

Day in the Life of the Hudson River 10/10/13
(Salt Front RM 69.3)
RIVER MILE 85
Mills Mansion, Staatsburgh, NY, Dutchess County
Maribel Pregnall, Arlington High School
Sara (Orange County), Christine (SCA), Marshall Pregnall (Vassar College)
23 High School 11-12th graders, 4 adults
N41.8566°N W73.9299°W (iphone coordinates)



Location: Sampling done on beach at Northside of the pumphouse at Mills Mansion
Area: pastoral setting, clean no houses except mansion and pumphouse, Forested; grassy; beach
Surrounding Land Use: picnics, fishing, sight seeing
Sampling Site: *Physical station:* on beach at Northside of the pumphouse at Mills Mansion;
Fish Station: off beach area, ebb tide, sandy, made our way over riprap rocks with fencing (erosion control), sandy/rocky and then muddy
Chemistry: near beach at mansion – at pumphouse/icehouse
Shoreline: sandy and rocky close to shore, further out it gets muddy
Plants in area: none in water
River Bottom –

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>	Time			
Air Temperature	10:20 AM 11:30 AM 11:34 AM	10.6°C 11.1 11.7	51°F 52 53	
Wind Speed	11:18 AM	Beaufort #2	0.9m/sec on meter	N/NE
Cloud Cover	11:19 AM	Overcast >75%		

Weather today	Cloudy and threat of rain but @ 11:32 AM no rain			
Weather recently	Mon 10/7 strong winds and heavy precip (~2/3 inch in afternoon, Tues 10/8 ~2/3 in precip in afternoon, Wed. 10/9 partly sunny			
Water	choppy			
Water Temperature 9:36 1 ft. water 11:40 0-6 inch water	9:36 AM 11:40 AM	17.8°C 17.4	17.1°C 17.1	Avg. 17.5°C Avg. 17.3
Turbidity	10:45 AM	56.4 cm 63.9 cm 60.2 cm		Average 60.2 cm
	11:50 AM	63.6 cm 62.6 cm 66.8 cm		Average 64.4 cm
Chemical				
DO (drop count)	10:08 AM 10:08 AM	8.6 mg/L 8 mg/L	17.6 °C 17.6 °C	90% sat 85% sat
	11:54 AM 11:54 AM	8.1 mg/L 8.4	17.1°C 17.1°C	82.5 % sat 85 % sat
pH	Time	Hach kit	meter	
	9:51 AM 11:49 AM 11:49 AM	8.3 8.2 8.2	8.39 7.95 7.91	
Salinity	Time	PPT	PPM	Conductivity
YSI	9:36 AM 11:44 AM	0.1 0.1	100 ppm 100 ppm	263.8 255.6
Refractometer	9:36 AM 11:44 AM	0 0		
Fish – seine ~30 ft. net				

FISH TOTALS	Species	Number	Size	Totals
9:15-10:30 AM	Banded Killifish	1	4 inch	DIVERSITY
	Spottail Shiner	7	2 inch	6 species
	Striped Bass	1	3 inch	TOTALS
	Bay Anchovy	1	3 inch	27 fish
	Shiner	16	3 inch	
	YOY Sunfish	1	1 inch	
11:30-12:15 PM	Shiner	3	3 inch	DIVERSITY
	Banded Killifish	2	2 inch	3 species
	Bay Anchovy	3	2 inch	TOTALS
				8 total

<i>GRAND TOTALS</i>	DIVERSITY	SPECIES #6	TOTALS	FISH #35
Tides	<i>time</i>	<i>cm</i>	Rate of change	<i>Rising/Falling</i>
	10:09 AM	54.5 cm		
	10:37 AM	47 cm	7.5cm/26 min	F
	11:09 AM	36.5 cm	10.5cm /29 min	F
	11:36 AM	29 cm	7.5 cm/25 min	F
	12:09 AM	27 cm	2 cm/33 min	F
<i>Currents</i>	11:24 AM	91cm/30 sec	3.03 cm/sec	Ebb
	11:28 AM	70 cm/30 sec	2.33 cm/sec	Ebb
	11:30 AM	70 cm/30 sec	2.33 cm/sec	Ebb
<i>Sediment Core</i>	6 inch core	H2S smell		Dark core
<i>Shipping</i>	Saw no commercial boats			
	11:30 AM	Recreational sailboat		southbound
<i>Observations</i>	At Mills Mansion there are no water chestnuts which makes it unique – other sites in this area have lots of water chestnut Lots of Canadian geese and vultures (birds of prey)			