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

**(Salt front ~ RM83)**

**RIVER MILE 94**

**Robert Post Park, Kingston, Ulster County**

**Meg Meisch, Rondout Valley High School**

**65 students 9th -12th graders, 6 adult helpers**

**GPS Latitude 42°01 N Longitude 73°94 W**

**Location:** Robert Post Memorial Park, Town of Ulster, Ulster County, NY

**Area:** Park space with fishing dock and boat launch

**Surrounding Land Use**: 30% urban/residential; 10% forested; 10% Beach, 50% parkland

**Sampling Site:** riprap on shoreline and broken concrete pieces on the shore

**Water depth**:

**River bottom** : rocky

**Plants in area -** none

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical***  |   |  |  |  |
| Air Temperature | 10:47 AM1:18 PM | 16°C20 °C | 62°F68°F |  |
| Wind Speed | Most of day no wind | Beaufort 1 | anemometer – 4 mph | NE |
| Cloud Cover | 51-76%  | Mostly cloudy |
| Weather today | No precip – became cloudier during the day |
| Weather recently | 80 degrees and unusually warm, dry |
| ***Water Temperature*** | ***Time*** | ***°C*** | ***°F*** | **AVERAGE****C F** |
|  | 9:36 AM11:03 AM1:00 PM | 15, 15, 16°C16,16,17 °C62.7,64.4,64.4°C | 59, 59, 60.8°F60.8,60.8,62.6°F62.7,64.4,64.4°F | 15.316.317.7 | 59.6 61.4 63.8 |
| ***Water surface*** | calm |  |  |  |
| ***Turbidity long******Site tube*** | 11:02 AM | 20 cm49 cm40cm |  | 36.3 cm Avg |
| ***Chemical*** |  |  |  |  |
| **DO** ***Hach Kit*** | **Time** | **Temp °C** | **DO**  | **% saturated** |
|  | 12:30 PM | 18°C | 9 ppm  | 95%  |
| pH – Litmus Paper | 10:20 AM | 555 |  | Average 5 |
| Salinity - Quantab | 11:05 AM | Quantab LR | 32 ppm Cl-32 ppm Cl-32 ppm Cl- | Converts to 58 ppm total salinity |
| ***Fish Catch****35’seine X 4 ft.*  | ***Number Caught-*** | ***Species -*** | ***Largest Size*** | ***Diversity & Totals*** |
| ***11 seines - 9:40-1:30 PM*** | 19 | mummichog |  | ***DIV - 11*** |
|  | 14 | Spottail Shiner |  | ***TOTALS = 162*** |
|  | 2 | Golden Shiner |  |  |
|  | 7 | White Perch |  |  |
|  | 102 | Banded Killifish |  |  |
|  | 1 | Catfish  |  |  |
|  | 10 | Pumpkinseed sunfish |  |  |
|  | 3 | Blueback herring |  |  |
|  | 2 | Darter |  |  |
|  | 1 | Bluegill Sunfish |  |  |
|  | 1 | Black Crappie |  |  |
| ***Macroinvert*** | 2 | Blue Crab |  | ***DIV- 2*** |
|  | 100+ | Zebra Mussels |  | ***TOTALS - 102*** |
| ***Tides*** | 9:46AM | 17.5 cm | start |  |
|  | 10:34 AM | 12 cm | Falling | 0.11 cm/min |
|  | 10:55 AM | 9 cm | Falling  | 0.14 cm/min |
|  | 11:20 AM | 6.5 cm | Falling | 0.10 cm/min |
|  | 12:19 PM | 9 cm | Rising | 0.04 cm/min |
|  | 12:39 AM | 15 cm | Rising | 0.3 cm/min |
|  | 12:55 PM | 20 cm | Rising | 0.3 cm/min |
|  | 1:06 PM | 24 cm | Rising | 0.4 cm/min |
|  | 1:22 PM | 29 cm | Rising | 0.31 cm/min |
| ***Currents – Time*** | ***Cm/30 secs*** | ***Cm/sec*** | ***Knots*** | ***N/S – E/F*** |
| 9:50 AM | 383 | 12.77 | 0.25 | S - E |
| 10:44 AM | 68 | 2.26 | 0.04 | S - E |
| 12:07 PM | 220 | 7.33 | 0.14 | N – F |
| 12:43 PM | 184 | 6.13 | 0.12 | N – F |
| 1:17 PM | 364 | 12.2 | 0.24 | N – F |
| ***Sediment Core***  | ***Length*** | ***Rare*** | ***Common*** | ***Abundant*** |
|  |  20 cm core -  | Sand | ClayGravel | MudBrick |