

Day in the Life of the Hudson River 10/20/15 Data

RIVER MILE 23

Kinnally Cove & MacEachron Waterfront Park, Hastings-on-Hudson

Melissa Shandroff, Hastings High School APES 11th-12th grade, 65 students, 4 adults

Latitude 40°59'52"N, Longitude 73°53.03"W

Location: Kinnally Cove, Hastings-on-Hudson, Westchester County

Area: Beach area with riprap shoreline, next to the park – used both spaces. Beach is totally covered during high tide.

Surrounding Land Use: 50% industrial/commercial (next to old Anaconda site) but mainly parking lot now, 15 % forested, 10% grassy, 25% beach

Sampling Site: beach, banks altered, riprap on shoreline, bulkhead

Plants in area: grass and weeds

Water depth:

River Bottom – sandy/rocky bottom

<i>ITEM</i>	<i>9:30 AM</i>	<i>1:30 PM</i>		<i>Comments</i>
<i>Physical</i>				
Air temperature	54 °F 12.2°C	67.5°F 19.7°C		
Wind Speed	10.2 mph	6.5 mph		
Cloud Cover	Partly cloudy 26-50%			
Weather today	Part clouds no rain			
Weather recently	cool over the last few days,			
<i>Water Surface</i>	calm			
<i>ITEM</i>	<i>9:30 AM</i>	<i>1:30 PM</i>		<i>Comments</i>
<i>Turbidity – long site tube</i>	3.2 cm	8 cm		*This site has a muddy embayment
<i>Turbidity – short tube</i>	100 jtu	90 jtu		
<i>Water temperature</i>	13°C	15°C		
<i>Chemistry</i>				
<i>pH - Pen</i>	7.2	7.2		
<i>pH strips</i>	6.5	7		
<i>pH LaMotte kit</i>	6.8	6.8		
<i>DO – Hach kit</i>	8 ppm	10 ppm		
<i>% saturation</i>	75%	97%		
<i>Salinity - hydrometer</i>	8 ppt	11 ppt		
<i>Salinity – Refractometer</i>	9 ppt	10 ppt		
<i>Nitrate – LaMotte</i>	1 ppm	2ppm		

<i>Kits</i>				
<i>Phosphate – LaMotte kit</i>	2 ppm	2ppm		
<i>Fish Catch</i> Seine 30 ft. net	8 Atlantic Silversides 2 Striped Bass 1 Mummichog	13 Atlantic Silversides 10 Striped Bass 3 Mummichog 1 Banded killi		<i>DAY TOTAL FISH</i> <i>Diversity 4</i> <i>TC – 38</i> <i>MACRO</i> <i>Diversity 2</i> <i>TC - 21</i>
<i>Fish Only</i>	Diversity 3	Diversity 4		
<i>Total Catch</i>	T.C. 11	T.C. 27		
<i>Macros</i>	1 Blue Crab (M) 4 shrimp	1 Blue Crab (M) 15 shrimp		
	Diversity 2	Diversity 2		
<i>Total Catch</i>	T.C. 5	T.C. 16		
<i>Sediment Cores</i>	Not Collected			
<i>Tide</i>	NR			
<i>Currents</i>	Ebb	Flood		
	0.5 kts	4.74 kts		