

Day in the Life of the Hudson River 10/22/19

GREAT KILLS PARK STATEN ISLAND

RIVER MILE: -11.2

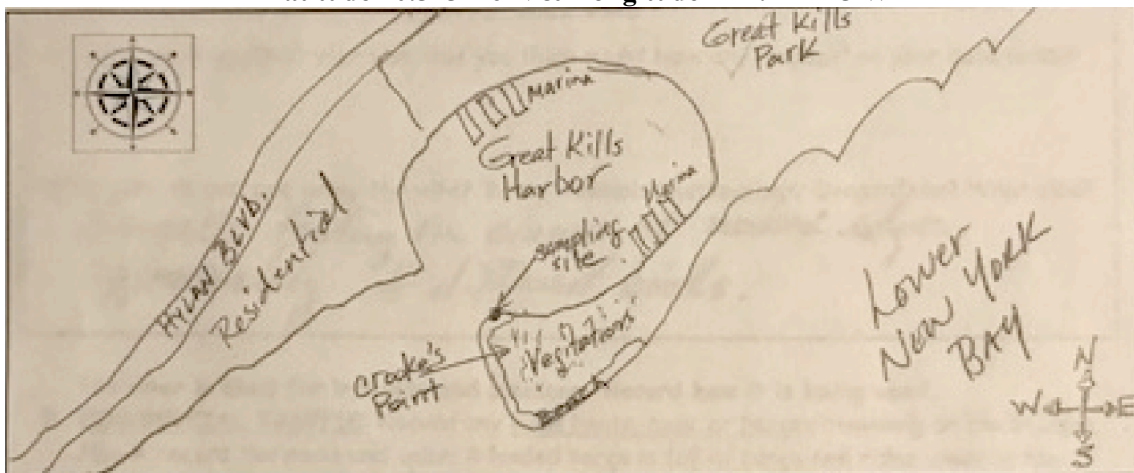
Salt Front: ~RM 53

Curtis High School- Dave Scheffler

38 students 11th -12th grade, 3 adults

Steve Stan

Latitude 40.545446 N & Longitude – 74.122115 W



Location: Great Kills Gateway National Recreation Area, Staten Island, New York

Area: Open Beach

Surrounding Land Use: 30% Beach (urban park); 70% Forested

Sampling Site: Beach and riprap, sandy and rocky.

River Bottom: Sandy and muddy

Shoreline: 80% Sandy; 20% Muddy

Plants in area: 20% seaweed

Water: 80 cm deep

ITEM	Time	Reading		Comments
Physical				
<i>Air Temperature</i>	11:01 AM	14.5 ° C	58.4 ° F	
	11:51 AM	17.8 ° C	62.7 ° F	
<i>Wind Speed:</i>	11:51 AM	Beaufort 2	6 m/s	East
<i>Weather today</i>	10:45 AM Overcast (100%); 11:30 AM Rain; 5 minutes of sprinkle			
<i>Weather the past 3 days:</i>				
Tides- Tide stick	Time	Rising, Falling, Unchanged	Height (cm)	Rate of Tidal Change (cm/min)
	10:45 AM	Falling	80 cm	NA
	12:00 PM	Falling	150 cm	0.93 cm/min
Current-	cm/second	Knots	North/South	Ebb/Flood/Still
	NA	NA	North	Flood
Water Temperature	Time	° C	° F	Average
	11:03 AM	16° C, 13° C, 15°	61° F, 55° F,	14.75° C, 58.75° F
	11:35 AM	C	59° F	15.5° C, 60° F
	11:48 AM	16° C, 15° C, 15.5° C, 16° C	61° F, 59° F, 60° F, 61° F	
Turbidity - long sight tube	11:35 AM	25.2 cm, 25.3 cm, 19.2 cm Avg: 25.23 cm		Brown, muddy
Chemical				

<i>Salinity-Refractometer</i>	<i>Time</i> 10:51 AM	<i>Chloride ppm Cl</i>	<i>Total Sal. ppm</i> 32000 ppm	<i>Salinity matches NYHOPS model for 10/22/19</i> http://hudson.dl.stevens-tech.edu/maritimeforecast/maincontrol.shtml
<i>DO – NA</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
<i>pH – Meter</i>	11:21 AM	8.2, 8.1, 8.2		
<i>Fish</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	
Seine 12' & Rod and Reel	6	Atlantic Silverside	2.75 inches	Pull 1
	18	Atlantic Silverside	3 inches	Pull 2
	1	Skate	14.5 inches	Rod and Reel
	1	Summer Flounder	24 inches	Rod and Reel
Fish Totals	TOTAL: 26	Diversity: 3		
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	
	2	Blue Crab	Females	
	3	Mud Crab	Males	
Macroinvertebrate Totals	TOAL: 5	Diversity: 2		
<i>Sediment Core</i>	<i>Time</i>	<i>Oxid Top</i>	<i>Grain Size</i>	<i>Other Items</i>
Length: 45 cm	10:34 AM	No	Abundant: Mud, Sand	Common: pieces of drift wood, dead oyster shells Abundant: Zebra mussels, living vegetation
Boats	Time	Loaded/Unloaded	North/South	Name/Color
Commercial	11:30 AM	NA	North	NYPD Rescue, Gray
Recreational	NA	Light	North	50' rec Fishing; White
Recreational	NA	Light	North	40' rec Fishing; White
Recreational	NA	Light	North	21' rec Fishing; White
Observations	Clam shells, oyster shells, crab molts, crab shells; seagulls were feeding on clams at water's edge. Approximately 8 species of birds.			