

Day in the Life of the Hudson River 10/22/20

SOUTH DOCK, WEST POINT

RIVER MILE: 52

Salt Front: ~ RM 75

United State Military Academy- Mindy Kimball, Patrick Baker and 50 others

Latitude 41.3933 N & Longitude – 73.9517 W



Location: South Dock, West Point, NY

Area: Shallow cover at the south side of Gee’s Point; in the vicinity of Duck Island; beach area on the waterfront along the West Point property

Surrounding Land Use: 70% Urban/Residential; 20% Forested; 10% Beach

Sampling Site: Forested, grassy, parking lot, Beach, banks altered, riprap, pipe entering the water

Shoreline: 30% Sandy; 35% Muddy; 30% Rocky

Water:

River Bottom: Muddy, sandy, rocky

Plants in water:

<i>ITEM</i>		° C	° C			
	<i>Time</i>	<i>Air Temp.</i>	<i>Water Temp.</i>	<i>Wind speed</i>	<i>Wind direction</i>	
	6:00 AM	17.3	17.7	1.5 m/s	N-NE	
	6:40 AM	17.8	17.8	1.7 m/s	N-NE	
	7:00 AM	17.4	17.6	2.1 m/s	E	
	7:30 AM	17.3	17.7	1.9 m/s	E	
	8:00 AM	17.4	17.8	2.4 m/s	N/NE	
	8:30 AM	17.4	17.6	1.5 m/s	N/NE	
	9:00 AM	17.7	17.6	1.4 m/s	N/NE	
	9:30 AM	18.0	17.8	2.5 m/s	N/NE	
	10:0 AM	18.5	17.9	1.5 m/s	N/NE	
	10:30 AM	19.3	18.3	1.4 m/s		
	11:00 AM	19.3	18.9	0.9 m/s	N/NE	
	11:45 AM	21.2	19.9	0.6 m/s	N/NE	
	12:00 PM	22.3	19.1	0.4 m/s	S	
	12:30 PM	22.1	19.2	0.4 m/s	S	
	1:00 PM	22.3	19.4	1.0 m/s	S	
	1:30 PM	21.4	19.6	0.3 m/s	N/NE	
	2:00 PM	24.1	19.5	0.9 m/s		
	2:30 PM	22.3	19.7	1.0 m/s	SE	
	3:00 PM	22.6	19.6	2.0 m/s	S	
	3:30 PM	21.6	19.3	1.5 m/s	SW	
	4:00 PM	20.8	19.1	4.0 m/s	E	
	4:30 PM	19.6	18.8	2.0 m/s	S	
	5:00 PM	19.7	18.6	1.5 m/s	S	
	5:30 PM	19.3	18.4	1.7 m/s	S	
	6:00 PM	19.2	18.3	1.4 m/s	S/SE	

Weather today	Sampling all day – at 6AM humid and foggy by 6:40 AM clear					
Weather past 3 days:	Hazy, low clouds, very humid, light drizzle in the AMs, little to no wind, mild temps. 50s to low 60sF					
Tides-	Time of Low tide	Time of high tide	Sample time			Tide at sample time
	10:30 AM	4:30 PM	10:30 AM			slack
Current-	Time	cm/sec ond, Knots	North/South			Ebb/Flood/ Still
	NR					
Turbidity with secchi	8:00 AM 12:30 PM	38 cm 36 cm				
Time	Salinity	pH	DO	% Saturation	Conductivity mS/cm	Turbidity NTUs
6:00 AM	3.0 ppt	7.15	8.55	90	5.49	10.9
6:40 AM	3.1	7.09	8.54	90	5.78	12.1
7:00 AM	3.2	6.76	8.46	87.9	5.83	13.5
7:30 AM	3.3	6.7	8.58	88.7	6.01	12.7
8:00 AM	3.3	6.96	8.64	89.3	6.13	15.5
8:30 AM	3.4	6.8	8.53	88.5	6.3	13.8
9:00 AM	3.4	6.86	8.61	89.4	6.28	24.8
9:30 AM	3.6	6.75	8.66	90.3	6.67	14.3
10:0 AM	3.7	7.83	8.76	91.6	6.81	11.6
10:30 AM	3.6	7.44	8.88	93.5	6.81	25.2
11:00 AM	3.7	7.4	9.54	101.8	6.74	18.8
11:45 AM	3.5	7.52	8.94	95.3	6.4	41.1
12:00 PM	3.5	7.66	9.23	98.8	6.37	36.0
12:30 PM	3.4	7.68	9.05	97.2	6.32	58.0
1:00 PM	3.3	7.52	8.91	96.1	6.14	34.2
1:30 PM	3.3	7.55	8.96	97.1	6.09	28.7
2:00 PM	3.1	7.4	8.77	94.8	5.71	23
2:30 PM	3.1	7.42	8.82	95.8	5.66	23
3:00 PM	3.0	7.45	8.88	96.2	5.5	19.4
3:30 PM	2.9	7.47	9.02	97.1	5.36	18.4
4:00 PM	2.7	7.19	8.81	94.4	4.99	12.8
4:30 PM	2.9	7.26	8.89	94.8	5.32	15.7
5:00 PM	3.0	7.2	8.79	93.3	5.64	14.5
5:30 PM	3.2	7.36	8.72	92.2	5.92	16.0
6:00 PM	3.4	6.96	8.65	91.3	6.31	14.1
Biological						
Fish	Number	Species		Length of longest	Length shortest	
Seine – used	1	American eel (elver)		36 cm		
highest number	23	White perch		18.5 cm	6 cm	
from each seine	24	Striped bass		9 cm	5.5 cm	
	63	Atlantic silversides		10 cm	5.5 cm	
	24	Alewife		6.5 cm	5 cm	
	1	Banded Killifish		5 cm		
	TOTAL: 136	DIVERSITY: 6				
Macroinvertebrates	Number	Species		Length of longest	Length shortest	

	4	Blue crab	9 cm	4 cm
	TOTAL: 4	DIVERSITY: 1		
SHIPS	7:00 AM	Large tanker ship passed		
	12:30 PM	Large Barge – “New England 29” going north		
	2:30 PM	Large container ship passing “20” showing on hull so light, being pushed north by tug		
	3:00 PM	Eva Leigh Cutler containership being pushed south by tug/appears empty		
	5:00 PM	large barge going south, nearly empty, pushed by tugboat		
	6:00 PM	Few recreational watercraft		
Other Observations	6:00 AM	Plenty of seeds from Eurasian waterchestnut		
	2:00	Young eagle		