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

**RIVER MILE 102**

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**Saugerties Light House, Town of Saugerties, Ulster Co.**

**Marie Daniels, Jennifer Reid & Matthew, Woodstock Day School**

**Grades 5th & 7th, 20 students and 8 adults**

**42.04**°**N, 73.92** °**W**

**Location:** Saugerties Light house @ northern bank of peninsula – pier with grassy area

**Area:** Pier of sorts, boating, fishing, swimming beach, picnics, hiking, walking

**Surrounding Land Use:** Forested 80%, Beach 20%

**Sampling Site:** beach, bulkhead altered banks years ago, covered with vegetation, collected wood/debris in area, shoreline riprap at lighthouse, shoreline is sandy, muddy, rocky

**River Bottom:** muddy, sandy, rocky

**Plants in area**: Percent reported varies from 50% to 90% water chestnut, and 50% to 10 % water celery

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical***  |   |  |  |  |
| Air Temperature | 10:33 AM11:37 AM11:51 AM | 13°C14°C15°C | 55 F57 F60 F |  |
| Wind Speed | 11:00 AM 11:51 AM | Beaufort #3Beaufort #2 |  | NSW |
| Cloud Cover | 12:00 PM | Partly cloudy | 51-75% cloud |  |
| Weather today | No rain  |
| Weather recently | Cool fall like  |
| ***Water Temperature*** | 10:30 AM 11:50 AM11:55 AM | 10 °C15°C15°C | 2 ft. water3 ft. water2 ft. water |  |
| ***Water Calm or Choppy*** | choppy |  |  |  |
| ***Turbidity***Long site tube | 10:35 AM  | 25 cm2030 | Average 25 cm  | Not clear but not turbid – on a scale of 1-10 it is about a 4! |
|  | 11:00 AM | 26 cm3235 | Average 31 cm  |  |
|  | 11:28 AM | 2634 25  | Average – 28.3 cm |  |
|  | 12:01 PM  | 26 cm2729 | Average 27 cm |  |
| ***Chemical*** |  |  |  |  |
| DO (ampules) | 10:30 AM11:00 AM12:00 PM | 6 mg/L8 mg/L8 mg/L |  |  |
| pH – color match kit | 11:30 AM 12:00 PM | 7.47.4 |  |  |
| Salinity Quantabs  |  |  |  |  |
| ***Fish – 50 ft. net*** | **Time**  | **Species** | **# caught** | **Length of largest** |
| ***Seine #1 - Div 3******Totals 4*** | 10:20  | Largemouth Bass | 1 | 15 cm |
|  |  | Banded Killi | 2 | 5 cm |
|  |  | Bluegill Sunfish | 1 | 2.5 cm |
| ***Seine #2 – Div 5******Totals 9*** | 10:54 AM  | Common Goldfish | 2 | 17 cm |
|  |  | Striped Bass | 4 | 17 cm |
|  |  | Pumpkinseed | 1 | 4 cm |
|  |  | Shad | 1 | 11 cm |
|  |  | Banded Killi | 1 | **10 cm** |
| ***Seine #3 – Div 3******Totals 5*** | 11:30 AM  | Goldfish  | 2 | 14 cm |
|  |  | Blueback Herring | 2 | 7cm |
|  |  | Tessellated Darter | 1 | 10 cm |
| ***Seine #4 – Div 7******Totals 28*** | 11:46 AM  | Pumpkinseed | 1 | 12 cm |
|  |  | Striped Bass | 5 | 18 cm |
|  |  | Shad | 8 | 8 cm |
|  |  | Bluegill sun. | 5 |  |
|  |  | Tessellated Darter | 1 |  |
|  |  | Banded Killifish | 7 |  |
|  |  | Golden Shiner | 1 | 10 cm |
|  | ***GRAND TOTALS*** | **DIVERSITY****- 9** | **TOTAL CATCH -46** |  |
| ***Tides*** | **Time** | **Height** | **Falling/Rising** |  |
|  | 10:36 AM11:07 AM  | 35cm93 cm  |  | HT was at 8:32 AM |
| ***Currents*** | **Time** | **Cm/30 secs** | **Cm/sec** | **N/S - E/F/S** |
|  | 11:45 AM 12:00 PM12:09 PM | 30cm/30 sec60 cm/30 sec50cm/30 sec | 1cm/sec2 cm/sec6.6 cm/sec | North/flood4.6 kts |
| ***Sediment Core -*** ***Length***  | **Observation**  | **Rare** | **Common**  | **Abundant** |
| ***10:50 AM -***  | 8 inches – oxidized top  |  |  | Mud on bottom |
| ***11:14 AM***  | 4 inches – 1 inch oxidized top | Gravel,Living vegetation | Clay,mud | sand |
| ***11:20 AM***  | 5 inches –oxidized top | Clay | Mud | Sand |
| ***11:54 AM*** | 3 inches – H2S smell, 1inch oxidized top | Clay |  | Sand |
| ***Shipping******Commercial (C)*** | 10:00 AMN/RN/R12:00 PM12:00 PM | Red BargeWhiteBarge Red/BkBlack Large Cargo | NorthboundNorthboundSouthboundSouthboundSouthbound | LoadedLightLightLightLoaded |
| ***Recreational (R)*** | 10:00 AM12:45 PM | White speedbtSailboat | Southbound Southbound | LightLight  |
| ***Observations***  | Lots of devil’s heads from water chestnut, and bricks, lumps of coal, bits of shells, overgrown plants and seagulls, hummingbird, squirrels, hawks, dragonflies |