

**Day in the Life of the Hudson River 10/4/12 Data**

**RIVER MILE 61.1 E**

**Beacon Waterfront Train Station Park, City of Beacon, Dutchess County  
Nancy Rypkema, Christine O'Shea, and 12 adult helpers/teachers - Valley Central  
Middle School, 7<sup>th</sup> & 8<sup>th</sup> graders (70 students )  
Latitude 41°30' 22" N - Longitude 73°59' 07" W**

**Location:** Waterfront Park, Beacon, Dutchess County NY

**Area:** Park area near the Beacon train station - grassy lawns, forested around edges, parking lot to the side. Children's play area

**Surrounding Land Use:** Park/grassy 60%, Urban/residential 10%; Forested 20%; shoreline/beach 10%

**Student assessment:** There is a bridge, transit station (train) and trees,

**Sampling Site:** beach, covered in vegetation, banks altered, rip rap

**Plants in area of sampling:** oak trees 10%; willow trees 10%; Grass 60%; maple trees 20%

**Water depth:**

**Bottom Surface:** sandy, rocky bottom

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading</i>	<i>Comments</i>
<b><i>Physical</i></b>				
Air Temperature	10:10 AM	21°C		
	10:25 AM	20		
	11:15 AM	20		
	11:25 AM	20		
	12:10 PM	21		
Wind Speed	10:10 AM – 12:07 PM	Beaufort #0		
Cloud Cover	Overcast all AM			
Weather today	Light rain 10:10 AM and 10:23 AM rotation. Drizzle 11:15 and 11:25 rotation. No rain 12:10 rotation			
Weather recently	Rainy and humid			
<b><i>water calm</i></b>	Calm			
<b><i>Water Temperature</i></b>	<b>Time</b>	<b>Degrees °C</b>		
	10:10 AM	20°C		
	10:25 AM	20		
	11:15 AM	20		
	11:25 AM	20		
	12:10 PM	21		
<b><i>Turbidity</i></b>	<b>Time</b>	<b>Turbidity Tube</b>		<b><i>Average</i></b>
	10:10 AM	62.5 cm		

	10:25 AM 11:15 AM 11:25 AM 12:10 PM	36 cm 38 cm 40.8 cm 36.4 cm		
<b><i>Chlorophyll</i></b>	10:10 AM 10:25 AM 11:15 AM 11:25 AM 12:10 PM	0.0 0.0 0.0 0.0 0.0		
<b><i>Chemical</i></b>	<b><i>Time</i></b>	<b><i>DO</i></b>	<b><i>Temp</i></b>	<b><i>% saturation</i></b>
DO (drop kit)	10:10 AM 10:25 AM 11:15 AM 11:25 AM 12:10 PM	6 ppm 8 9 9 11	20C 20C 20C 20C 20C	70% 80% 95% 95% 100%
pH – <b><i>test strips</i></b>	10:10 AM 10:25 AM 11:15 AM 11:25 AM 12:10 PM	8 7 7.5 7.5 7.5		
<b><i>Nitrates</i></b>	10:10 AM 10:25 AM 11:15 AM 11:25 AM 12:10 PM	4.5 ppm 4 ppm 4.3 ppm 4.4 ppm 4.5 ppm		
<b><i>Salinity –</i></b>	<b><i>Time</i></b>	<b><i>Quantab reading</i></b>	<b><i>Chloride reading</i></b>	<b><i>Total Salinity conversion</i></b>
	10:10 AM 10:25 AM 11:15 AM 11:25 AM 12:10 PM		92 mg/l Cl- 97 mg/l 97 mg/l 92 mg/l 92 mg/l	166 ppm salinity 175 ppm salinity 175 ppm salinity 166 ppm salinity 166 ppm salinity
<b><i>Fish Catch seine 9X4feet</i></b>	<b><i>Number Caught</i></b>	<b><i>Species</i></b>	<b><i>Length</i></b>	<b><i>MACROs</i></b>
	1	Striped Bass		<b>Div = 6 Total Catch =81</b>
	12	Herring		
	1	Darter		
	36	Sunfish		
	~30	Spottail Shiners		
	1	White Perch		
	few	Baby Crabs		
<b><i>Tides</i></b>	<b><i>Time</i></b>	<b><i>Tide Stick</i></b>	<b><i>Flood/Ebb Still</i></b>	<b><i>Rate of change</i></b>
	10:09AM	11 cm		

	10:23AM	16 cm	Flood	5 cm/14 mins
	11:12 AM	39 cm	Flood	23 cm/49 mins
	11:25AM	45cm	Flood	6 cm/13 mins
	12:07 PM	64 cm	Flood	19 cm/42 mins
<b><i>Currents</i></b>	<b><i>Time</i></b>	<b><i>Cm/60 secs</i></b>	<b><i>Cm/sec</i></b>	<b><i>knots</i></b>
	10:09AM		3.084 cm/s	0.06 kts
	10:23AM		3.084 cm/s	0.06 kts
	11:12 AM		2.313 cm/s	0.045 kts
	11:25AM		3.084 cm/s	0.06 kts
	12:07 PM		2.519 cm/s	0.049 kts