

Day in the Life of the Hudson River 10/16/18 Data

GEORGE'S ISLAND COUNTY PARK

RIVER MILE: 40

Salt Front: ~RM 24

Fox Meadow Elementary- 86 students 3rd grade, Alethea Lynch

Pleasantville High School- 14 students

22 parent chaperones, 12 teachers, 1 photographer

Latitude 41.24936 N & Longitude -73.936474 W

Location: George's Island County Park, Westchester County, NY

Area: waterfront park, banks altered, bulkhead with wooden timbers, boat launch

Surrounding Land Use: Primarily, park picnic area and boat launch; forested area; parking lot

Sampling Site: Beach, riprap, and concrete bulkhead

Shoreline: sandy rocky with brick pieces

Plants in area: grass covers > than 1/2 of site – low cut, deciduous trees cover 1/4 of site include sugar maples, black locust, willows, hophorn beam, Common reed (Phragmites) covers

River Bottom: muddy

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>	<i>Comments</i>	
Physical				
<i>Air Temperature:</i>	10:30 AM	59 ° F, 60 ° F	15 ° C, 15.56 ° C	
	10:45 AM	60 ° F, 61 ° F	15.56 ° C, 16.1 ° C	
	10:55 AM	61 ° F, 62 ° F	16.1 ° C, 16.67 ° C	
	11:05 AM	62 ° F, 62 ° F	16.67 ° C, 16.67 ° C	
	11:46 AM	62 ° F, 62 ° F	16.67 ° C, 16.67 ° C	
	12:32 PM	62 ° F, 62 ° F	16.67 ° C, 16.67 ° C	
	12:41 PM	62 ° F, 61 ° F	16.67 ° C, 16.1 ° C	
	1:03 PM	62 ° F, 62 ° F	16.67 ° C, 16.67 ° C	
<i>Wind Speed:</i>	10:30 AM	Beaufort: 2	2.8 mph	South
	10:45 AM	Beaufort: 3	3.1 mph	South
	10:55 AM	Beaufort: 2	2.8 mph	South
	11:32 AM	Beaufort: 3	2.9 mph	South
	11:48 AM	Beaufort: 2	2.5 mph	South
	12:34 PM	Beaufort: 2	2.3 mph	South
	12:42 PM	Beaufort: 2	2.9 mph	South
	1:05 PM	Beaufort: 3	4.3 mph	South
<i>Weather Today:</i>	No rain, partly cloudy all day (Cirrus/cumulus)			
<i>Water Temperature</i>	10:32 AM	52 ° F, 52 ° F	11.1 ° C, 11.1 ° C	
	10:51 AM	58 ° F, 59 ° F	14.4 ° C, 15 ° C	
	11:09 AM	60 ° F, 59 ° F	15.5 ° C, 15 ° C	
	11:25 AM	58 ° F, 56 ° F	14.4 ° C, 13.3 ° C	
	11:46 AM	56 ° F, 58 ° F	13.3 ° C, 14.4 ° C	
	12:32 PM	60 ° F	15.5 ° C	
	12:53 PM	59 ° F	14.4 ° C	
	1:08 PM	61 ° F	16.1 ° C	
<i>Turbidity - Secchi Disk</i>	10:30 AM	52 cm	*Large fluctuations in a short amount of time.	
	10:52 AM	47.5 cm		
	11:13 AM	61 cm		
	11:34 AM	44.5 cm		
	11:52 AM	51 cm		
	12:31 PM	22.56 cm		
	12:48 PM	61 cm		
	1:07 PM	72 cm		
Chemical				
<i>Salinity- Hydrometer</i>	10:32 AM	Below Detection		
	11:43 AM	Below Detection		

<i>DO – Estuary wide monitoring Kit</i> <i>*DO reads are low; Estuary wide kit is low resolution</i>	<i>Time</i>	<i>Temp</i>		<i>ppm DO</i>	<i>% saturation</i>
	10:30 AM	12 ° C		4	37
	10:48 AM	15 ° C		4	40
	11:10 AM	15 ° C		4	40
	11:26 AM	14 ° C		4	39
	11:46 AM	13 ° C		4	38
	12:28 PM	15 ° C		4	40
	12:51 PM	14 ° C		4	39
	1:07 PM	16 ° C		4	41
<i>pH-</i>	10:35 AM - 11:25 AM	7.5			
<i>Nitrates- Estuary Wide kit</i>	10:30 AM 10:47 AM 11:08 AM 11:23 AM 11:40 AM 12:32 AM 12:53 AM 1:08 PM	40 ppm 5 ppm 20 ppm 20 ppm 20 ppm 5 ppm 15 ppm 15 ppm			<i>*This kit is very low resolution. The readings are very high and variable</i>
<i>Fish –</i>	<i>Number</i>	<i>Name</i>		<i>Length of longest</i>	
	7 3 3 1	Striped Bass Banded Killifish American Eel Hogchoker			
	TOTAL: 14	Diversity: 4			
<i>Macroinvertebrates-</i>	<i>Number</i>	<i>Name</i>		<i>Length of longest</i>	
	100 2 2	Blue Crab Shrimp Scud		6 cm	
	TOTAL: 104	Diversity: 3			
<i>Tides- Dock to water</i>	<i>Time</i>	<i>Rising, Falling, Still</i>	<i>Height (cm)</i>	<i>Rate of Tidal Change (cm/min)</i>	
	10:30 AM 10:45 AM 10:55 AM 11:10 AM 11:46 AM 12:32 AM 12:41 AM 1:03 PM	- Rising Rising Rising Rising Rising Rising Slack	27 cm 26 cm 25 cm 24 cm 23 cm 18 cm 14 cm 14 cm	 0.067 0.1 0.067 0.0278 0.11 0.44 0	
<i>Currents Flow</i>	<i>Time</i>	<i>Cm/second</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Still</i>
	10:30 AM 10:45 AM 10:55 AM 11:07 AM 11:48 AM 12:36 AM 12:47 AM 1:05 PM			South South South South South Still Still South	Ebb Ebb Ebb Ebb Ebb/Slack Slack Slack Ebb
<i>Boats</i>	<i>Time</i>	<i>Name</i>	<i>Color</i>	<i>North/South</i>	<i>Loaded/Light</i>
Commercial	10:00 AM	Barge	Green and Black	North	Loaded
Commercial	11:45 AM	Barge	Red and Black	North	Loaded