

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

RIVER MILE 23

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

Melissa Shandroff, Hastings High School APES 11th-12th grade, 48 students, 3 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: 80% industrial/commercial (next to old Anaconda site), 5 % forested, 5% urban/residential, 10% beach

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

Plants in area: no water plants in area

Water depth: 4-6 ft.

River Bottom – sandy/muddy bottom

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	10:37 AM	73.9 °F °C	10:54 AM	74.4 °F °C
	11:15 AM	75.5 °F °C	11:34 AM	76.0 °F °C
	12:50 PM	72.9 °F		
Wind Speed	Beaufort 1		SW	
Cloud Cover	Overcast all day			
Weather today	Overcast, small amount of rain during samplings <1cm (11:15-noon)			
Weather recently	Rain, very humid			
<i>Water Surface</i>	Calm			
<i>Turbidity – long</i>	10:30 AM	33.0 cm		Average 39.3

<i>site tube</i>		45.0cm 40.0 cm		cm
<i>Chlorophyll</i>	10:45 AM	1.0		
<i>Water temperature</i>	10:30 AM	70.7 °F 69.8 °F	21.5°C 21°C	Avg 70.25 °F 21.25°C
	11:00 AM	68°F 69.8°F	20°C 21°C	68.9°F 20.5°C
	11:27 AM	69.8°F 69.9°F	21°C 21°C	69.8°F 21°C
	12:30 PM	69.8°F 73.4°F	21°C 23°C	71.6°F 22°C
<i>Chemistry</i>				
<i>pH - pen</i>	10:44 PM	7.6 7.5 7.0		Average 7.4
<i>DO</i>	10:44 AM	8 ppm	21.5°C	90% saturation
	1:02 PM	6 ppm	21.0	65 %
<i>Salinity *</i> Quantab high range	11:00 AM	1950 ppm Cl-	3523 ppm salinity converted	*3.5 ppt (seems low for other sites in the area)
<i>Fish Catch</i> Seine 9 ft. (20 ft. pull) Dip net, minnow trap	<i>Number Caught</i>	<i>Species</i>	<i>CPUE</i>	<i>Seine</i>
Diversity – 4 Total Catch - 11	5	<i>Atlantic Silverside</i>	<i>Menidia menidia</i>	7.5 cm
	1	<i>Striped Bass</i>		7.5 cm
*reported as smallmouth bass - a freshwater fish	1	<i>*White Perch or a Spot</i>		23 cm
	4	<i>Blue Crab</i>		1 large, 3 babies
<i>Sediment Cores</i>				
<i>Tide</i>	10:36 AM	Rising	40 cm	
	10:51AM	Rising	58 cm	1.2 cm/min
	11:05 AM	Rising	65 cm	0.5 cm/min
	11:25 AM	Rising	68 cm	0.15 cm/min
<i>Currents</i>				
<i>Time</i>	<i>CM/60 sec</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>N/S</i> <i>Ebb/Flood</i> <i>Still</i>

10:37 AM	50cm	0.83 cm/sec	0.0162 kts	N - Flood
11:12 AM	22	0.36	0.00071	N - Flood
11:20 AM	26	0.43	0.0084	N - Flood
11:35 AM	500	8.33	0.162	N - Flood
12:25 PM	0	0		Still
<i>Shipping</i>	11:13 AM	Cargo	White/Black	North - light
	11:13 AM	Motorboat	White	South
	11:38 AM	Motorboat	White	North
	11:38 AM	Motorboat	White	South
	1:17 PM	Cargo	Black/Green	North – light
	1:25 PM	Cargo	Black	North- light
<i>Almanac Entry</i>	<p>Despite it being an overcast day, today was lovely! It was fun to identify fish and spend the day near the water. Everyone had a lot of fun and today was very productive. I think I can speak for everyone when I say I am glad I was a part of a Day in the Life! Emily Romano</p> <p>Reflecting on our day at the Hudson River it was a really fun experience. From easy procedures such as chucking oranges into the river to harder procedures like determining dissolved oxygen in the river water, we did some pretty compelling experiments. We caught some fish, we tested with complex devices, and we truly had a great time. Miranda Mitchell</p>			