

Day in the Life of the Hudson River 10/16/18 Data

LONG DOCK, BEACON, RIVER MILE: 61

Salt Front: ~RM 24

Excelsior Academy (Newburgh Free Academy)- Joyce D'Imperio

50 students 10th grade, 6 adults

Scenic Hudson- Kate Phipps, Kristin Welch

Constitution Marsh- Rebecca Schultz

Latitude 41.50312 N & Longitude – 73.98696 W

Location: Long Dock Park, Beacon, Dutchess County, NY

Area: Long Dock Park- a former brownfield now public park used for fishing, launching kayaks, picnics, fieldtrips, enjoying scenic view of the Hudson River, Hudson Highlands, and Hudson Valley. Most of the shoreline on the south side is lined with trees.

Surrounding Land Use: 25% Forested; 15% Beach; 60% Other

Sampling Site: Beach area rocky with lots of sand, water chestnut and grass

Plants in area: water chestnut

River Bottom: Muddy, Rocky

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature:</i>	9:23 AM	12 ° C	53.6 ° F	
	10:20 AM	10 ° C	50 ° F	
	11:50 AM	13 ° C	55.4 ° F	
	12:40 PM	16 ° C	60.8 ° F	
<i>Wind Speed:</i>	9:23 AM	5 mph	7.5 mph gusts	
	10:20 AM	6 mph	11 mph gusts	
	11:50 AM	6 mph	7 mph gusts	
	12:40 PM	7.5 mph	9 mph gusts	
<i>Weather Today:</i>	NA			
<i>Weather Previous:</i>	NA			
Water Temperature	9:45 AM	13.5 ° C	56.3 ° F	
	10:52 AM	12.5 ° C	54.5 ° F	
	12:00 PM	15 ° C	59 ° F	
	12:45 PM	14 ° C	57.2 ° F	
Turbidity -	<i>Time</i>	<i>meter</i>	<i>Long sight tube</i>	
	9:40 AM	24 NTUs	29 cm	
	10:50 AM	140 NTUs	10 cm	
Chemical				
<i>Salinity- Low Range Quantabs</i>	9:40 AM	32 ppm		
	10:50 AM	32 ppm		
	12:00 PM	32 ppm		
<i>DO –</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	9:45 AM	13.5 ° C	11	105
	10:52 AM	12.5 ° C	10	95
	12:00 PM	15 ° C	13	130
	12:45 PM	14 ° C	11	106
<i>pH -</i>	9:45 AM	7		
	10:52 AM	7.4		
	12:00 PM	7.4		
	12:45 PM	7.4		
Fish – seine	Number	Name	Length of longest	
	5	Striped Bass	7.7 cm	
	11	Spottail Shiner	11 cm	
	1	Alewife	2 cm	
	8	Blueback Herring	3 cm	
	4	White Perch	13 cm	

	2 1 1 1 1	Pumpkinseed Bluegill Banded Killifish Tessellated Darter Golden Shiner	16.5 cm 8 cm 9 cm 6.5 cm 6.5 cm	
	TOTAL: 35	Diversity: 10		
<i>Macroinvertebrates- Seine</i>	Number	Name	Length of longest	
	N/R			
	TOTAL:	Diversity:		
<i>Tides- dock to water</i>	Time	Rising, Falling, Still	Height (cm)	Rate of Tidal Change (cm/min)
	9:23 AM 10:20 AM 11:50 AM 12:40 PM	Rising Rising Rising Rising	290 203 200 191	- 1.526 0.033 0.18
Currents Flow	Cm/second	Knots	North/South	Ebb/Flood/Still
9:23 AM 10:20 AM 11:50 AM 12:40 PM	28 31 18.3 27.6	0.544 0.603 0.356 0.537		