**Day in the Life of the Hudson River 10/10/13 Data**

**(Salt Front RM 69.3)**

**RIVER MILE 61.1 E**

**Beacon Waterfront Train Station Park, City of Beacon, Dutchess County**

**Nancy Rypkema and total of 16 adults/teachers - Valley Central Middle School,**

**7th & 8th graders (76 students )**

**Latitude 41°30’ 22” N - Longitude 73°59’ 07” W**

**Location:** Waterfront Park, Beacon, Dutchess County NY

**Area:** Park area near the Beacon train station - grassy lawns, forested around edges, parking lot to the side. Children’s play area

**Surrounding Land Use:** Industrial/Commercial 30%, Urban/residential 10%; Forested 30%; shoreline/beach 10% Other (Parkland) 20%

**Shoreline:** There is a bridge, transit station (train) and trees, concrete debris, dock

**Sampling Site:** beach, covered in vegetation, banks altered, rip rap

**Plants in area of sampling:** oak trees 10%; willow trees 10%; Grass 60%; maple trees 20%

**Water depth:** 0.5 m

**Bottom Surface:** muddy, rocky bottom

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading***  | ***Comments*** |
| ***Physical***  |   |  |  |  |
| Air Temperature | 10:04AM10:58 AM | 11.2°C13°C | 52.4°F54.1°F |  |
| Wind Speed | 11:00 AM | Beaufort #1 | 5.1 kts3 mph | NE |
| Cloud Cover | Overcast  |  |  |  |
| Weather today | Overcast - Sprinkled after 11:00 AM. |
| Weather recently | Monday tornado warning, Wed. sunny and cool  |
| ***Water Surface*** | Choppy |  |
| ***Water Temperature*** | **Time** | **Degrees °C** |  |  |
|  | 9:40 AM  | 18.6°C16.2 | 65.3°F62.8 | 17.4°C64.1°F |
|  | 10:06 AM | 17.7°C17.5 | 63.2°F63.4 | 17.4°C63.3°F |
|  | 10:28 AM | 16.9°C16.6 | 62.2°F62.0 | 16.8°C62.1°F |
|  | 11:32 AM | 15.6°C15.4 | 60.3°F60.4 | 15.5°C60.4°F |
| ***Turbidity*** | ***Time*** | ***Turbidity Tube*** |  | ***Average*** |
|  | 11:40 AM  | 69.6 cm66 cm61.5 cm |  | 65.7 cm |
| ***Chlorophyll*** | 10:10 AM10:25 AM11:15 AM11:25 AM12:10 PM | 0.00.00.00.00.0 |  |  |
| ***Chemical*** | ***Time*** | ***DO*** | ***Temp*** | ***% saturation*** |
| DO (drop kit) | 11:16 AM11:45 AM12:06 PM | 7 ppm87 | 16°C16°C16°C | 70%80%70% |
| pH – ***test strips*** | 10:20 AM10:30 AM11:08 AM11:30 AM | 7.07.07.07.0 | ***Using probe*** | 7.57.97.857.84 |
| ***Nitrates*** | 10:00 AM | 0 ppm |  |  |
| ***Salinity –QTs- Time*** | ***Quantab reading*** | ***Quantab Average*** | ***Chloride reading*** | ***Total Salinity conversion*** |
| 10:20 AM10:34 AM11:08AM11:30 AM | 7 & 7.27.9 & 7.67.6 & 7.87.2 & 7.5 | 7.17.87.77.4 | 581 ppm Cl-680 ppm Cl-671 ppm Cl- 626 ppm Cl- | 1050 ppm T.S.1228 ppm T.S.1212 ppm T.S.1131 ppm T.S.  |
| ***Fish Catch****seine 9X4feet* | ***Number Caught*** | ***Species*** | ***Length*** |  ***MACROs*** |
|  | 1 | Eel | 10.2 cm | **Div = 6****Total Catch =81** |
|  | 1 | White Perch | 10 cm |  |
|  | 1 | Butter Fish | 22.86 cm |  |
|  | 2 | Killifish | 10 cm |  |
|  | 25 | Shiner | 10 cm |  |
|  | 1 | Hog Choker | 7.5 cm |  |
|  | 1 | Summer Flounder |  |  |
|  | 4 | Bay Anchovy | 9 cm |  |
| **Total Catch** | **36** | **Diversity**  | **8** |  |
| **4 Macro** | 3 | Crab |  |  |
| **2 Macro Diversity** | 1 | Dragonfly |  |  |
| ***Tides*** | ***Time*** | ***Tide Stick*** | ***Flood/Ebb Still*** | ***Rate of change*** |
|  | 9:40 AM | 19 cm | Start |  |
|  | 10:06AM | 9 cm | Ebb(Falling) | 10 cm/26 mins |
|  | 10:32 AM | 10 cm | ~still |  |
|  | 11:00AM | 7 cm | Ebb | 2 cm/54 mins |
|  | 11:45 AM | 22 cm | Flood(Rising) |  |
| ***Currents*** | ***Time*** | ***Cm/60 secs*** | ***Cm/sec*** | ***knots*** |
|  | Data not included as it didn’t make sense |
| ***Shipping*** | Saw the Clearwater sailing both North & South |