

Day in the Life of the Hudson River 10/05/2023

Chelsea Yacht Club, Wappinger Falls, NY

RIVER MILE: 65

Salt Front: ~ 52

Wappingers Jr High School-Rosellen Hardt

25 students, 7th grade, 4 adults

Latitude 41.553508°N & Longitude -73.970238°W



Location: Chelsea Boat Launch, Chelsea Yacht Club, Wappinger Falls, Dutchess County, NY

Surrounding Land Use: 25% Urban/Residential, 40% Industrial/Commercial, 25% Beach

Sampling Site: Pier, Beach, Wood Bulkhead, Grassy, Forested, Covered in vegetation, Rip Rap, Concrete Bulkhead, Marshy

Shoreline: Sandy, Muddy & Rocky

Water: Calm

River Bottom: Weedy, Sandy, Muddy & Rocky

Plants in the water:

*NR = Not read/recorded

| <i>ITEM</i> | <i>Time</i> | <i>Reading</i> | | <i>Comments</i> |
|---------------------------------|-------------|-----------------------------------|-----------------|--------------------|
| <i>Physical</i> | | | | |
| <i>Air Temperature-NR</i> | | ° C | ° F | |
| <i>Wind Speed: NR</i> | | <i>Anemometer</i> | <i>Beaufort</i> | <i>Direction</i> |
| <i>Weather today</i> | | <25% Cloud Cover | No Rain | |
| <i>Weather the past 3 days:</i> | Warm | | | |
| <i>Tides- Dock to water</i> | <i>Time</i> | <i>Rising, Falling, Unchanged</i> | | <i>Height (cm)</i> |
| | 9:42 AM | - | | 49 cm |
| | 10:10 AM | Falling | | 50 cm |
| | 10:57 AM | Falling | | 54 cm |
| | 11:34 AM | Falling | | 59.5 cm |
| | 12:42 PM | Rising | | 40 cm |
| <i>Current-</i> | <i>Time</i> | <i>Cm/sec</i> | <i>Knots</i> | <i>North/South</i> |
| | 9:56 AM | 762 | 0.49 | |
| | 10:20 AM | 457.2 | 0.30 | |
| | 11:07 AM | 411.48 | 0.27 | |
| | | | | Ebb |

| | | | | | |
|----------------------------------|---|---|--------------|--|--|
| | 11:42 AM 12:51 PM | 381 213.36 | 0.25 0.14 | | |
| Water Temperature- | 9:39 AM 10:11 AM 10:54 AM 11:00 AM 11:31 AM 12:37 PM | 20°C 19.5°C 19.6°C 19°C 20.1°C 21.2°C | | 68°F 67.1°F 67.3°F 66.2°F 68.2°F 70.2°F | |
| Turbidity- long site tube | 9:39 AM 10:11 AM 10:54 AM 11:31 AM 12:37 PM | 55.77 cm 49.8 cm 54.8 cm 53.47 cm 74.2 cm | | | |

Chemical

| | | | | |
|---|---|--|---------------------------|---------------------|
| Standardized Salinity- Low Range Quantabs- | <i>No time recorded</i> | 30 ppm Cl ⁻ | 54 ppm total salinity | <i>1.4 QT units</i> |
| DO – Hach Drop Count Kit | <i>Time</i> | <i>Temp</i> | <i>ppm DO</i> | <i>% saturation</i> |
| | 10:53 AM 11:38 AM 12:40 PM | 19.6°C 19°C 19.5°C | 5 ppm 10 ppm 13 ppm | 55% 105% 140% |
| pH – Color Match Kit | 9:39 AM 9:41 AM 9:44 AM 10:12 AM 10:18 AM 10:20 AM 10:52 AM 10:55 AM 11:00 AM 11:34 AM 11:39 AM 11:40 AM 12:39 PM NR | 6.5 6.5 6.5 7 7 7 8 7.5 7 6.5 6.5 6 6.5 7 (X2 readings) | | |
| Nitrates- | | | | |

Biological

| Fish | Number | Name | Length of longest | Length smallest | | |
|---------------------------------|-------------------|----------------------------------|-----------------------------|-------------------------|-------------------|-----------------------|
| 9:45 AM-12:45 PM | 257 | Herring sp. | 7 cm | 3 cm | | |
| | 2 | Pumpkinseed | 11 cm | 9 cm | | |
| | 3 | White Perch | 15 cm | 10 cm | | |
| | 7 | Mummichog: 1M, 3F, 2NR | 8 cm | 6 cm | | |
| | 2 | Striped Bass | 11 cm | NR | | |
| | 1 | Spottail Shiner | 7 cm | NA | | |
| | 1 | Largemouth Bass | 12 cm | NA | | |
| Fish Totals | TOTAL: 273 | Diversity: 7 | | | | |
| Macroinvertebrates | Number | Name | Length of longest | | | |
| | 8 | Blue Crab (7 M & 1 Unidentified) | 10 cm | Blue Crab was Softshell | | |
| Macroinvertebrate Totals | TOTAL: 8 | Diversity: 1 | | | | |
| Sediment Core -NR | Time | Oxid Top | H₂S Smell | Oil | Grain Size | Other Features |
| | | | | | | |

Boats

| Commercial/ Recreational | Time | Type | Color | Southbound/ Northbound | Light/ Loaded |
|-------------------------------------|-------------|-------------|-----------------------------|-----------------------------------|--------------------------|
| Recreational | 9:49 | NR | White, Blue & Red | Northbound | Light |
| Recreational | 11:42 | Sailboat | Red, Blue, White & Green | Southbound | Light |
| Recreational | 12:44 | Sailboat | White | Northbound | Light |
| Recreational | 10:23 | Sailboat | White & Blue | Northbound | Light |
| Recreational | 11:04 | Sailboat | White, Green & Red | Southbound | Light |
| Recreational | 12:44 | Sailboat | Blue & White | Southbound | Light |