**Day in the Life of the Hudson River 10/20/16 Data**

**(Salt Front ~ RM 83)**

**RIVER MILE 11.5 – Fort Washington Park**

**Katie White, Marymount School of New York**

**51 students 7th grade, 7 adults, 8 adults**

**Latitude 40°50’46.42444” N - Longitude -73.°56’46.914”W**

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**Location:** Fort Washington Park just South of the George Washington Bridge

**Area:** Site is a sandy beach with rip rap adjacent to a paved jogging trail within a grassy park. Some trees on far side of jogging trail but none next to water. Very little aquatic vegetation.

**Surrounding Land Use**: : 14% forested, 85% grass park land, 1% beach,

**Sampling Site:** Park with a lot of trees, picnic tables, covered with vegetation, lots of riprap shore, collected wood debris. Large outflow pipe directly south of site <100 meters

**Plants in water:** None

**Water depth**: 2-4 ft.

**River Bottom** –mainly sandy and rocks, no mud this year (past years yes)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |   |  |  |  |
| Air Temperature | 9:51 AM10:16 AM10:59 AM1:00 PM1:43 PM | 20°C21222525 |  |  |
| ***Wind Speed –*** | ***Time*** | ***Clouds*** | ***Beaufort #*** | ***Wind m/s*** |
|  | 9:53 AM | mostly cloudy | 3 - SW | 8.7 |
|  | 10:14 AM | mostly cloudy | 2 - SW | 6 |
|  | 11:01 AM | mostly cloudy | 3 - SW | 8.3 |
|  | 1:05 PM | mostly cloudy | 2 - SW | 7.1 |
|  | 1:24 PM | mostly cloudy | 1 - SW | 2.9 |
| Cloud Cover | 10:0610:2610:5512:2412:52 | Partly cloudy MostlyMostlyClearClear | 25-50 %51-7551-75<25<25 |  |
| Weather today | No rain | Consistent weather throughout day |
| Weather last 3 days | Weather for past 3 days: Warm (low 80s) and dry (no rain) |
| **Water** | Water mainly calm, some small wavelets |
| ***Water Temperature*** | 9:49 AM10:23 AM10:48 AM12:18 PM12:51 PM | 11°C12°C 14°C18°C15°C  |  |  |
| ***Turbidity -***  *Long site tube* | 9:46 AM10:22 AM11:00 AM12:58 PM1:30 PM  | 57.4 cm63.22cm59.2 cm17.9 cm13.1 cm |  | Tide was very high in the PM & mixing with sand on the beach  turbidity |
| ***Chemical*** |  |  |  |  |
| DO *Salifert Kit* *(each measurement is avg. of 4-5)* | 9:46 AM10:21 AM10:55 AM12:41 PM1:26 PM | 18.5°C17.52019.520 | 6.8 ppm5.65.84.25.5 | 70% saturation60%60%43%60% |
| pH *color match test kit - (each measurement is avg. of 4-5)* | 9:46 AM10:21 AM10:55 AM12:41 PM1:26 PM | 7.67.47.67.67.7 |  |  |
| *Salinity* |  | *refractometer* | *hydrometer* |  |
|  | 9:36 AM10:20 AM10:50 AM12:50 PM1:10 PM | 21.6 ppt 20.82021.523.8 | **30 ppt****26.4**20.422.622.8 | ***Average 21.54****\**Bolded values are outliers – refractometer is more accurate.  |
| ***Fish Catch – 9 ft. 30 ft. pull -***  ***22 seines – 8 with no catch*** | ***Time*** | ***Fish Species*** | ***# caught*** | ***Length cm*** |
| ***Seine #3*** | 9:51 AM | Atlantic Silversides | 9 | 8.5 |
| ***#4*** | 9:55 AM | Atlantic Silversides | 15 | 10.5 |
| ***#6*** | 10:20 AM | Striped Bass | 1 | 9 |
| ***#7*** | 10:30 AM | Atlantic Silversides | 8 | 12.5 |
| ***#10*** | 10:55 AM | Bluefish | 1 | 15.5 |
| ***#21*** | 1:21 PM | Atlantic Silversides | 1 | 10.5 |
| ***#22*** | 1:35 PM | Bay Anchovy | 1 | 6 |
| ***TOTAL DIV - 3*** | **TOTAL CATCH 36** |  |  |  |
| ***Macroinvert*** | ***Number***  | ***Macros***  | ***Number*** | ***Additional Info*** |
| ***Seine #2*** | 9:38AM | Portunid crab | 4 | All Male |
|  |  | Hydroid Medusa | 1 |  |
| ***#4*** | 9:55 AM | Portunid crab | 4 | All Male |
| ***#5*** | 10:14 AM | Portunid crab | 1 | Male |
| ***#10*** | 10:55 AM | Portunid crab | 1 | Male |
| ***11*** | 11:15 AM | Ctenaphore  | 2 |  |
| ***#12*** | 11:18 Am  | Hydroid Medusa | 1 |  |
|  |  | Portunid crab | 2 | 1 M, 1F |
| ***#14*** | 12:47 PM | Portunid crab | 1 | F |
| ***#18*** | 12:59 PM | Hermit Crab | 1 |  |
| ***#19*** | 1:07 PM | Portunid crab | 1 | M |
| ***#20*** | 1:17 PM | Hermit Crab | 2 |  |
|  |  | Ctenaphore | 2 |  |
|  |  | Hydroid Medusa | 8 |  |
| ***Macro – Div. 4*** | ***Totals 31*** |  |  |  |
| ***Tides*** | 9:45 AM | Rising | 27 cm | --- |
| Data collected  | 10:24 AM | Rising | 40 | 0.33 |
| With stick in | 10:45 AM | Rising | 55 | 0.71 |
| the sand | 11:15 AM | Rising | 60 | 0.17 |
|  | 12:52 PM | Rising | 85 | 0.27 |
|  | 1:15 PM | Rising | 83 | -0.09 |
| ***Currents*** | **Cm/Sec** | **Ebb/Flood/Still** | **Note**  |
| ***9:45 AM******10:24 AM******10:45 AM******12:52 PM******1:15 PM*** | 17 cm/s4.66.17.74 | EbbEbbEbbEbbEbb | We threw orange as far as possible but caught in side current. We expected flood based on tide |
| ***Shipping – Commercial***  | 10:08AM  | Tug  | Course of America | N - Light |
|  | 11:06 AM  | Cargo  | BBC Alabama  | N - Light |
| ***Recreational***  | 9:45 AM | Speed boat | n/a | South |
|  | 10:04 AM | Sail boat | L'aeuse aux Fraises | South |
|  | 10:31 AM | Speed Boat | n/a | South then North |
|  | 12:39 PM | Yacht | n/a | North |
|  | 12:39 PM | Sail boat | n/a | South |
|  | 12:39 PM | Sail boat | n/a | South  |
|  | 12:54 PM | Sail boat | n/a | South  |