

Day in the Life of the Hudson River 10/05/2023
Esopus Meadows Preserve, Ulster County, NY
RIVER MILE: 87
Salt Front: ~ RM 52
Kingston High School-Sophia Sagan
Clearwater- Eli Schloss
19 students, 9th-12th grade, 5 adults
Latitude 41.868266°N & Longitude -73.950724°W

Location: Beach Lighthouse Park, Esopus Meadows Preserve, Town of Esopus, Ulster County, NY.

Surrounding Land Use: 90% Forested& 10% Beach

Sampling Site: Rocky shallow, sloping beach area covered with vegetation.

Shoreline: Muddy & Rocky

Water: Calm

River Bottom: Muddy & Weedy

Plants in the water: 20% Water Milfoil

*NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature</i>	11:22 AM	21 ° C	70° F	
<i>Wind Speed:</i>	11:22 AM	<i>Anemometer</i> 7-10 knots	<i>Beaufort</i> 3	<i>Direction</i> East/Southeast
<i>Weather today</i>	10:52 AM	26-50% Cloud Cover	No Rain	
<i>Weather the past 3 days:</i>	Sunny and warm			
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Height (cm)</i>	
	10:52 AM	Falling	48.25 cm	
	11:22 AM	Falling	40.64 cm	
	11:38 AM	Falling	38.1 cm	
<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>
	11:22 AM			Slack
	11:38 AM			Slack
<i>Water Temperature-</i>	11:58 AM	21°C	70°F	
<i>Turbidity- Long Sight Tube (120 cm)</i>	11:58 AM	28 cm		
Chemical				
<i>Standardized Salinity- Low Range Quantabs</i>	1:30 PM	Below Detection		
<i>Student Salinity- High Range Quantabs</i>	1:00 PM	30 ppm Cl ⁻	54 ppm Total Salinity	
<i>DO – Hach Drop Count Kit</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	12:05 PM	21°C	7 ppm	83%
<i>pH – Color Match Kit</i>	12:11 PM	7.5		
Biological				
<i>Fish-Seine (9 Hauls)</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>Notes</i>
11:00 AM-12:00 PM	1	American Eel	12 cm	
	4	YOY Herring sp.	<4 cm	
	1	Banded Killifish	5 cm	
	1	White Perch	10 cm	
	12	Pumpkinseed	13 cm	
	6	Bluegill	8 cm	

	2 18	Largemouth Bass Tessellated Darter	8 cm 5 cm			
Fish Totals	TOTAL: 45	Diversity: 8				
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>			
	12	Blue Crab	12 cm			
Macroinvertebrate Totals	TOTAL:	Diversity:				
<i>Sediment Core -NR</i>	<i>Time</i>	<i>Oxid Top</i>	<i>H₂S Smell</i>	<i>Oil</i>	<i>Grain Size</i>	<i>Other Features</i>

Boats					
Commercial/Recreational	Time	Name	Color	Southbound/Northbound	Light/Loaded
Commercial	11:38 AM	Rip Van Winkle	White	Southbound	