

Day in the Life of the Hudson River 10/20/15 Data
RIVER MILE 25E
Matthiessen Park, Irvington, NY
Joanna Morabito, Irvington High School
19 Marine Science Students, 43 AP Environmental Science Students
Latitude 41° 2' 30" N Longitude 73° 52' 32" W



Area: Hudson River, grass, rocks bordering (river), mini beach, dock
Percentages: 40% grass, 10% beach, 5 % forested, 45% river
Surrounding Land Use: Park
Sampling Site: Mini beach at Matthiessen Park,
Plants in area: Moss, maple tree, oak tree, grass
Water Depth: varied; depth increased as the day progressed
River Bottom: Rocky close to the beach and muddy farther away
Weather Conditions: Sunny

ITEM	Reading 1 Time: 9:24am	Reading 2 Time: 9:56am	Reading 3 Time: 10:26am	Reading 4 Time: 10:56am
Air Temperature	43 F	51 F	51 F	52 F
Wind Speed	4 (Beaufort #)	3	3	2

Cloud Cover	Small Amount	Small Amount	Clear	Clear
Current Weather	Partly Cloudy	clear	clear	clear
Describe the recent weather over the past TWO days: Cloudy but no Rain				

Currents	Time of Reading	Length from Start to Finish line (cm)	Amount of time from Start to Finish	Rate (length/time)	Direction of Current
Reading 1	9:45 am	1000	2 min 47 sec	5.988cm/sec	South
Reading 2	10:14 am	1000	3 min 17 sec	5.154cm/sec	South
Reading 3	10:40 am	1000	1 min 37 sec	7.299cm/sec	North
Reading 4	11:07 am	1000	1 min 29 sec	7.751cm/sec	North

Other comments: We had fun throwing oranges into the river.

River Traffic (note time): none

WATER CHEMISTRY: LaMotte Kit

	Reading 1 Time: 9:24 AM	Reading 2 Time: 9:51 AM	Reading 3 Time: 10:24 AM	Reading 4 Time: 10:52 AM
Water Surface Temperature (degrees Celsius)	11	8	12	11
Turbidity (Use Turbidity Tubes) (centimeters)	18	15.2	26	24
DO (tablet kit-PPM) **This Test was performed incorrectly- students did not place appropriate number of tablets in tube.**	3	2	5	5
pH (tablet Kit)	7	7	7	7
Salinity Meter (PPT)	11	6	7	6

HIGH SCHOOL WATER CHEMISTRY TESTS ONLY

CHEMets Kits

	Reading 1 Time: 9:25 9:25	Reading 2 Time: 9:52 10:00	Reading 3 Time: 10:09 10:25	Reading 4 Time: 10:23 11:00
DO (PPM)	6	10	8	6
Nitrate (PPM)	0	0.1	0	0.1
Phosphate (PPM)	1	0	0	1
pH meter	7.7	7.8	7.8	7.9

FISH ID/ SEDIMENT CORE/ TIDES

	Species Caught	Number of each Species Caught
Fish Catch 1 Time: 9:06 am	Silverside Blue Crab Shiner Shrimp Anchovy	6 4 1 2 1
Fish Catch 2 Time: 9:20 am	Shiner Silverside White perch silverback Blue Crab	2 3 1 3 2
Fish Catch 3 Time: 9:31 am	Shiner Silverside White Perch Silverback Blue crab	2 3 1 3 2
Fish Catch 4 Time: 10:01 am	Small mouth bass flounder silverside	1 1 5

Sediment Core

	Time core was taken	Rare components	Common components	Abundant components
Core 1	9:40 am	wood leaves shells	pebbles slug	mud gravel

Core 2	10:00 am	Wood	Mud	Gravel Sand Mud
Core 3	10:35 am	Leaves Wood Shells	Mud	Gravel Sand Mud
Core 4	11:05 am	Wood Shells	Pebbles	Gravel Sand Mud

TIDES (Multiple groups measured 4 times.)

	Reading 1 and Time When Taken	Reading 2 and Time When Taken	Reading 3 and Time When Taken	Reading 4 and Time When Taken
Right Side Stick	N/A	N/A	N/A	N/A
Left Side Stick	8:30am: 13cm: 9:50am: <13cm 11:10am: <13cm 12:24pm: 33 cm	8:50am: <13cm 10:10am: <13cm 11:30am: 15cm	9:10am: <13cm 10:30am: <13cm 11:50am: 27cm	9:30am: <13cm 10:50am: <13cm 12:10pm: 28cm

Is it an incoming or outgoing high tide or an incoming or outgoing low tide?

The high tide was incoming.