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

**RIVER MILE 118**

**Shelley Forester, Cary Institute of Ecosystem Studies**

**Ms. Jeffrey, Ms. Kneller, Mrs. Fischer, Mr. Pearson, Mr. Kullman, Mr. V., Chatham & Taconic High School, Chatham NY**

**39 students 10th -12th grade, 9 adults**

**Latitude – N 42**°**15’ Latitude – W -73**°**48’**

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**Location:** Hudson River Waterfront Park, City of Hudson, Columbia County

**Area:** 1st dock in thewaterfront propertyused for fishing, marina, picnics, large grassy area, just north of the old quarry site, has a parking lot

**Surrounding Land Use:** 75% urban/residential, 10 % forested, 15% Industrial/Commercial

**Sampling Site:** waterfront with banks altered to include wooden & concrete bulkheads and large riprap on shoreline,

**Plants in area**: Moss covering approximately 20% of shoreline

**Water -** Calm

**River Bottom** – muddy, rocky

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical***  |   |  |  |  |
| Air Temperature |

|  |
| --- |
| 9:30 AM.10:00 AM10:35 AM12:23 PM12:54 PM |

 | 9°C8.881313 | 49°F48475656 |  |
| Cloud Cover | 9:30-1:00 PM>75% |  |  |  |
| Wind – wind picked up during day | **Time**9:30 AM.9:57AM10:35 AM12:23 PM1:00 PM | **Beaufort**11111 | **MPH**20.62.51.32.1 | **Direction** |
| Weather today | No Rain  |  |  |  |
| Weather recently | Cool Temperatures, below 50°F and snow within last 3 days |
| Water  | calm |  |  |  |
| ***Water Temperature –******In 3 meters depth of H2O*** | 9:13 AM9:27AM10:01 AM10:41 AM12:20 PM 12:49 PM | 13.2°C14.013.113.313.514.5  | 55.76°F57.2055.5855.9456.358.1  |   |
| ***Turbidity –***  | NR  | 92.5 cm |  | ***Secchi*** |
|  | NR | 40 JTU |  | ***Short site tube*** |
| ***Chemical*** | **Time** | **Temp** **C** | **DO ppm** | **% sat.** |
| DO -  | 10:10 AM10:41 AM12:03 PM12:39 PM12:50 PM | 13.1 13.313.414.514.7 | 10.19.611.411.413.0 | 95%91135110130 |
| pH – *Color Match* | 9:15 AM10:00 AM10:26 AM12:17 PM12:43 PM | 77777 |  |  |
| **Salinity Quantabs**  | **Time**10:46 AM12:00 PM | **%** 0.0060.006 | **Chloride ppm**38 32 | **Total Salinity ppm**69 ppm69 ppm |
| ***Fish Catch***Seine net 20 feet X 4 ft., 1.4 inch mesh  | ***Time*** | ***Species*** | ***number*** | ***Size of largest*** |
| ***Diversity 2******Total Catch7*** | 9:25 AM | *Largemouth Bass**Shiner*  | *1**6* | 15 cm bass |
| ***Diversity 5******Total Catch 30*** | 9:55 AM  | *Largemouth Bass**Shiner**Striped Bass**Yellow Perch* *Bluegill Sunfish* | *1**26**1**1**1* | 13 cm bass |
| ***Diversity 3******Total Catch 10*** | 10:52 AM | *Largemouth Bass**Shiner**Banded Killifish* | *1**4**5* | 19 cm shiner |
| ***Diversity 5******Total Catch 33*** | 12:11 PM | *Largemouth Bass**Shiner**Blue Gill**Banded Killifish**Unknown* | *1**17**1**11**3* | 11 cm unknown  |
| ***Diversity 4******Total Catch 38*** | 12:45 PM | *Largemouth Bass Banded Killifish**Spottail Shiner**Darter* | *2**18**17**1* | 10 cm shiner |
|  | **For the Day**  | ***Total Diversity 8*** | ***Total Catch 118*** |  |
| ***Tides*** | 9:15 AM9:59 AM10:36 AM12:10 PM12:50 PM | 47 cm40 cm25 cm0 cm0 cm | SetFallingFallingStill Still  | *Water Height*  |
| ***Currents***  | **Time** | **Cm/sec** | **E/F/S** | **Direction** |
|  | 9:30 AM. | 17 | Ebb  | (NW)  |
|  | 10:03 AM | 6.67 | Ebb | (NW)  |
|  | 10:35 AM | 13.3 | Flood | (SE)  |
|  | 12:23 PM | 6.7 | Flood | (SE)  |
|  | 12:54 PM | 6  | Flood | (SE)  |
| ***Core Sample*** | ***Length/*** | ***Grain size*** | ***Plant Material***  |  |
|  | 10 cm5.5 cm5.1 cm8 cm3.8 cm | Sand/muds/claySand/muds/claySand/muds/clayMuds & ClayMuds & Clay | NoNoNoNoNO |  |
| 10:45 AM | No length - Oxidized top | Clay, Mud |  | coal |
| 12:10 PM | 2 inches | Mud | Gravel, Pebbles | Brick, Living Vegetation |
| 12:16 PM | None listed | Clay |  | Mud, gravel, pebbles |
| 12:40 PM | None listed | Clay | Mud | pebbles |
| ***Traffic - commercial*** | ***Time***  | ***Name*** | ***Color*** | ***Direction/Loaded or Light*** |
|  | 10:15 AM | Bouchard | Black & Red | Southbound, loaded |
|  | 11:01 AM | Red Dog | Red & White | Southbound Light |
|  | 11:05 AM | Unknown | WHite | Southbound Light |
| ***Other Items*** | Water chestnut seeds | Large rocks | Crab parts – legs and claws | Seagulls and ducks |