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

**(Salt Front RM 169.3)**

**RIVER MILE 133**

**River Park, Schodack Island, Troy**

**Dawn Baldwin, Children’s Museum of Science and Technology**

**Michael O’Brien, Carroll Hill School–22 students 4rd graders, 5 adults**

**N 42.482113470199998 W -72.7763160920000002**

**Location:** Schodack Island State Park

**Area:** 1052 acres – park and boat launch area

**Surrounding Land Use:** Forested,Boat launch, playground, parking lot, used for picnics, fishing, open and grassy

**Sampling Site:** Forested 40%; recreation state park with grass, trees, parking area, picnic area 40%, boat launch 20% ;

**Shoreline:** banks altered, rip rap, bulkhead,

**Plants in area:** minimal amount of plants growing in the riprap, leaves looked like reeds – less than 1%

**Water depth**: 4-6 ft. – water is deeper but we are bucketing from this depth

**River Bottom**: rocky

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |  | |  |  |  |
| Air Temperature | 10:10 AM | | 54 °F  12.22°C |  |  |
|  | 10:40 AM | | 54°F  12.22°C |  |  |
|  | 11:11 AM | | 55°F  12.77°C |  |  |
| Wind Speed | 10:40 AM Beaufort #1 | | 2.5 kts | NW | |
| Cloud Cover | Clouds | |  |  |  |
| Weather today | Sun broke through the clouds briefly around 10:15 AM but clouds moved back in quickly | | | | |
| Weather recently | Low 60s – Heavy rain on Monday 10/7 late in day. Mix of Sun and clouds Tues & Wed | | | | |
| ***Water Temperature -***  ***Water depth ~1.5 ft.*** | 10:00 AM | 60 °F  60 °F | | 15.55°C  15.55°C | AVERAGE  60°F  17.55°C |
|  | 10:30 AM | 59 °F  60 | | 15°C  15.55 | 59.5 °F  15.28 °C |
|  | 11:00 AM | 60 °F  60 °F | | 15.55°C  15.55°C | 60°F  17.55°C |
| ***Water*** | Slightly choppy |  | | | |
| ***Turbidity – small site tube*** | 12:30 PM | 10 JTU  10  15 | |  | 11.67 JTU average |
|  |  |  | |  |  |
| ***Chlorophyll*** | 10:18 AM | 0.1 | | 10:40 AM | 0.0 |
| ***Chemical*** |  |  | |  |  |
| DO  (Drop count kit | 11:00 AM | 9 mg/L\* | | 15.55°C | 90% |
| pH  (ind. Sol.) | 11:00 AM | 8.0  7.5  7.0 | |  | 7.8 avg. |
| Salinity - quantabs | 10:15 AM | .005/28 X 3 | | 28 ppm Cl- | 51 ppm TS |
| Nitrates | 11:30 AM | 1 ppm  0.05 ppm  1 ppm | |  | Average 0.83 ppm |
| ***Fish Catch*** seine – 15 ft. X 4 net, 15 ft. pull & minnow trap (no fish in trap) – 3 sienes | ***Number Caught*** | ***Species*** | | ***Length*** | ***Seine*** |
| Seine #1 – 1 fish 12:00 PM | 1 | Shiner | | 2 inch |  |
| Seine #2 – 2 fish 12:15 PM | 2 | Shiner | | 1.5 inch |  |
| Seine #3 – 5 fish 12:30 PM | 5 | Shiner | | 2 inch and less |  |
| **TOTAL DIVERSITY** | **1** | **TOTAL CATCH** | | **8** |  |
| **CPUE seine #1** | Noon | Catch 1 | | 15 ft. pull` | 0.014 |
| **CPUE seine #2** | 12:15 PM | Catch 2 | | 15 ft. pull | 0.029 |
| **CPUE seine #3** | 12:30 PM | Catch 5 | | 15 ft. pull | 0.072 |
| ***Tides*** | 9:30 AM | 57 cm | | Falling |  |
|  | 10:05 AM | 42 cm | | Falling | 0.43 cm/min |
|  | 10:17 AM | 35 cm | | Falling | 0.58 cm/min |
|  | 10:35 AM | 25 cm | | Falling | 0.55 cm/ min |
|  | 11:07 AM | 10 cm | | Falling | 0.46 cm/min |
|  | 11:30 AM | Not reachable | | Still falling |  |
| ***Currents*** | **Cm/30 sec** | **Cm/sec** | | **Knots** | **North/South** |
| 9:50 AM | 940 | 30.1 cm | | 0.58 | South/Ebb |
| 10:30 AM | 753 | 21.8 | | 0.42 | South/Ebb |
| 11:10 AM | 672 | 22.4 | | 0.44 | South/Ebb |
| ***Traffic*** | 10:20 AM | Barge | |  | South/ Light |
|  | 10:45 AM | Cargo Ship | | Great Reward | North/Light -general cargo |
|  | Several pleasure craft heading in each direction while we were watching | | | | |
| ***Core*** |  | | | | |
| ***Comments/Observations*** | No water chestnut this year. Usually they are abundant.  Only seagulls seen-no other birds | | | | |
| ***Kid’s Comments*** | As we approached the river at Schodack Island State Park Mr. O’Brien’s class from Carroll Hill School in Troy was very excited! We had discussed the river meeting the Atlantic and some were surprised that they could not see the ocean from where we were. A bottle floating by was mistaken for a shark and someone knew there were submarines under the water. By days end I was surrounded by 22 very eager Hudson River Scientists who were excited to go home and share what they had learned. With a hug I heard the words “This was the most exciting day of school in my “WHOLE life”! | | | | |