

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

**GARRISON LANDING**

**RIVER MILE: 51.5**

*Salt Front: ~RM 24*

**Garrison School- Kevin Keegan**

**25 students 7<sup>th</sup>-8<sup>th</sup> grade, 5 adults**

**Hudson Highlands- Lisa Mechaly**

**Latitude 41.38207 N & Longitude – 73.94799 W**

**Location:** Garrison Landing Park, Garrison, Putnam County, NY

**Area:** Waterfront beach area with a pier in front of grassy park primarily used for boating and picnics

**Surrounding Land Use:** 60% Forested; 20% Urban/Residential; 10% Industrial/Commercial; 10% Other

**Sampling Site:** Rocky shoreline, pier, shore with bulkhead, riprap, grassy, parking lot

**Shoreline:** sandy, muddy

**Plants in area:** no plants in water area

**Water:** 3 feet deep, choppy

**River Bottom:** muddy; sandy

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<b>Physical</b>				
<i>Air Temperature:</i>	10:05 AM	10 ° C	50 ° F	
	12:16 PM	16 ° C	60.8 ° F	
<i>Wind Speed:</i>	10:12 AM	SW Beaufort 1	1-3 Knots	
	11:26 AM	N Beaufort 5	1-3 MPH	
	12:17 PM	SW Beaufort 2		
<i>Weather Today:</i>	10:13 AM partly cloudy (26-50%), 12:20 PM mostly cloudy (51-75%). No rain, very cold and windy			
<i>Weather Previous:</i>	Very rainy- on and off for the past 3 days			
<b>Water Temperature</b>	10:20 AM	14.5 ° C	58 ° F	5 inches
	10:29 AM	17.8 ° C	55 ° F	
	10:35 AM	15.1 ° C	60 ° F	
	11:54 AM	15.6 ° C	60 ° F	2.10 feet
<b>Turbidity - Secchi disk</b>	10:44 AM	100 cm		
<b>Salinity- Low Range Quantabs</b>	11:45 AM	101 ppm Cl <sup>-</sup>	182 ppm Total Salinity	
<i>DO – titrator strips, color match</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	10:54 AM	15.6 ° C	8	81
	11:08 AM	15.6 ° C	8	81
<i>pH - color match</i>	11:49 AM	7		
	11:54 AM	7		
<b>Fish – seine</b>	<b>Number</b>	<b>Name</b>	<b>Length of longest</b>	Seine: 60'x 94.2'x 1/4' mesh <b>Group # 1</b> <i>Diversity: 5 Total: 29</i>  <b>Group #2:</b> <i>Diversity: 4 Total: 6</i>  <b>Group #3:</b> <i>Diversity: 7 Total: 17</i>
<i>Group #1: 10:05 AM</i>	1	Pumpkinseed	8 cm	
	2	Hogchoker	5 cm	
	19	Herring	11 cm	
	2	Banded Killifish	8 cm	
	5	Striped Bass	7 cm	
<i>Group #2: 11:00 AM</i>	3	Hogchoker	12 cm	
	1	Darter	7 cm	
	1	American Eel	17 cm	
	1	Yellow Perch	7 cm	
<i>Group #3: 12:15 PM</i>	1	Naked Goby	4 cm	
	1	Sunfish	4.5 cm	
	2	Darter	6.5 cm	
	1	Black Crappie	12.2 cm	
	2	American Eel	19 cm	
	2	White Perch	12 cm	

	1	Hogchoker	5 cm		
	<b>TOTAL: 52</b>	<b>Diversity: 12</b>			
<b>Macroinvertebrates-</b>	<b>Number</b>	<b>Name</b>	<b>Length of longest</b>		<b>Group # 1</b>
Group #1: 10:05 AM	5	Blue Crab	2 cm		Diversity: 1 Total: 5
Group #2: 11:00 AM	7	Blue Crab	Male		<b>Group #2</b>
	1	Mud Crab	Male		Diversity: 2 Total: 8
Group #3: 12:15 PM	9	Blue Crab	Male		<b>Group #3:</b>
	1	Mud Crab			Diversity: 2 Total 10
	<b>TOTAL: 23</b>	<b>Diversity: 2</b>			
<b>Tides-</b>	<b>Time</b>	<b>Rising, Falling, Still</b>	<b>Height (cm)</b>	<b>Rate of Tidal Change (cm/min)</b>	
	9:30 AM	-	12.7	-	
	10:30 AM	Still	12.7	0	
	11:30 AM	Falling	5.08	0.127	
<b>Currents Flow</b>	<b>Time</b>	<b>Cm/second</b>	<b>Knots</b>	<b>North/South</b>	<b>Ebb/Flood/Still</b>
	10:01 AM	18.2	0.354		
	10:15 AM	18.2	0.354		