**Day in the Life of the Hudson River 10/20/15Data**

**HARLEM RIVER MILE 13b**

**Sherman Cove Park saltmarsh flats, Harlem River**

**Obed Fulcar, Friends of Sherman Creek**

**MS319 Middle School, 8thgrade, 25 students, 2 adult**

**GPS Latitude 40.85 E -**  **Longitude -73.92 N**

**Note: We participate in the Billion Oyster Project and so it played a role in our sampling. Here we are checking the oyster cage.**

**Academy Street (New CON ED substation)**

**N**

**Sherman Creek**

**W** **E** **HARLEM RIVER**

**PHRAGMITES FOREST**

XXXXXXXXXXXXXXXX

**200 St** **S**  **PS 5 Snapshot Day Site**

**HARLEM RIVER DRIVE**

**UPLAND TREES**

XXXXXX

**SITE MAP**

**Location:** Saltmarsh/mudflats at Sherman Cove Park next to a side road/school building, adjacent to Swindler Cove next to the north end of Harlem River Drive, Manhattan – a forever wild area.

**Surrounding Land Use:** 40% urban/residential, 50% forested, 5% beach, 5% Industrial/commercial.

**Sampling Site:** Beach area, covered with vegetation - Sampled in salt marsh covered with phragmites on one side and a mudflat with gravel on the shore, pipe with 1 m diameter north of sampling site

**Shoreline:** 20% muddy, 80% rocky

**Plants in area:** Rocks covered with algae and cord grass spartina. 5% of water area has plants in it. 40% of site is invasive Phragmites, 20% other

**River Bottom**: muck/muddy bottom – water 1 ft. depth

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |  | | | |
| Air Temperature | 10:15 AM | 22.1°C | 70.2 °F |  |
| Wind Speed | 10:05 AM | 5 m/sec | NW |  |
| Cloud Cover | Clear <25% |  |  |  |
| Weather today | Clouds | No rain |  |  |
| Weather recently | Sunny & cold |  |  |  |
| Water Conditions | calm |  |  |  |
| ***Water Temperature*** | 11:00 AM | 15.0 °C  19.9 °C  14.7 °C |  | Average 16.5°C |
| ***Turbidity – Long sight tube*** | 11:30 AM | 49.5 cm  26.1  34 |  | Average 36.5 cm |
| ***Chemical*** |  |  |  |  |
| DO – LaMotte greenforce kit – (**note**:this is a low resolution sample kit) | 11:30 -11:35 AM | 7 ppm  9 ppm  11 ppm | Average 9 ppm | 92% saturated |
| pH – | 11:30 AM | 7.25  7.28  7.34 | Average 7.29 |  |
| Salinity – hydrometer & meter | 12:30 PM | 16.1 ppt | \*Also reported Meter data but this is too high – perhaps error in calibration of meter | \* Reported -21  32  34  Average for meter = 29 ppt |
| Phosphate | Not read |  |  |  |
| ***Fish Catch – 10 ft. net pull 30 ft., 31 fish caught*** | ***Number Caught*** | ***Species*** |  | ***Size*** |
| ***12:45 PM*** | None caught |  |  |  |
| ***Tides*** | 10:20 AM | Rising | LT ~ 9AM |  |
| ***Currents*** | 7.6 m/42 secs | | 760 cm/42 sec | 18 cm/sec |
| ***Core Sample Sediments*** |  | | | |
|  | **Core Length** | **Common** | **Abundant** | **Notes** |
|  | 5 cm | Sand  Gravel  Pebbles  Shells | Mud  Living Vegetation | H2S smell |
| ***Commercial Traffic*** | 10:30 AM | Circle Line | Northbound | Loaded with people |
|  | 10:45 AM | Tugboat | Southbound | light |
| ***Other Items*** | Seagulls, yellow leaves from Autumn in the sample area. | | | |