

**Day in the Life of the Hudson River 10/22/19
 RANDALL'S ISLAND, MANHATTAN
 RIVER MILE: (Harlem River) 1**

Salt Front: ~ RM 53

**Dwight School- Emma Ryan, Shalini Bhavani, Michelle Watch
 70 students 7th grade, 10 adults**

**Randall's Island- Chris Girgenti, Jacqueline Wu and staff
 Latitude 40.789126 N & Longitude – 73.932872 W**



Location: Randall's Island Park, Harlem River, Manhattan, NY

Area: Randall's Island Park, Harlem River Waterfront (North of 103rd St. bridge/Ward's Island Bridge), sandy adjacent to shore, increasingly muddy with depth; sporadic rocks

Surrounding Land Use: 50% Urban/Residential, 40% Parkland, 10% Beach

Sampling Site: Grassy, beach, banks altered, wood bulkhead, concrete bulkhead, riprap, pipe entering water

Shoreline: 90% Sandy; 10% Rocky

Water: calm

River Bottom: 60% Rocky, 40% Sandy

Plants in water: no plants in water area

ITEM	Time	Reading		Comments
Physical				
Air Temperature	10:00 AM 11:00 AM 11:20 AM	15 ° C 13 ° C 13 ° C		
Wind Speed:	9:58 AM	Beaufort 1	0.6 mph	
Weather today	Overcast, rain			
Weather past 3 days:	Rainy, warm one day			
Tides-	Time	Rising, Falling, Unchanged	Water Height (cm)	Rate of Tidal Change (cm/min)
	HT 5:25 AM (137 cm) LT 11:26 AM (21 cm)	NR		
Current-	Time	ft/second	North/South	Ebb/Flood/Still
	10:00 AM 10:30 AM 12:10 PM	3 0.15 0.41	South South North	Ebb Ebb Flood
Water Temperature-	11:00 AM 11:30 AM 12:00 PM	16.4 ° C, 16.3 ° C, Avg: 16.35 ° C 16.4 ° C, 16.4 ° C, Avg: 16.4 ° C 16.4 ° C, 16.5 ° C, Avg: 16.45 ° C		
Turbidity- long sight tube	11:00 AM	28 cm, 22 cm, 25 cm, Avg: 25 cm		Brownish with low visibility
Chemical				
Salinity- Hydrometer	11:00 AM 11:30 AM 12:00 PM	24,000 ppm, 22,000 ppm, 22,000 ppm 20,000 ppm, 21,000 ppm, 21,000 ppm 16,000 ppm, 11,000 ppm, 15,000 ppm		Avg: 22,333 ppm 20,666 ppm 14,000 ppm
DO –	Time	Temp	ppm DO	% saturation

	11:00 AM 11:30 AM 12:00 PM	16.5 ° C 16.4 ° C 16.4 ° C	10.46 7.52 7.64	105 66 66
pH –	11:00 AM 11:30 AM 12:00 PM	6.5, 6.8, 6.9 6.5, 6.9, 6.8 6.8, 6.8, 6.9		
Nitrates- Estuary wide kit	11:00 AM	5 ppm, 5 ppm, 5 ppm		<i>*Estuary wide kits have low resolution.</i>
Phosphates- Estuary wide kit	11:00 AM	4 ppm, 2 ppm, 0 ppm		
Biological				
Fish	Number	Name	Length of longest	
Seine 1	55	Atlantic Silversides	10 cm	Totals: Atlantic Silversides 496 Northern Pipefish 1 Striped Bass 1 Winter flounder 2
2	20	Atlantic Silversides	10 cm	
3	1	Northern pipefish	10 cm	
	12	Atlantic Silversides	9 cm	
4	12	Atlantic Silversides	10 cm	
5	1	Striped Bass	10 cm	
	20	Atlantic Silversides	10 cm	
	1	Winter Flounder	9 cm	
6	349	Atlantic Silversides	10 cm	
	1	Winter Flounder	10 cm	
7	28	Atlantic Silversides	14 cm	
Fish Totals	TOTAL: 500	Diversity: 4		
Macroinvertebrates	Number	Name	Length of longest	
Seine 1	3	Blue Crab	4 cm carapace	
2	1	Moon Jelly		
	1	Comb Jelly		
3	4	Blue carb	4 cm carapace	
	5	Comb Jelly		
4	5	Comb Jelly		
5	0	NA		
6	4	Blue Crab		
	1	Comb Jelly		
7	1	Blue Crab		
Macroinvertebrate Totals	TOTAL: 35	Diversity: 3		
Sediment Core	Time	Oxidized Top	Grain Size	Other Features
19 cm water depth 40.7888800, -739329306 Core Length was not recorded	10:00 AM	No	Abundant: sandy, pebbles Common: gravel Rare: clay, mud	Common: brick, coal, slag Rare: leaves, macroinvertebrates
Boats	Time	Name/Color	North/South	Loaded/Light
Commercial	10:20 AM	NYPD blue and white	North	Light
Commercial	11:10 AM	Circle Line white/green	North	Light
Commercial	11:20 AM	FDNY red/grey	South	Light
Recreational	11:30 AM	Black	South	Light
Observations				