

Day in the Life of the Hudson River 10/16/18 Data
NUTTEN HOOK, RIVER MILE: 124.5
Green County, NY
Salt Front: ~ RM 24
Averill Park High School- Vicky Boulay
65-100 students 9th – 10th grade, 5 adults
Latitude 42.358271 N & Longitude - 73.788178 W



Location: Nutten Hook, Green County, NY

Area: Beach, forested bluff, large marsh behind bluff, DEC public access, used for picnics, water access

Surrounding Land Use: 45% Beach; 55% Forested.

Shoreline: Sandy and rocky, riprap, banks altered in some areas with bulkhead, brick and slag on the ground

Water Depth: 3 feet

Plants in area: No plants in water area

River Bottom description: Sandy, muddy

| <i>ITEM</i> | <i>Time</i> | <i>Reading</i> | | <i>Comments</i> |
|------------------------------------|-------------|----------------|---------------|-------------------|
| Physical | | | | |
| <i>Air Temperature:</i> | | | | |
| Block #1B | 9:16 AM | 11 °C | 51.8 °F | |
| Block #1A | 9:47 AM | 11 °C | 51.8 °F | |
| Block #3A | ~10:15 AM | 10 °C | 50 °F | |
| Block #8 | ~10:30 AM | 10 °C | 50 °F | |
| Block #3B | ~11:40 AM | 11 °C | 51.8 °F | |
| <i>Wind Speed:</i> | | | | |
| Block #1B | ~9:20 AM | 5.2 mph | Assume mph | <i>Anemometer</i> |
| Block #1A | ~9:45 AM | 3 mph | | |
| Block #3A | ~10:15 AM | 6 mph | | |
| Block #8 | ~10:30 AM | 3 mph | | |
| Block #3B | ~11:45 AM | 2.2 mph | | |
| <i>Water Temperature</i> | | | | |
| <i>Group: #1</i> | | Avg: 13.7 °C | Avg: 56.66 °F | |
| <i>Group #2</i> | | Avg: 13.07 °C | Avg: 55.53 °F | |
| <i>Group #3</i> | | Avg: 12 °C | Avg: 53.6 °F | |
| <i>Group #4</i> | | Avg: 13.4 °C | Avg: 56.12 °F | |
| <i>Turbidity - long sight tube</i> | | | | |
| Block #1A | 9:15 AM | 9:15 AM | 58.3 cm | |
| Block #3A | 9:46 AM | 9:46 AM | 50.06 cm | |
| Block #1 B | 10:33 AM | 10:33 AM | 36.6 cm | |
| Block #3B | 10:45 AM | 10:45 AM | 51.4 cm | |
| Block #8 | | | 35 cm | |

| Chemical | | | | |
|--|---|--|---|--------------------------------------|
| <i>Salinity- Probe</i> | <i>Group:</i> #1 #2 #3 #4 | <i>Conductivity uS/cm</i> 313 312.1 312.9 310.6 | <i>Chloride ppm:</i> 31.2 ppm Cl⁻ | |
| <i>DO – Probe</i> | <i>Group</i> | <i>Temp</i> | <i>ppm DO</i> | <i>% saturation</i> |
| | #1 #2 #3 #4 | Avg: 13.7 °C Avg: 13.07 °C Avg: 12 °C Avg: 13.4 °C | 9.8 9.57 9.6 9.6 | 94% 90% 94% 91% |
| <i>pH – Group:</i> #1 #2 #3 #4 | <i>Probe</i> Avg: 7.76 Avg: 7.86 Avg: 7.7 Avg: 7.93 | <i>Test strips*</i> Avg: 6.18 Avg: 5.8 Avg: 6.9 Avg: 6.18 | <i>*Test strips were hydrion paper – notes on website: “not for measuring the pH of natural waters, such as streams, rivers and lakes.”</i> | |
| Fish | Number | Name | Length of longest (cm) | |
| | 46 2 7 39 10 4 | Spottail Shiner Bay Anchovy Striped Bass Herring White Perch Banded Killifish | 9 12 10 13 8 | |
| Fish Totals | TOTAL: 108 | Diversity: 6 | | |
| Macroinvertebrates | Number | Name | Length of longest | |
| | 2 16 | Beetles Blue Crabs | | |
| Macroinvertebrate Totals | TOTAL: 18 | Diversity: 2 | | |
| Tides- | Time | Rising, Falling, Still | Height (cm) | Rate of Tidal Change (cm/min) |
| Block #1B | 9:06 AM | - | 15 | - |
| | 9:28 AM | Still | 16 | 0.045 |
| Block #1A | 9:39 AM | - | 13 | - |
| | 9:58 AM | Falling | 10 | 0.157 |
| Block #3A | 10:06 AM | - | 8.5 | - |
| | 10:31 AM | Falling | 2 | 0.26 |
| Block #8 | 10:36 AM | - | 6.5 | - |
| | 10:56 AM | Rising | 10 | 0.175 |
| Block #3B | 11:40 AM | - | 4 | - |
| | 12:05 PM | Falling | -3 | 0.28 |
| <i>*HT at 9:56 AM LT at 4:21 PM.</i> | <i>* Data doesn't correspond to tides</i> | <i>*Noted- suspect sampling in cove affects tides</i> | | |
| Currents Flow | Cm/second | Knots | North/South | Ebb/Flood/Still |
| Block #1B ~9:20 AM | 3.75 | 0.073 | | <i>*currents done in cove</i> |
| Block #1A ~9:45 AM | 4.688 | 0.91 | | |
| Block #3A~10:15 AM | 3.947 | .077 | | |
| Block #8 ~10:30 AM | 4.318 | .084 | | |
| Block #3B ~11:45 AM | 5.263 | .102 | | |
| Sediment Core | Shown in image above but no data submitted | | | |