

**Snapshot Day 10/12/06 Data
(Salt Front RM 52.5)
RIVER MILE 84.5**

**Mills-Norrie Point Environmental Center, Staatsburgh, NY, Dutchess County
Jean Villa McAvoy & Laurie Fila, Hudson River National Estuarine Research
Reserve (HRNERR)**

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Location: Sampling done on the southern inlet of Norrie Point. East side of Hudson far from the main channel in a protected cove

Area: Substantial paved areas nearby, large environmental center building adjacent to the water.

Surrounding Land Use: forested 60%; Environmental Education Center (EEC) and concrete patio, parking lots and access area 40%

Sampling Site: Seining area – large parking lot adjacent to shallows – fairly protected bay. By water chemistry area: samples collected off concrete patio adjacent to dock and EEC; Wind and weather taken from inside EEC & concrete patio between building and river

Shoreline: covered with vegetation (some duckweed on surface, water celery in the bay- mostly uprooted), banks altered for EEC building, riprap along RR tracks, collected wood and debris in shallow cove

Plants in area: 7% of water in sampling site is covered with plants.

cattail

duckweed

water celery

water chestnut

sedge (unknown variety)

yellow flag (iris)

Water depth: 3-6 feet deep where chemistry water collected

River Bottom – gravel and rock bottom where chemistry done. Rocky and partly muddy where seining/sediment/plankton done.

| <i>ITEM</i> | <i>Time</i> | <i>Reading 1</i> | <i>Reading 2</i> | <i>Comments</i> |
|---|------------------------------------|------------------|---------------------------|-----------------|
| Physical | | | | |
| Air Temperature | | | Average Daily Temp | 19.2°C |
| | 9:36am | 18°C | | |
| | 10:17am | 18°C | | |
| | 10:50am | 17°C | | |
| | 12:18pm | 23°C | | |
| | 1:01 AM | 20°C | | |
| Wind Speed | 9:36am | south | 4 to 6 | Overcast |
| | 10:17am | south | 7 to 10 | Overcast |
| | 10:50am | south | 4 to 6 | Mostly cloudy |
| | 12:18pm | south | 4 to 6 | Overcast |
| | 1:01pm | south | 4 to 6 | Mostly cloudy |
| Cloud Cover | Yes all day | | | |
| Weather today | No rain | | | |
| Weather recently | Rainy afternoon and evening, windy | | | |
| Water Temperature | | 17°C | 18°C | |
| | 9:52am | | | |
| | 10:31am | 17°C | 17°C | |
| | 11:04am | 17°C | 17°C | |
| | 12:15pm | 17°C | 17°C | |
| | 1:03pm | 17°C | 17°C | |
| Turbidity | Time | Secchi | Sight tube | |
| Results posted as averages of 3 groups except where noted with (2) | 9:44am | 90cm (2) | 48 cm | |
| | 10:26am | 70cm | | |
| | 11:08am | 34cm | | |
| | 12:30pm | 45cm | | |
| | 1:15pm | 45cm | 54 cm (2) | |
| Chlorophyll | 9:30 AM | 5.0 | 11:20 AM | 2.0 |
| Chemical | | | | |
| DO (drop count) | | 8.0 mg/L | 17.5°C | 83% |
| | 9:32am | | | |
| | 10:28am | 8.0 mg/L | 17°C | 82% |
| | 11:04am | 9.0 mg/L | 17°C | 93% |
| | 12:18pm | 9.0 mg/L | 17°C | 93% |
| | 12:42pm | 9.0 mg/L | 17°C | 93% |

