

Day in the Life of the Hudson River 10/20/15 Data
RIVER MILE 90
George Freer Memorial Park, Port Ewen, Ulster County
Meg Meisch, Rondout Valley High School
60 students 9th -12th graders, 7 adult helpers
GPS Latitude 41°907 N Longitude 73°978 W

Location: George Freer Memorial Park, Town of Ulster, Ulster, NY
Area: Park space with grassy area, used for picnics, fishing and boating
Surrounding Land Use: 28% urban/residential; 2% forested; 70% Beach
Sampling Site: Shore is beach, wooded area, muddy and rocky along the water, banks have been altered with piping noted entering the river, bits of brick and charcoal on beach. 2 drainage pipes ~2 ft. in diameter
Water depth: 1 meter
River bottom : sandy & muddy
About the site – Water Milfoil in each seine run 1-2 sq ft/run

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	10:47AM 1:02 PM	12.8°C 18.3°C	55 °F 65°F	
Wind Speed	Most of day no wind	Beaufort 0-1	11:00 AM anemometer - 1.7 kts or 2 mph	S
Cloud Cover	51-76%			
Weather today	Became mostly sunny @ 11AM, then cloudy again for rest of day			
Weather recently	Windy 10/18 with few snow flurries, very cold 10/19/15			
<i>Water Temperature</i>	10:09 AM	13°C 13 12	55°F 55 54	Average 13C/55F
	10:51 AM	13°C 12 12	56°F 53 53	12C/54F
	12:32 PM	13 °C 15 13	55°F 59 55	14C/54F
	1:09 PM	13 °C 15 16	55°F 59 60	15C/58F
<i>Water surface</i>	calm			
<i>Turbidity long Site tube</i>	NR	33 cm 30 cm 13.3 cm		25 cm Avg
<i>Chemical</i>				

DO Hach Kit	Time	Temp °C	DO	% saturated
	10:27PM	15°C	8 ppm	80%
pH – Litmus Paper	12:34 PM	6 6 6		Average 6
Salinity - Quantab	11:00-1:19 PM	Quantab units 1.2 1.2 1.2	32 ppm Cl- 32 ppm Cl- 32 ppm Cl-	Converts to 58 ppm total salinity
<i>Fish Catch 35'seine X 4 ft.</i>	<i>Number Caught-</i>	<i>Species -</i>	<i>Largest Size</i>	<i>Diversity & Totals</i>
<i>10:30-1:00 PM 10 pulls</i>	17	American Shad	8 cm	<i>Diversity - 8</i>
	2	Spottail shiner	8.5 cm	<i>Totals = 27</i>
	2	Tessellated Darter	5 cm	
	2	Striped Bass	9.5 cm	
	1	Yellow Perch	16.5 cm	
	1	White Perch	12 cm	
	1	Smallmouth bass	10 cm	
	1	Blueback herring	11 cm	
<i>Macroinvert</i>		Zebra Mussels		<i>Diversity 1</i>
<i>Tides</i>	9:55 AM	61 cm	start	
	10:47 AM	43.5 cm	falling	0.34cm/min
	12:24 PM	14 cm	Falling	0.30 cm/min
	1:02 PM	0 cm	Falling	0.36 cm/min
				AVG rate 0.33 cm/min
<i>Currents – data collected too close to shoreline to reflect the main channel</i>	<i>Time</i>	<i>Cm/30 secs</i>	<i>Cm/sec</i>	<i>Knots – Ebb Flood</i>
	10:17 AM	3 cm/30 sec	0.1 cm/sec	N - Flood
	11:05 AM	0 cm	0	Still
<i>Sediment Core</i>	<i>Length</i>	<i>Description</i>	<i>Common</i>	<i>Rare</i>
<i>12:05 PM</i>	15 cm core -	H2S smell Oil Oxidized Top	Clay Mud Sand Gravel	Pebbles Brick Coal

<i>Shipping Commercial</i>	9:43 AM	Barge – RTC 502	Not moving all day	Loaded
	12:23 PM	Bouchard	Black/Red/White	Loaded - S
<i>Recreational</i>	12:42 PM	Sailboat	White/Black	Light – N
	1:35 PM	Speedboat	Blue/Black/White	Light - N