

Day in the Life of the Hudson River 10/22/19
GEORGE FREER MEMORIAL PARK, PORT EWEN
RIVER MILE: 90.5
Salt Front: ~ RM53
High Meadow School- Gian Ascione
15 students 8th grade
Latitude 41.910714 N & Longitude – 73.972606 W

Location: George Freer Memorial Park, Port Ewen, New York

Area: Park space with grassy area, used for picnics, fishing and boating.

Surrounding Land Use: Urban/Residential; Recreation/Beach

Sampling Site: Grassy; parking lot nearby; light density forest trees nearby (Willow, Oak, staghorn sumac)

Shoreline: Sandy beach; banks partially altered by concrete bulkhead; drainage pipes (2) entering water north of bulkhead; may pieces of brick and coal lay around the beach

Plants in area: Water chestnut seeds

River Bottom: Sandy

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature</i>	11:04 AM	16 ° C	61 ° F	
	11:18 AM	16.7 ° C	62 ° F	
<i>Wind Speed: anemometer</i>	11:08 AM	0-0.2 mph	East	
	12:38 PM	1 mph	Southeast	
<i>Weather today</i>	Overcast >75%			
<i>Weather the past 3 days:</i>	Three days prior have been dry, mild temperature (high 54-61F), two of the three days were sunny.			
Tides-	Time	Rising, Falling, Unchanged	Height (cm)	Rate of Tidal Change (cm/min)
	10:45 AM	Falling		
	11:15 AM	Falling		
	11:45 AM	Falling		
	12:15 PM	Falling		
	12:45 PM	Falling		
Current-	cm/second	Knots	North/South	Ebb/Flood/Still
11:04 AM	0.17			
11:10 AM	1.7			
11:15 AM	3.5			
11:20 AM	3			
12:45 PM	4.9			
Water Temperature	11:15 AM	11° C	54° F	
	12:47 PM	16.7° C	62° F	
	1:32 PM	14.4° C	58° F	
Turbidity - long sight tube	11:12 AM	53 cm		
	12:30 PM	67 cm		
	1:27 PM	58 cm		
Chemical				
<i>Salinity-NA</i>	<i>Time</i>	<i>Chloride ppm Cl</i>	<i>Total Sal. Ppm</i>	
<i>DO – NA</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
<i>pH – NA</i>				
Fish	Number	Name	Length of longest	
	32	Spottail Shiners	4 inches	
Fish Totals	TOTAL: 32	Diversity: 1		

<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	
	13	Blue Crab		11 males, 2 females
Macroinvertebrate Totals	TOAL: 13	Diversity: 1		
<i>Sediment core</i>				
Using push core sediment collection, only a few inches of gravel and pebbles could be sampled. Some bits of brick were possible as well. There were no obvious signs of living material (vegetation, shells)				
Observations				