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

**RIVER MILE 115**

**Cohotate Preserve, Athens, Greene Co.**

**Liz LoGuidice, Cornell Cooperative Extension of Greene County**

**Tony Loughran, Coxsackie Athens High School, Env. Sci. - 23 students, 12th**

**Sue Boyle, Cairo Durham HS – 27 students, 9th**

**(adults – 2 teachers, 4 chaperones, 2 instructors)**

**N 42.24410 – W 73.8362**

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**Location:** Cohotate preserve – Ice house site –

**Area:** The ice house is a flat, grassy are on the river with several cotton wood trees. It is situated at the bottom of a forested hill. Large waterfront vegetated. The artificial shoreline of the bulkhead dominates the eastern shore. Shoreline is characterized by tidal mudflats. Area is used recreationally for picnicking, hiking and fishing. Ice house is approximately ½ miles walk from the parking area.

**Surrounding Land Use:** Forested 85%, Beach 10%; Urban/residential 5%

**Sampling Site:** Beach area, Shoreline includes tidal mud flats in the southeast, with a rocky shore further south. To the north of the tidal mud flat there is an old bulkhead, with another tidal flat to the north of the bulkhead, rip rap in sections.

The banks have been altered at the bulkhead (entire ice house area is likely dredge spoil), wood and debris are collected in the southern mudflat, there is lots of vegetation and no pipes entering the water. Brick pieces on shoreline

**Water Depth:** NR

**River Bottom:** Muddy, rocky, weedy

**Plants in area:** NR

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| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |  | |  |  |  |
| Air Temperature | 9:50 AM  10:32 AM | | 15°C  13 | 59°F  54 |  |
| Wind Speed |  | |  |  | |
| Cloud Cover | Overcast | |  |  |  |
| Weather today | Cool and cloudy | | | | |
| Weather recently | Cool | | | | |
| ***Water Temperature*** | 9:55 AM | 11.7°C  53°F | |  |  |
|  | 10:35AM | 12°C  55°F | |  |  |
|  | 11:15AM | 12°C  55°F | |  |  |
| ***Water Surface*** | Choppy |  | |  |  |
| ***Turbidity*** | 10:50AM  11:41AM | 86 cm  88 cm | |  |  |
| ***Chemical*** |  |  | |  |  |
| DO  Pasco Probe | 9:45 AM  10:30  11:15 | 8.9 ppm  9.7  9.67 | | 12 °C  11.4  11.7 | 88%  89%  88% |
| pH – Pasco Probe | 11:15AM | 7.4  7.3  7.3 | | Average 7.33 | |
| Conductivity – Pasco probe | 9:45 AM  10:45AM  11:15AM | 269.1 μs/cm  321  215 | |  | Average 301.7 μs/cm |
| Nitrates | 10:00AM  11:00AM | 1.0 NO3 mg/l  0.4-0.6 NO3 | |  |  |
| Phosphates | 10:00AM  11:00AM | 0-0.1 mg/l  0-0.1 | |  |  |
| ***Fish Catch***  *40 ft. X 30 ft.* | ***Total #*** | ***Species –*** | | **Size** | ***Totals*** |
| **FISH – 9:45**  **6 seines** | 43  60  15 | Spottail Shiner  Banded Killifish  Blueback Herr. | | 10 cm  NR  8cm | ***Seine #1*** |
| **Diversity = 10** | 18 | Spottail Shiner | | 8 cm | ***Seine #2*** |
| **Total Catch = 266** | 1  2  1  1  6 | White Perch  Spottail Shiner  Banded Killifish  Darter  Bluegill Sunfish | | NR  NR  NR  NR  13cm | ***Seine #3*** |
|  | 9  1  2  43  11  2  1  1 | Banded Killifish  Alewife  White perch  Spottail Shiner  Darter  Blueback Herrin.  Bluegill Sunfish  Black Crappie | |  | ***Seine #4*** |
| 2  1 | Golden Shiner  Pumpkin Seed | |  | ***Seine #5*** |
| 10  17  17  1  1 | Darter  Banded Killifish  Bluegill Sunfish  Spottail Shiner  Wihte Perch | |  | ***Seine #6*** |
| ***Tide*** | 9:44 AM  10:43AM  11:35AM | Falling/Ebb  Ebb/Sluggish  Flood | |  |  |
| **Boating - Commercial** | 10:07AM  10:10AM | Red Flag  Bouchard | | Petroleum  B#264 | Light  Southbound |