

**Day in the Life of the Hudson River 10/10/13 Data
(Salt Front RM 69.3)
RIVER MILE 61.1 E**

**Beacon Waterfront Train Station Park, City of Beacon, Dutchess County
Nancy Rypkema and total of 16 adults/teachers - Valley Central Middle School,
7th & 8th graders (76 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: Industrial/Commercial 30%, Urban/residential 10%; Forested 30%; shoreline/beach 10% Other (Parkland) 20%

Shoreline: There is a bridge, transit station (train) and trees, concrete debris, dock

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: 0.5 m

Bottom Surface: muddy, rocky bottom

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	10:04AM 10:58 AM	11.2°C 13°C	52.4°F 54.1°F	
Wind Speed	11:00 AM	Beaufort #1	5.1 kts 3 mph	NE
Cloud Cover	Overcast			
Weather today	Overcast - Sprinkled after 11:00 AM.			
Weather recently	Monday tornado warning, Wed. sunny and cool			
<i>Water Surface</i>	Choppy			
<i>Water Temperature</i>	Time	Degrees °C		
	9:40 AM	18.6°C 16.2	65.3°F 62.8	17.4°C 64.1°F
	10:06 AM	17.7°C 17.5	63.2°F 63.4	17.4°C 63.3°F
	10:28 AM	16.9°C 16.6	62.2°F 62.0	16.8°C 62.1°F
	11:32 AM	15.6°C 15.4	60.3°F 60.4	15.5°C 60.4°F
<i>Turbidity</i>	<i>Time</i>	<i>Turbidity Tube</i>		<i>Average</i>

	11:40 AM	69.6 cm 66 cm 61.5 cm		65.7 cm
<i>Chlorophyll</i>	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		
<i>Chemical</i>	<i>Time</i>	<i>DO</i>	<i>Temp</i>	<i>% saturation</i>
DO (drop kit)	11:16 AM 11:45 AM 12:06 PM	7 ppm 8 7	16°C 16°C 16°C	70% 80% 70%
pH – <i>test strips</i>	10:20 AM 10:30 AM 11:08 AM 11:30 AM	7.0 7.0 7.0 7.0	<i>Using probe</i>	7.5 7.9 7.85 7.84
<i>Nitrates</i>	10:00 AM	0 ppm		
<i>Salinity – QTs- Time</i>	<i>Quantab reading</i>	<i>Quantab Average</i>	<i>Chloride reading</i>	<i>Total Salinity conversion</i>
10:20 AM 10:34 AM 11:08AM 11:30 AM	7 & 7.2 7.9 & 7.6 7.6 & 7.8 7.2 & 7.5	7.1 7.8 7.7 7.4	581 ppm Cl- 680 ppm Cl- 671 ppm Cl- 626 ppm Cl-	1050 ppm T.S. 1228 ppm T.S. 1212 ppm T.S. 1131 ppm T.S.
<i>Fish Catch seine 9X4feet</i>	<i>Number Caught</i>	<i>Species</i>	<i>Length</i>	<i>MACROs</i>
	1	Eel	10.2 cm	Div = 6 Total Catch =81
	1	White Perch	10 cm	
	1	Butter Fish	22.86 cm	
	2	Killifish	10 cm	
	25	Shiner	10 cm	
	1	Hog Choker	7.5 cm	
	1	Summer Flounder		
	4	Bay Anchovy	9 cm	
Total Catch	36	Diversity	8	
4 Macro	3	Crab		
2 Macro Diversity	1	Dragonfly		
<i>Tides</i>	<i>Time</i>	<i>Tide Stick</i>	<i>Flood/Ebb Still</i>	<i>Rate of change</i>
	9:40 AM	19 cm	Start	

	10:06AM	9 cm	Ebb(Falling)	10 cm/26 mins
	10:32 AM	10 cm	~still	
	11:00AM	7 cm	Ebb	2 cm/54 mins
	11:45 AM	22 cm	Flood(Rising)	
<i>Currents</i>	<i>Time</i>	<i>Cm/60 secs</i>	<i>Cm/sec</i>	<i>knots</i>
	Data not included as it didn't make sense			
<i>Shipping</i>	Saw the Clearwater sailing both North & South			