

Day in the Life of the Hudson River 10/14/21

SCHODACK ISLAND STATE PARK

RIVER MILE: 134.5

Salt Front: ~ RM 49

Chatham Middle School – 50 students, Tom O'Dowd

Chatham High School- 50 students, Sandy Fischer

Cary Institute of Ecosystem Studies

Latitude 42.499487 N & Longitude – 73.776702 W



Location: Schodack Island State Park, Schodack Landing, Rensselaer County, NY

Area: 1052 acres- park and boat launch area- grassy area with concrete walkway, pier, forested, grassy, parking lot, and boat launch

Surrounding Land Use: 70% Forested, 15% Urban/Residential, 55% Industrial/Commercial

Sampling Site: Boat launch, banks altered, covered in vegetation, riprap, concrete bulkhead, pipe entering the water

Shoreline: 5% Sandy, 15% Muddy, 80% Rocky

Water: 610 cm, deep drop off from the bank, calm

River Bottom: Rocky, muddy

Plants in the water: no plants in the water area

ITEM	Time	Reading				Comments		
Physical								
	Time	Metal Thermometer		Anemometer Therm.		Wind Chill	Dew Point	
Air Temperature	9:21 AM	16.5 ° C	61.7 ° F	17.8 ° C	64.04 ° F	17 ° C	23.2 ° C	
	10:36 AM	21.6 ° C	70.88 ° F	18.9 ° C	65.84 ° F	18.9 ° C	23.2 ° C	
	11:15 AM	26 ° C	78.8 ° F	-	-	-	-	
	11:46 AM	-	-	24.6 ° C	76.28 ° F	24 ° C	23.2 ° C	
Wind Speed:	9:21 AM	1.3 m/s, 1.9m/s gusts		North		Beaufort 0-2		
	10:36 AM	1.0-2.0 m/s, 1.0m/s gusts		North		Speed: 0-7 mph		
	11:46 AM	0.0-0.3 m/s						
Weather today	AM- Mostly cloudy (51-75%), PM- Overcast (>75%)							
Weather the past 3 days:								
Tides- tide stick	Time	Rising, Falling, Unchanged		Height (cm)				
Group 1:	9:55 AM	-		49 cm				
	10:00 AM	Rising		56 cm				
	10:05 AM	Rising		59 cm				
	Group 2:	9:58 AM	-		130 cm			
		10:02 AM	Rising		131 cm			
		10:11 AM	Rising		133 cm			

Group 3:	10:20 AM 10:25 AM 10:30 AM	- Rising Rising		170 cm 180 cm 180 cm +		Above the tide stick	
Group 4:	12:20 PM 12:25 PM 12:30 PM	- Falling Falling		175 cm 173 cm 172 cm			
<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>			<i>Ebb/Flood/Still</i>
	9:02 AM 10:20 AM 11:13 AM 12:25 PM 12:55 PM	37.5 29.5 69.1 0 10.837 29.3	0.73 0.57 1.34 0 0.21 0.57	North North North Still South South			Flood Flood Flood Still Ebb Ebb
<i>Water Temperature</i>	<i>Time</i>	<i>Metal Thermometer</i>		<i>Anemometer Therm.</i>			
<i>Thermocline Probe</i> Depth 2.5 m Depth 2.8 m Depth 2.9 m	9:30 AM 10:54 AM 1:47 PM	15.56 ° C 19.44 ° C 18.89 ° C	60 ° F 67 ° F 66 ° F	17.5 ° C 19.1 ° C 18.4 ° C	63.5 ° F 66.38 ° F 65.12 ° F		
	9:30 AM 10:54 AM 1:47 PM	Surface Temperature 18.9 ° C 19.8 ° C 20.6 ° C			Bottom Temperature 18.8 ° C 19.2 ° C 19.8 ° C		
<i>Turbidity-</i>	9:30 AM 10:54 AM 1:47 PM	Secchi Disk 91.44 cm 124.97 cm 122 cm			Long sight tube 42.5 cm 65 cm 101 cm		
<i>Chemical</i>							
<i>Salinity- Quantab</i>	9:30 AM 10:54 AM 1:47 PM	< 29 ppm Cl- < 29 ppm Cl- < 29 ppm Cl-		Below Detection Below Detection Below Detection			
<i>DO – titration</i>	<i>Time</i>	<i>Temp</i>		<i>ppm DO</i>		<i>% saturation</i>	
		18 ° C		7.6 (average)		78%	
<i>pH – Aquachek strip</i>	9:30 AM 10:54 AM 1:47 PM	7 5 6					
<i>Alkalinity- Aquachek strip</i>	9:30 AM 10:54 AM 1:47 PM	80 ppm 40 ppm 40 ppm				*different location	
<i>Nitrate/Nitrite</i>	10:45 AM	23 ppm					
<i>Phosphate- Aquachek strip</i>	9:30 AM 10:54 AM 1:47 PM	30 ppm 25 ppm 30 ppm					
<i>Biological</i>							
<i>Fish</i>	<i>Number</i>	<i>Name</i>		<i>Length of longest</i>		<i>Length of smallest</i>	
<i>Seined onsite</i>	1	Spottail Shiner		5 cm		-	
	36	Banded Killifish		7 cm			
	10	White Perch					
	2	Pumpkinseed Sunfish		12 cm			
	6	Bluegill		7.6 cm			
	1	Largemouth Bass					
	1	Tessellated Darter		7 cm			
	1	Yellow Perch					
Fish Totals	TOTAL: 58	Diversity: 8					
<i>Brought by DEC</i> <i>Brought by DEC</i>	1 1	Catfish Smallmouth Bass		Not in totals above		-	

<i>Brought by DEC</i>	1	White Sucker			
<i>Boat Traffic</i>					
<i>Boats</i>	<i>Time</i>	<i>Name</i>	<i>Color</i>	<i>North/Southbound</i>	<i>Light/Loaded</i>
Commercial	9:38 AM	Boat	White	South	Loaded
	9:41 AM	Fuel Barge	Black, Red	South	
	10:15 AM	Salt Barge	Black, Blue	Docked	
	10:38 AM	Medium Boat	White	-	
	12:53 PM	Boat	-	-	
	1:06 PM	Tug, Barge	-	North	
	All Day	Container ship	Orange	Docked at Port of Coeymans	
Recreational	9:32 AM	Speedboat		South	
	10:07 AM	Sailboat		South	
	10:07 AM	Speedboat		Docked	
	10:10 AM	Fishing boat		-	
	12:53 PM	Speedboat		South	
	1:11 PM	Speedboat		North	
	1:15 PM	Motor boat		South	
Observations	Flock of geese, cormorants, water spider, salamander, belted kingfisher, bald eagle, chipmunk, squirrel, water chestnut seeds, mosquitos , dog and deer tracks				