

Day in the Life of the Hudson River 10/12/17 Data
(Salt Front ~ RM 65)
RIVER MILE 11.5 – Fort Washington Park
Katie White, Marymount School of New York
53 students 7th grade, 8 adults
Latitude 40°50'46.42444" N - Longitude -73.°56'46.914"W

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: 70% urban /residential, 25% forested, 5% 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.

Water: Choppy

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

| <i>ITEM</i> | <i>Time</i> | <i>Reading 1</i> | <i>Reading 2</i> | <i>Comments</i> |
|-----------------------------------|---|--|-------------------|-----------------|
| <i>Physical</i> | | | | |
| Air Temperature | 9:40 AM 10:10 AM 10:45 AM 12:20 PM 12:55 PM | 15°C 15 14.5 16 16.5 | | |
| <i>Wind Speed –</i> | <i>Time</i> | <i>Clouds</i> | <i>Beaufort #</i> | <i>Wind m/s</i> |
| | 9:45 AM | Overcast >75% | 2 - N | 1.2 |
| | 10:12 AM | Overcast >75% | 2 - N | 1.5 |
| | 10:47 AM | Overcast >75% | 2 - N | 1.6 |
| | 12:23 PM | Overcast >75% | 3 - N | 3 |
| | 12:56 PM | Overcast >75% | 2 - N | 2 |
| Weather today | Rain | Light overnight rain until 9AM | | |
| Weather last 3 days | Weather for past 3 days: Rainy or overcast – high ~75 degrees F | | | |
| <i>Water Temperature</i> | 9:35 AM 10:00 AM 10:38 AM 12:15 PM 12:44 PM | 20°C 20°C 20°C 20°C 20°C | | |
| <i>Turbidity - Long site tube</i> | 9:55 AM 10:13 AM 10:45 AM 12:20 PM 12:53 PM | 42.3 cm 43 cm 59 cm 86 cm 84cm | | |

| | | | | |
|--------------------|---------------|----------------------|-------------------|------------------------|
| Chemical | | | | |
| DO | 10:02AM | 20°C | 5 ppm | 50% saturation |
| Salifert Kit | 10:28 AM | 20 | 5 | 50% |
| (each | 10:59 AM | 20 | 7.5 | 85% |
| measurement is | 12:36 PM | 20 | 7.5 | 85% |
| avg. of 4-5) | 1:07 PM | 20 | 6 | 65% |
| pH | 9:45 AM | 7.5 | | |
| color match test | 10:13 AM | 8 | | |
| kit - (each | 10:45 AM | 7.7 | | |
| measurement is | 12:23 PM | 7.8 | | |
| avg. of 4-5) | 12:53 PM | 8 | | |
| Salinity | | <i>refractometer</i> | <i>hydrometer</i> | |
| | 9:40 AM | 22 ppt | 24.25 ppt | . |
| | 10:20 AM | 20 | 23 | |
| | 10:45 AM | 20 | 21 | |
| | 12:20 PM | 20.5 | 20.25 | |
| | 12:55 PM | 20 | 20.25 | |
| Fish Catch | Time | Fish Species | # caught | Length cm |
| Seine #1 | 9:39 AM | Atlantic Silversides | 110 | 10.5 |
| #2 | 9:49 AM | Striped Bass | 1 | 13 |
| #5 | 10:15 AM | Atlantic Silversides | 24 | 10 |
| #8 | 10:45 AM | Atlantic Silversides | 2 | 6 |
| #9 | 12:00 PM | Atlantic Silversides | 44 | 9.5 |
| #12 | 12:33 PM | Atlantic Silversides | 7 | unknown |
| TOTAL DIV – | 2 | TOTAL CATCH | 188 | |
| Macroinvert | Number | Macros | Number | Additional Info |
| Seine #1 | 9:39AM | hermit crab | 1 | |
| #2 | 9:49 AM | Blue Crab | 2 | F |
| | | Hermit crab | 2 | |
| | | Swimming crab | 2 | |
| #3 | 10:06 AM | Blue Crab | 1 | Male |
| | | Swimming crab | 1 | |
| | | Hermit crab | 2 | |
| | | Mud Snail | 1 | |
| | | Ctenophore | 1 | |
| #4 | 10:15 AM | Swimming Crab | 3 | |
| | | Hermit crab | 1 | |
| | | Mud snail | 1 | |
| | | Ctenophore | 2 | |
| #5 | 10:20 AM | Mud snail | 1 | |
| #6 | 10:30 AM | Swimming crab | 4 | |
| | | Mud snail | 1 | |

| | | | | |
|------------------------------|---------------|--|---|--------|
| | | Ctenophore | 2 | |
| #7 | ? | Mud snail | 1 | |
| | | Blue Crab | 1 | Male |
| #8 | 10:45 AM | Swimming crab | 1 | |
| | | Blue crab | 1 | F |
| #10 | 12:15 PM | Swimming crab | 1 | |
| #11 | 12:30 PM | Swimming crab | 1 | |
| #14 | ? | Swimming crab | 1 | |
| DIVERSITY | 5 | TOTALS 35 | | |
| Tides | 9:42 AM | Rising | 22.5 cm | |
| Data collected | 10:16 AM | Rising | 37 | |
| With stick in | 10:46 AM | Rising | 50.5 | |
| the sand | 11:48 AM | Rising | 80 | |
| | 12:24 PM | Rising | 105 | |
| | 12:54 PM | Rising | 110 | |
| Currents | Cm/Sec | Ebb/Flood/Still | Note | |
| 9:42 AM | 20.05 cm/s | Ebb | *Had trouble throwing the orange far enough into the channel. Results are averages of 2 or 3 tosses. The current may reflect side current which was unusually strong from noon on. | |
| 10:20 AM | 1.14* | Ebb | | |
| 10:46 AM | 27.46 | Ebb | | |
| 12:27 PM | 72.99 | Flood | | |
| 1:00 PM | 41.65 | Flood | | |
| Shipping – Commercial | 9:37 AM | Cargo Ship | Docked | Loaded |
| | 9:53 AM | Small Cruise Boat to Statue of Liberty | North | Loaded |
| | 10:43 AM | Coast Guard | North | Light |
| | 12:12 PM | Coast Guard | North | Light |
| | 12:12 PM | Cruise – Circle Line | South | Loaded |
| Recreational | 9:53 AM | Recreational Sailboat | South | n/a |
| | 10:23 AM | Sail boat | South | n/a |
| | 12:47 PM | Recreational – Elastic Failure | North | n/a |
| | 12:50 PM | Recreational | North | n/a |