

Day in the Life of the Hudson River 10/22/19

HENRY HUDSON PARK, BETHLEHEM

RIVER MILE: 138

Salt Front: ~ RM 53

The Albany Academics- Sarah Loya and Bob Neudel

31 students 5th grade, 5 adults

College of St. Rose- Mary Cosgrove

Latitude 42.543455 N & Longitude – 73.759119 W



Location: Henry Hudson Park Waterfront, Bethlehem, Albany County, New York

Area: Park/boat launch, used for picnics, just north of Vloman Kill

Surrounding Land Use: 100% parkland with 75% vegetated coverage

Sampling Site: Grassy, parking lot, banks altered, riprap, bulkhead rocky

Plants in area: Water chestnuts

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<i>Physical</i>				
<i>Air Temperature</i>	9:36 AM 10:23 AM 10:45 AM 11:20 AM 11:43 AM 11:55 AM	14 °C 12 °C 12 °C 14 °C, 13 °C 16 °C 16 °C	53.6 °F 53.6 °F 57.2 °F, 55.4 °F	
<i>Wind Speed: Anemometer</i>	9:36 AM 10:23 AM 10:45 AM 11:20 AM 11:43 AM 11:55 AM	0 mph 1.8 mph, 6.1 mph 4.8 mph, 2.4 mph 4.7 mph, 1.9 mph 6.7 mph, 10.8 mph 3.2 mph, 5.1 mph	Beaufort 0 Beaufort 1-2 Beaufort 1-2 Beaufort 1-2 Beaufort 2 Beaufort 1-2	North North North North North North
<i>Weather today</i>	NA			
<i>Weather the past 3 days:</i>	NA			
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Height (cm)</i>	<i>Rate of Tidal Change (cm/min)</i>
	9:36 AM 10:23 AM 10:45 AM 11:20 AM 11:43 AM 11:55 AM	Rising Rising Rising Rising Rising Rising	+3.5 cm +1.5 cm +1 cm + 0.5 cm +1 cm + 4 cm	NA 0.032 0.045 0.014 0.043 0.333
<i>Current-</i>	<i>cm/second</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Still</i>

	9:36 AM 10:23 AM 10:45 AM 11:20 AM 11:43 AM 11:55 AM	0.33 cm/s 1 cm/s, 1.33 cm/s 1.83 cm/s, 2.33 cm/s 2.67 cm/s, 3 cm/s 3.7 cm/s 3.3 cm/s, 2.3 cm/s	South South South South South South	Ebb Ebb Ebb Ebb Ebb Ebb
Water Temperature	9:36 AM 10:23 AM 10:45 AM 11:20 AM 11:43 AM 11:55 AM	12 ° C 11 ° C 11.5 ° C 12 ° C 12 ° C 11 ° C, 12 ° C	51.8 ° F 52.7 ° F 53.6 ° F	
Turbidity - long sight tube	9:35 AM 10:10 AM 10:46 AM 11:08 AM 11:31 AM 12:00 PM	31.2 cm 32 cm 42 cm, 32 cm - average 37 cm 32 cm, 32 cm – average 32 cm 25 cm, 31 cm – average 28 cm 32 cm		
Chemical				
Salinity- quantabs LR	<i>Time</i> 9:35 AM 10:10 AM 10:40 AM 11:10 AM 11:40 AM 12:00 PM	<i>Chloride ppm Cl⁻</i> 32 ppm 27 ppm 17 ppm 22 ppm 22 ppm 22 ppm	<i>Total Sal. Ppm</i> 58 ppm 49 ppm 31 ppm 40 ppm 40 ppm 40 ppm	
DO –	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	9:35 AM 10:10 AM 10:40 AM 11:10 AM 11:34 AM 12:02 PM	12 ° C 11 ° C 11.5 ° C 12 ° C 12 ° C 11 ° C, 12 ° C	9 ppm *air bubble 9 ppm 7 ppm 9 ppm 10ppm *air bubble 12 ppm *air bubble	
pH –	9:35 AM 10:10 AM 10:40 AM 11:10 AM 11:40 AM 12:00 PM	7 7 7 7 7 7.4		
Chlorophyll	9:35 AM 10:10 AM 10:40 AM 11:10 AM 11:40 AM 12:00 PM	1 ppm 1.5 ppm 0.7 ppm 1.5 ppm 1.5 ppm 0.7 ppm		
Fish	Number	Name	Length of longest	
Seine	10	Goldfish	*all in a cove	9:30-10:30 AM
Fish Totals	TOTAL: 10	Diversity: 1		
Macroinvertebrates	Number	Name	Length of longest	
NA				
Macroinvertebrate Totals	TOAL:	Diversity:		
Sediment Core	Color	Smell	Texture	Composition
	Dark brown,	Smells like	Moist, clay-like,	Mostly mud, some

	olive green, some black	dirt/mud/grass/woody- smell	mostly smooth (feels like play- doh), squishy, a little grainy, slightly prickly, sandy	grass, roots, 4 tiny worms, small rock
Boats	Time	Name/Color	North/South	Loaded/Unloaded
	10:10 AM	Two Boats passed	NA	
	10:31 AM	Boat passed	NA	
Recreational	10:50 AM	Sailboat passed	NA	
Recreational	11:52 AM	Small boat passed	NA	
Recreational	12:13 PM	Small boat passed	NA	
Commercial	12:25 PM	Shipping Boat passed	NA	
Recreational	12:27 PM	Small Boat passed	NA	
Observations	Water chestnuts			