</i>	1	11 cm unknown

<b>Total Catch 33</b>		<i>Shiner</i> <i>Blue Gill</i> <i>Banded Killifish</i> <i>Unknown</i>	17 1 11 3	
<b>Diversity 4</b> <b>Total Catch 38</b>	12:45 PM	<i>Largemouth Bass</i> <i>Banded Killifish</i> <i>Spottail Shiner</i> <i>Darter</i>	2 18 17 1	10 cm shiner
	<b>For the Day</b>	<b>Total Diversity 8</b>	<b>Total Catch 118</b>	
<b>Tides</b>	9:15 AM 9:59 AM 10:36 AM 12:10 PM 12:50 PM	47 cm 40 cm 25 cm 0 cm 0 cm	Set Falling Falling Still Still	<i>Water Height</i>
<b>Currents</b>	<b>Time</b>	<b>Cm/sec</b>	<b>E/F/S</b>	<b>Direction</b>
	9:30 AM.	17	Ebb	(NW)
	10:03 AM	6.67	Ebb	(NW)
	10:35 AM	13.3	Flood	(SE)
	12:23 PM	6.7	Flood	(SE)
	12:54 PM	6	Flood	(SE)
<b>Core Sample</b>	<b>Length/</b>	<b>Grain size</b>	<b>Plant Material</b>	
	10 cm 5.5 cm 5.1 cm 8 cm 3.8 cm	Sand/muds/clay Sand/muds/clay Sand/muds/clay Muds & Clay Muds & Clay	No No No No NO	
10:45 AM	No length - Oxidized top	Clay, Mud		coal
12:10 PM	2 inches	Mud	Gravel, Pebbles	Brick, Living Vegetation
12:16 PM	None listed	Clay		Mud, gravel, pebbles
12:40 PM	None listed	Clay	Mud	pebbles
<b>Traffic - commercial</b>	<b>Time</b>	<b>Name</b>	<b>Color</b>	<b>Direction/Load ed or Light</b>
	10:15 AM	Bouchard	Black & Red	Southbound, loaded
	11:01 AM	Red Dog	Red & White	Southbound Light
	11:05 AM	Unknown	White	Southbound Light
<b>Other Items</b>	Water chestnut seeds	Large rocks	Crab parts – legs and claws	Seagulls and ducks

