

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

SCHODACK ISLAND STATE PARK

RIVER MILE: 134.5

Salt Front: ~ RM 53

Berkshire Waldorf High School- Lee Magadini

13 students 9-12th grade Earth Science, 2 adults

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: 65% Forested, 10% Urban/Residential, 25% boat launch

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

Shoreline: 50% Muddy, 50% 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



<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<i>Physical</i>				
<i>Air Temperature</i>	10:13 AM	50 ° F	11 ° C	
	10:43 AM	56.8 ° F	14.1 ° C	
<i>Wind Speed:</i>	10:43 AM	Beaufort 2-4	West	Between wind gusts
<i>Weather today</i>	Overcast (100%) no rain			
<i>Weather past 3 days:</i>	Saturday: 61-34 ° F at night, Sunday 56-40 ° F at night, Monday 59-43 ° F at night			
<i>Tides- tide stick</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Water Height (cm)</i>	<i>Rate of Tidal Change (cm/min)</i>
	9:51 AM	NA	40	
	10:06 AM	Rising	45	
	10:21 AM	Rising	50	
	10:36 AM	Rising	55	
	10:51 AM	Rising	60	
	11:06 AM	Unchanged	60	
	11:44 AM	Falling	55	
<i>Current-</i>	<i>Time</i>	<i>cm/second, Knots</i>		<i>North/South</i>
	9:46 AM	3.66 cm/s, 0.07 knots		
	10:44 AM	29 cm/s, 0.564 knots		

	11:40 AM	2 cm/s, .078 knots		
Water Temperature-	9:45 AM 11:32 AM 12:12 PM	12 °C, 11.5 °C, 11.75 °C 12 °C, 12 °C, 12 °C 12 °C, 12 °C, 12 °C		
Turbidity- Secchi disk	9:59 AM	58 cm, 60 cm, 60 cm, Avg: 59.3 cm		Very murky
Chemical				
Salinity- LR Quantabs	9:58 AM 10:30 AM	1.4 Quantab number 1.4 Quantab number	32 ppm -Cl 32 ppm -Cl	58 ppm Total Sal. 58 ppm Total Sal.
DO – drop count	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
*readings are quite variable in a short period of time	11:32 AM	13 °C	14	130
	11:46 AM	12 °C	10	90
	12:12 PM	12 °C	7	65
pH – LaMotte color match	9:50 AM 10:48 AM	6.0, 6.5 6.5		
Nitrates- octa slide	10:21 AM	1 ppm		
Biological				
Fish	Number	Name	Length of longest	Notes
	4 1 27	Banded Killifish Smallmouth Bass Spottail Shiner	7.5 cm 6.5 cm 6.1 cm	
Fish Totals	TOTAL: 32	Diversity: 3		
Macroinvertebrates	Number	Name	Length of longest	
	NR			
Macroinvertebrate Totals	TOTAL:	Diversity:		
Sediment Core	Time	Oxid Top	Grain Size	Other Features
	NR			
Boats	Time	Name/Color	North/South	Loaded/Light
Commercial	10:25 AM	Black	North	Loaded
Recreational	10:06 AM	Lobster boat, white/blue	South	Light
Recreational	10:36 AM	Personal, white/green	South	Light
Recreational	10:36 AM	DEC fishing boat	South	
Recreational	10:48 AM	DEC research vessel	North	
Recreational	11:10 AM	Schooner wood	South	Light
Commercial	11:55 AM	RTC82 Black/red	North	Loaded
Observations	The bulkhead is breaking so there are bits of cement in water. Bugs and turkey vultures. Waterchestnut seeds 10:57 AM gray train going west 11:01AM black and white helicopter going east 11:05 AM black oil train going east 12:24PM two seagulls.			

Hudson River Journal Entry: Cold, light wind carries colorful leaves to the ground. The park by the boat launch is full of trees. Crickets chirp and purr in the woods around. I hear the sounds of cars and large trucks on the highway nearby and the horn of a train.

When I opened my eyes I was surprised about how big the world looked.

Hudson River Journal Entry: The air is cold, a hint of winter. I can hear it blowing in the trees. I can hear early night creatures, buzzing and chirping. The air is dry and bites at my ears and nose.

With my eyes closed, it feels like night, so I am slightly surprised to see that it is light. While it gets darker sooner now, it is not time yet.

Many things may have affected my data collection today, including the atmosphere. It is a different temp than last time. The wind may have been blowing harder, and the water may have been colder.

There are many "news" for me, especially the fact that I am surrounded by friends.