## Snapshot Day 10/8/09 Data (Salt Front RM 60.3) RIVER MILE 41

Steamboat Dock Park, Verplanck, Westchester Beth Rhines, Teatown Lake Reservation

Bob Connick, Sott Rizzo, Trisha Fuller Johnson & Liz Stevens & Mahopac High School - Chem Honors, Regents and APES - 9<sup>th</sup> - 12<sup>th</sup> graders - 40 students Latitude N 41°24'.936" Longitude W 73°93'.479"



Blue Fish and a Crevalle Jack seined during A Day in the Life

**Location:** Steamboat Dock Park beach, City of Verplanck in Westchester County **Area:** located in a small cove between a point and a bulkhead – sampled approximately 30 ft. from south end of dock/parking lot

**Surrounding Land Use:** Urban/residential 30%, Forested 10%, beach 40%, Industrial commercial 5%, Other 15%. Some buildings with large parking lots in front to the north. Beach, a street with houses with some trees to the south

Sampling Site: beach, riprap, banks altered, dock, bulkhead

Plants in area: Trees – Oak, Maple, Black Locust

Vines – Wild grape
Other Plants – Burdock
Deadly nightshade

Water depth: 0.7 meters

**River Bottom** – sandy and rocky

**Observations-** *Bricks on beach* -2 types. 1. Rounded edges, talked with a local who noted they had been in the river awhile. Rejects from the brick factories on the Hudson. 2. Intact – Construction waste dumped in river. Lots of sea glass.

**Parking lot** – garbage, cans, storm drains, buildings, dock – impacts due to alteration of habitat – both thermal and chemical pollution.

ITEM	Time	Reading	1 Reading 2	Comments			
Physical							
Air Temperature	11:25 AM	18.5°C					
		51 °F					
	12:17 PM	19°C					
Wind Speed	1 Beaufort	4.83 km/	/hr 3 knots wind	d from the North			
Cloud Cover	none						
Weather today	Partly cloudy, no rain						
Weather recently	A lot of wind and rain the day before						
Water Surface	Calm						
Water	11:25 AM	20°C	70°F	Water depth 2			
Temperature		20°C	70°F	ft.			
		20°C	70°F				
	11:45 PM	20°C	70°F	Water depth 2			
		20°C	70°F	ft.			
		20°C	70°F				
Turbidity - secchi							
Meter							
Chlorophyll							
Chemical							
DO	11:35 AM	8 mg/L	18°C	85 %			
(drop kits)							
	12:20 PM	9 mg/L	20°C	97%			
	12:32 PM	9 mg/L	20°C	97%			
pH Indicator sol	11:38 AM	8.0					
	12:05 PM	7.5					
	12:15 PM	8.5					
Salinity meter	11:25 AM	2.3 ppt					
	12:15 PM	2.0 ppt					
Conductivity		3594 mS					
Fish Catch	Number Caught	Species	CPUE	Seine			
20 ft net X 4ft– 50 ft. pull	70	Silversides	7.5 cm				

4X6 mm openings	1	Crevalle Jack	4.5 cm		
Did a total of 10	1	Bluefish	10.5 cm		
seine runs					
$I^{st}$ seine run =	1	Striped Bass			
1 bluefish, 9					
silversides and 1					
Crevalle Jack					
Tides	TIME	Water height	Rise/Fall		
	11:10 AM	67cm			
	11:25 AM	68cm	rising		
	11:50 AM	74 cm	rising		
	12:07 PM	81 cm	rising		
	12:21 PM	84 cm	Rising		
Currents	Time	Cm/60 sec	Knots	Direction	
	11:35 AM	60 cm/60sec	0.019 knots	N Flood	
	11:53 AM	56 cm/60sec	0.018 knots	N Flood	
Core –	Length -	Top 4 cm	8-13 cm	Abundant"	
From 3.5 ft. of	12-13.5	oxidized –	second layer	Clay	
water - 40 ft.	cm – dark	reddish grey	_		
from shore	slatey	with red dots –	fine particles		
	grey	brick or oxidation?	(clay?)		
Traffic	11:36 AM	Tugboat with barge	Brown	Southbound/Full	
	12:18 PM	Corander Ferry	White	Northbound	
	12:33	Sheriff	White	Northbound	
Other Items	Turkey Vultures, 12 Canadian Geese, 2 Black Ducks, 10 Ringed-Bill Gulls				