

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

INWOOD HILL PARK, MANHATTAN

RIVER MILE: (Hudson River) 12.75

Salt Front: ~ RM 53

Comprehensive Model School Project- Carolina Castro

New York City Park Ranger- Dan Tainow

35 students 10th grade, 4 adults

Latitude 40.87308 N & Longitude – 73.92105 W

Location: Inwood Park, sampling on the Hudson River side of the park, Manhattan, NY

Area: Hudson River waterfront, a pier and a park

Surrounding Land Use: 10% Forested; 40% Park

Sampling Site: beach area and a pier

Shoreline: beach

Water: calm

ITEM	Time	Reading		Comments
Physical				
<i>Air Temperature</i>	11:02 AM	16 ° C		
<i>Wind Speed:</i>	NR			
<i>Weather today</i>	10:30 AM Overcast (100%) Drizzle			
<i>Weather the past 3 days:</i>	Cool, dry, a little rain			
Tides- used a tide stick	Time	Rising, Falling, Unchanged	Height (cm)	Rate of Tidal Change (cm/min)
<i>LT was at 10:38 AM so stick set was just at the tidal switch.</i>	10:40 AM*		75	NA
	11:06 AM	Rising	85	0.385
	11:22 AM	Rising	89	0.25
	11:45 AM	Rising	95	0.261
	12:05 PM	Ebb	91	0.2
Current-	cm/second	North/South	Ebb/Flood/Still	Comments
10:20 AM	3.3		Transition time	*LT was at 10:38 AM. Recorded as ebbing all day but should be flooding
10:53 AM	6.6		Flood	
11:20 AM	5.2		Flood	
Water Temperature	11:30 AM	16 ° C, 15 ° C	60.8 ° F, 59 ° F	Avg. 15.25 ° C
	11:41 AM	15 ° C, 15 ° C	59 ° F, 59 ° F	59.5 ° F
Turbidity - long sight tube	11:00AM	64 cm, 47 cm, 37 cm - Avg: 49.3 cm		Water is very cloudy; yellow and green
Chemical				
Salinity- Hydrometer	Time	Chloride ppm Cl	Total Sal. ppm	
	11:00 AM		8000 ppm	
	11:03 AM		7500 ppm	
	11:12 AM		11000 ppm	
DO – drop count kit	Time	Temp	ppm DO	% saturation
*Way too high. Caroline noted reagents were old and needed replacing.	10:56 AM	15 ° C	22 ppm	140%+
	11:30 AM	13 ° C	20 ppm	140%+
pH – color match test	11:43 AM	8.4, 7.2, 8.4		
Fish	Number	Name	Length of longest	
Seine: 10 m	28	Atlantic Silverside	10 cm	
Fish Totals	TOTAL: 28	Diversity: 1		
Macroinvertebrates	Number	Name	Length of longest	

	2	Comb Jelly		
Macroinvertebrate Totals	TOAL: 2	Diversity: 1		
<i>Sediment Core</i>	<i>Time</i>	<i>Oxid Top</i>	<i>Grain Size</i>	<i>Other Features</i>
Length: 5 cm		No	Common: mud, sand, gravel, pebbles	H ₂ S smell Some glass in the core
Boats	Time	Name/Color	North/South	Loaded/Unloaded
Recreational Recreational	12:20 PM 11:30 AM	Jet ski, White Sail boat, White		
Observations	NR			