

**A Day in the Life of the Hudson River 10/20/15 Data
RIVER MILE 102**



**Saugerties Light House, Town of Saugerties, Ulster Co.
Marie Daniels, Jennifer Reid & Matthew, Woodstock Day School
Grades 5th & 7th, 20 students and 8 adults
42.04°N, 73.92 °W**



Location: Saugerties Light house @ northern bank of peninsula – pier with grassy area

Area: Pier of sorts, boating, fishing, swimming beach, picnics, hiking, walking

Surrounding Land Use: Forested 80%, Beach 20%

Sampling Site: beach, bulkhead altered banks years ago, covered with vegetation, collected wood/debris in area, shoreline riprap at lighthouse, shoreline is sandy, muddy, rocky

River Bottom: muddy, sandy, rocky

Plants in area: Percent reported varies from 50% to 90% water chestnut, and 50% to 10 % water celery

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	10:33 AM	13°C	55 F	
	11:37 AM	14°C	57 F	
	11:51 AM	15°C	60 F	
Wind Speed	11:00 AM	Beaufort #3		N SW
	11:51 AM	Beaufort #2		
Cloud Cover	12:00 PM	Partly	51-75% cloud	

		cloudy		
Weather today	No rain			
Weather recently	Cool fall like			
Water Temperature	10:30 AM 11:50 AM 11:55 AM	10 °C 15°C 15°C	2 ft. water 3 ft. water 2 ft. water	
Water Calm or Choppy	choppy			
Turbidity Long site tube	10:35 AM	25 cm 20 30	Average 25 cm	Not clear but not turbid – on a scale of 1-10 it is about a 4!
	11:00 AM	26 cm 32 35	Average 31 cm	
	11:28 AM	26 34 25	Average – 28.3 cm	
	12:01 PM	26 cm 27 29	Average 27 cm	
Chemical				
DO (ampules)	10:30 AM 11:00 AM 12:00 PM	6 mg/L 8 mg/L 8 mg/L		
pH – color match kit	11:30 AM 12:00 PM	7.4 7.4		
Salinity Quantabs				
Fish – 50 ft. net	Time	Species	# caught	Length of largest
Seine #1 - Div 3	10:20	Largemouth Bass	1	15 cm
Totals 4		Banded Killi	2	5 cm
		Bluegill Sunfish	1	2.5 cm
Seine #2 – Div 5	10:54 AM	Common Goldfish	2	17 cm
Totals 9		Striped Bass	4	17 cm
		Pumpkinseed	1	4 cm
		Shad	1	11 cm
		Banded Killi	1	10 cm
Seine #3 – Div 3	11:30 AM	Goldfish	2	14 cm

Totals 5				
		Blueback Herring	2	7cm
		Tessellated Darter	1	10 cm
Seine #4 – Div 7 Totals 28	11:46 AM	Pumpkinseed	1	12 cm
		Striped Bass	5	18 cm
		Shad	8	8 cm
		Bluegill sun.	5	
		Tessellated Darter	1	
		Banded Killifish	7	
		Golden Shiner	1	10 cm
	GRAND TOTALS	DIVERSITY - 9	TOTAL CATCH -46	
Tides	Time	Height	Falling/Rising	
	10:36 AM 11:07 AM	35cm 93 cm		HT was at 8:32 AM
Currents	Time	Cm/30 secs	Cm/sec	N/S - E/F/S
	11:45 AM 12:00 PM 12:09 PM	30cm/30 sec 60 cm/30 sec 50cm/30 sec	1cm/sec 2 cm/sec 6.6 cm/sec	North/flood 4.6 kts
Sediment Core - Length	Observation	Rare	Common	Abundant
10:50 AM -	8 inches – oxidized top			Mud on bottom
11:14 AM	4 inches – 1 inch oxidized top	Gravel, Living vegetation	Clay, mud	sand
11:20 AM	5 inches – oxidized top	Clay	Mud	Sand
11:54 AM	3 inches – H2S smell, 1 inch oxidized top	Clay		Sand
Shipping Commercial (C)	10:00 AM N/R N/R 12:00 PM 12:00 PM	Red Barge White Barge Red/Bk Black Large Cargo	Northbound Northbound Southbound Southbound Southbound	Loaded Light Light Light Loaded
Recreational (R)	10:00 AM 12:45 PM	White speedbt	Southbound Southbound	Light Light

		Sailboat		
<i>Observations</i>	Lots of devil's heads from water chestnut, and bricks, lumps of coal, bits of shells, overgrown plants and seagulls, hummingbird, squirrels, hawks, dragonflies			