| | | | | | | |
|--|----------------|----------------|----------------|-----------------|----------------|--------------|
| pH | | | | | | |
| Phosphate | | | | | | |
| Nitrate | | | | | | |
| Alkalinity | | | | | | |
| Salinity | 9:35am | 40 mg/l | 35 mg/L | 37.5 mg/L | | |
| -drop count kit | 10:14am | 35 mg/L | 35 mg/L | 35 mg/L | | |
| | 10:55 AM | 40 mg/L | 35 mg/L | 37.5 mg/L | | |
| | 12:10pm | 45 mg/L | 40 mg/L | 42.5 mg/L | | |
| | 12:56pm | 40 mg/L | 40 mg/L | 40 mg/L | | |
| Fish seined 39X4 ft. X 0.375 mesh | Group 1 | Group 2 | Group 3 | *Group 4 | Group 5 | TOTAL |
| American Eel | 5 | 4 | 1 | 1 | 7 | 18 |
| Golden Shiner | | | | | 1 | 1 |
| Herring | | | | | 6 | 6 |
| Pumpkinseed | 6 | 4 | 4 | | 15 | 29 |
| Smallmouth Bass | | | 1 | | | 1 |
| Spottail Shiner | 3 | | | 1 | 2 | 6 |
| Sunfish | | | | 6 | | 6 |
| Tesselated Darter | 1 | | | | | 1 |
| Killifish | 1 | | 1 | 6 | 2 | 10 |
| Blue Crab | 2 | 1 | 1 | | | 4 |
| TOTALS | 18 | 9 | 7 | 14 | 33 | 81 |
| Macros: 2 boatmen, 1 water beetle, 1 damselfly, isopods | | | | | | |
| * noted that they thought a large or small mouth bass was in this count but it wasn't recorded on the sheet | | | | | | |
| 30 ft net/60 ft pull | 548.64 m | 5 total | 0.009 | Seine #1 | | |
| 30 ft net/60 ft pull | 548.64 m | 2 total | 0.004 | Seine #2 | | |
| 30 ft net/60 ft pull | 548.64 m | 1 total | 0.002 | Seine #3 | | |
| 30 ft net/60 ft pull | 548.64 m | 6 total | 0.011 | Seine #4 | | |
| 30 ft net/60 ft pull | 548.64 m | 9 total | 0.016 | Seine | | |
| 30 ft net/60 ft pull | 548.64 m | 9 total | 0.016 | Seine #6 | | |
| 30 ft net/60 ft pull | 548.64 m | 17 total | 0.031 | Seine #7 | | |
| 30 ft net/60 ft pull | 548.64 m | 16 total | 0.029 | Seine #8 | | |
| 30 ft net/60 ft pull | 548.64 m | 17 total | 0.031 | Seine #9 | | |
| 30 ft net/60 ft pull | 548.64 m | 10 total | 0.018 | Seine #10 | | |
| Tides | | cm | Ebb or flood | | | |
| | 9:30am | 59 | ebb | | | |
| | 10:10am | 49 | ebb | | | |
| | 10:38am | 41 | ebb | | | |
| | 10:45am | 39 | ebb | | | |
| | 11:10am | 36 | ebb | | | |
| | 12:11pm | 33 | flood | | | |
| | 12:36 PM | 38 | flood | | | |

| | | | | |
|--|--|-----------|-------|--|
| | 12:55pm | 46 | flood | |
| | 1:25pm | 63 | flood | |
| | | | | |
| <i>Currents</i> | Not recorded | | | |
| * Site is far from main channel – unable to calculate current due to site restrictions | | | | |
| <i>Traffic</i> | Time | Direction | | |
| Sailboat under power | 10:25 | South | | |
| Freighter (Intermarine) | 11:00 | North | | |
| Tanker | 12:09 | North | | |
| Pleasure Boat | 12:19 | South | | |
| Tugboat | 12:21 | South | | |
| Commercial Tour Boat | 12:52 | South | | |
| <i>Other Items</i> | Bald eagle flew by and landed in a tree just south of the cove near the site. | | | |
| | We also saw the Pilot boat motor out to exchange boat pilots. | | | |
| | It was an exciting, informative and fun-filled day; basically it was AWESOME!! A number of Haviland students were heard to say that it was the best field trip they had been on! | | | |