

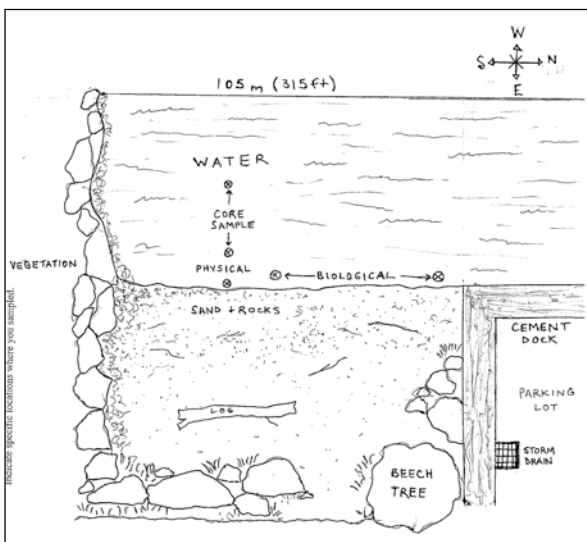
**Day in the Life of the Hudson River 10/10/13 Data  
(Salt Front RM 69.3)**

**RIVER MILE 41**

**Steamboat Dock Park, Verplanck, Westchester**

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Environmental Research and Field Biology 10<sup>th</sup> - 12<sup>th</sup> graders –18 students**

**Latitude N 41°14958 & 41.24936 Longitude W 73°936474**



**Location:** Steamboat Dock Park beach, City of Verplanck in Westchester County  
**Area:** located in a small cove between a point and a bulkhead – Pier, Grassy, Parking Lot

**Surrounding Land Use:** Boating, Picnics, Swimming, Fishing, Jogging

**Sampling Site:** beach, riprap, banks altered, dock, bottom rocky, bulkhead, pipe south of the sampling site 10-15 m.

**Shoreline:** Sandy, rocky

**Plants in area:** 95% wild grape, 3% honey suckle, 1% locust, 1% sumac

**Other: Plants** Water celery in water, green and brown algae covering rocks.

**Water depth:** 12 meters

**River Bottom** – sandy, rocky

**Area Observations:** brick pieces on ground, water chestnut seeds, shell pieces, 3 crab shells, overgrown.

**Possible Impacts:** stormdrains, roads, parking lot

| <i>ITEM</i>     | <i>Time</i> | <i>Reading 1</i> | <i>Reading 2</i> | <i>Comments</i> |
|-----------------|-------------|------------------|------------------|-----------------|
| <i>Physical</i> |             |                  |                  |                 |

|  |                                  |  |                            |                                    |
|--|----------------------------------|--|----------------------------|------------------------------------|
| Air Temperature                        |                                  |  |                            |                                    |
| Wind Speed                             | 10:30 AM                         | 5-10 mph                                       | NW                         |                                    |
| Cloud Cover                            | 10:25 AM                         | >75%<br>cloud cover                            | Overcast                   | 100% stratus                       |
| Weather today                          | 11 AM – constant rain            |  |                            |                                    |
| Weather recently                       |                                  |  |                            |                                    |
| <b>Water Surface</b>                   | Choppy                           |  |                            |                                    |
| <b>Water Temperature –</b>             | 10:20 AM                         | 0.75 cm water                                  | 21.7°C                     | Overcast                           |
|  | 11:30 AM                         | 0.75 cm water                                  | 21.7°C                     |                                    |
| <b>Turbidity –</b>                     | 11:30 AM                         | 54 cm<br>Transparency tube                     |                            | Lot of<br>suspended<br>material    |
|  |                                  |  |                            |                                    |
| <b>Chlorophyll</b>                     | Test 1                           | 0.3  | Test 2                     | 1.0                                |
| <b>Chemical</b>                        |                                  |  |                            |                                    |
| DO<br>(drop kits)                      | 10:10 AM<br>10:20 AM             | 21.7 °C<br>21.7 °C                             | 8 ppm<br>8 ppm             | 87%<br>87 %<br>Saturation          |
| pH<br>Indicator solution               | 10.50AM<br>11:10 AM              | 8.0<br>7.8                                     | 8.0<br>7.6                 |                                    |
| Salinity<br>YSI SCT meter              | 10:20 AM<br>11:30 AM             | 6.2 ppt<br>5.4 ppt                             | 6.1 ppt<br>5.4 ppt         |                                    |
| Conductivity<br>YSI SCT meter          | 10:20 AM<br>11:30 AM             | 10.19 mS<br>9.07 m/S                           | 10.14 mS<br>8.87 mS        | ppm is ~ =<br>0.64<br>conductivity |
| <b>Alkalinity</b><br>(Hach kit: drops) | 10:40AM                          | 80 mg/L  |                            |                                    |
| <b>Nitrates</b><br>(Hach color kit)    | 10:30 AM                         | 1.1 mg/L                                       |                            |                                    |
| <b>Phosphate</b><br>(colorimeter)      | 10:30 AM<br>10:40 AM<br>11:13 AM | 0.55 ppm<br>0.25 ppm<br>0.00 ppm               |                            | Used color<br>wheel                |
| <b>Fish Catch-<br/>11:00 AM</b>        | <b>Number<br/>Caught</b>         | <b>Species</b>                                 | <b>Size of<br/>largest</b> | <b>Seine</b>                       |
| 25 ft net X 4ft–<br>300 ft. pull       | 8                                | Striped Bass                                   | 7 cm                       |                                    |
| 6 seines in 60<br>minutes              | 1                                | White Perch                                    | 20 cm                      |                                    |
| Totals                                 | 2                                | Shiners  | 8 cm                       |                                    |
| <b>Total Catch</b>                     | <b>11</b>                        | <b>Total Diversity 3<br/>species</b>           |                            |                                    |
| <b>Invertebrates</b>                   | 1<br>12                          | large male blue crab<br>combjelly (ctenophore) |                            |                                    |
| <b>Coring</b>                          | Too rocky to core                |  |                            |                                    |

|                                    |  |                    |                    |                     |
|------------------------------------|--|--------------------|--------------------|---------------------|
| <b><i>Tides</i></b>                | TIME   | Amt. Rise/<br>Fall |                    |                     |
|                                    | 10:20 AM   | 2 inches           |                    | Set stick           |
| <b><i>Currents</i></b>             | 10:45 AM   | 4.5 inches         | Rise               |                     |
|                                    | 10:55 AM   | 6 inches           | Rise               |                     |
|                                    | 11:05 AM   | 10 inches          | Rise               |                     |
|                                    | <b>Time</b>  | <b>Direction</b>   | <b>Ebb/Flood</b>   | <b>Speed</b>        |
|                                    | 10:45 AM   | North              | Flood              | Slow                |
| <b><i>Traffic - commercial</i></b> | <b>Color</b>   | <b>Name</b>        | <b>North/South</b> | <b>Loaded/Light</b> |
| 10:14 AM                           | White  | David Scudder      | Southbound         | Light               |
| 10:56 AM                           | Red (tug pushing barge)  | Fred Johanntsens   | Southbound         | Light               |
| 11:15 AM                           | White  | David Scudder      | Northbound         | Light               |
| <b><i>Recreational</i></b>         |  |                    |                    |                     |
| 10:40 AM                           | Black  | David Scudder      | Southbound         | Light               |
| 11:35 AM                           | White  | Wild Child         | Northbound         | Light               |
|                                    |  | Isis               |                    |                     |
| <b>Birds</b>                       | 20 Ring Bill Gull, 2 Cormorant, 2 Canadian geese, 1 Turkey Vulture |                    |                    |                     |