

**Day in the Life of the Hudson River 10/12/17**  
**(Salt Front ~ RM 65)**  
**RM 140 Papscanee Preserve**  
**Staats Island Rd., Castleton-On-Hudson**  
**Kate Perry, Parker School 2<sup>nd</sup> & 3<sup>rd</sup> and 6<sup>th</sup> & 7<sup>th</sup>, 36 students & 16 adults**



**Sampling Site**



**Location:** 150 Staats Island Rd, Staats Island Rd, Castleton-On-Hudson, Rensselaer County

**Surrounding Land Use:** 80% Urban/residential, 10% forested, 10% beach (gravel)

**Sampling Site:** Mostly vegetation covering larger rocks. One section of gravel beach.

**Plants in area:** plants covered by water at highest tide – otherwise along edge – 5%. Water milfoil and water celery, and also found 3 devil head seed pods but no water chestnut plants seen. Grasses and reeds present.

**Water depth:** shore to 1.22m mostly

**River Bottom:** rocky, gravely with some mud

NOTE: Fish catch from students listed below. DEC also brought fish including:

- 1 Catfish (30.5 cm)
- 5 White Sucker (38 cm)
- 1 Freshwater Drumfish (45.7 cm)
- 1 Northern Hog Sucker (35.6 cm)

**All sampling occurred between 9:30-11:00 & 11:30 and 1:00 PM**

	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<b>Physical</b>				
Air Temperature	10:50 11:33	19°C 20	66.2 °F 68	
Wind Speed		Beaufort	S-SW	

Cloud Cover	Partly cloudy, clearing as morning went on			
Weather last 3 days	Unseasonably warm, rain evening of 10-11-17			
<b>Water Surface</b>	Mostly calm			
<b>Water Temperature</b>	10:45 11:30 11:50	16°C 16 16	16°C  16	16°C 16 16
<b>Turbidity</b> Long Sight Tube	10:45	71.2	68	69
<b>Chemical</b>				
DO - drop count	10:50 AM	5mg/l	16°C	50% saturation
pH (test strips)	10:50	6, 6, 6	Litmus paper	Average: 6
<b>Salinity -</b> (Low-range Quantab)	10:45	1.2 Quantab unit (below detection)		
<b>Nitrates</b> (NO <sub>3</sub> <sup>-</sup> )	11:07	0ppm	5ppm	Average: 2.5 ppm
<b>Phosphate</b>	11:07	0.04ppm	0.04ppm	Average: 0.04ppm
quantabs	11:25 AM	39 mg/l Cl-		70 ppm
<b>Tides</b>	Time	Height	Rate	Rising/Falling
Measuring dock to water surface	10:40 10:50 11:06 11:16 11:43 11:46	60cm 61 50 56 61 66	1.0cm/min 0.7 0.55 0.06 0.4 1.0	Falling Rising Falling Falling falling
<b>Currents</b>	Cm/30 sec	Cm/sec	Knots	N/S – Ebb/Flood
10:40	353.9	11.8		S/Ebb
11:00	178.3	5.9		S/Ebb
11:30	240.4	8.01		S/Ebb
Data was collected off of a dock with a platform alongside it. Boat traffic and student error may have created data discrepancy				
<b>Sediment Core 20 cm depth</b>	<b>Description</b>	<b>Rare</b>	<b>Common</b>	<b>Notes</b>
	Length of core: 90cm	Mud Pebbles Leaves Shells Oysters Freshwater	Sand Gravel Wood	Roots with diameter ranging from 2mm to 4mm

		Mussels Zebra mussels Macroinvertebrates Brick Coal Slag		
<b>Fishing – seine 20 ft. net &amp; a 40 ft. pull</b>	<b>Count</b>	<b>Species</b>	<b>Length largest</b>	<b>Seine #s</b>
	<b>DIVERSITY 1</b>	<b>CATCH 6</b>		
CPUE				
<b>Shipping</b>	<b>Time</b>	<b>Type (Recreational/ Commercial)</b>	<b>Type</b>	<b>Cargo</b>
	9:50 10:30 10:55	R C R	Yacht Coastguard Speedboat	People People People
<b>Other items of interest</b>	Historic Staat's House, grasshopper missing a leg, baby mice in a nest along shore, gull			
An amazing day at Stats Island. Three dozen young scientists marveled at the cool winds, gentle tides, blue sky and Hudson River fish. They mysterious devils pod chestnut seeds created rich inquiries. Avian life abounded in the nearby trees still holding fall leaves.				