

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

Peebles Island State Park

RIVER MILE: 154

Salt Front: ~ 49

D. Lee Magadini & Berkshire Waldorf High School



12 students (9th-12th grade) & 2 adults
Latitude 42.78 N & Longitude – 73.68 W



Location: Peebles Island State Park

Area: A large grassy riverside park with many trees surrounding an open pavilion with picnic tables inside and an overlook that has 180° view of the Hudson River.

Surrounding Land Use: 55% Urban/Residential; 20% Forested; 5% Industrial/Commercial; 10% Beach; 10% Roadways and Bridges.

Sampling Site: Forested, grassy, covered in vegetation, parking lot. A beach with altered banks that have stairs to the water.

Shoreline: 10% Sandy, 80% Muddy, 10% Rocky

Water: Calm, estimated depth of 25 cm.

Plants in area: 25% Eurasian water milfoil; 5% Willow

River Bottom: Muddy, rocky and weedy

*NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>	
Physical					
<i>Air Temperature</i>	11:37 AM 12:31 PM 1:34 PM	21.128° C 22.24° C 22.24° C	70° F 72° F 72° F		
<i>Wind Speed:</i>	11:25 AM	<i>Anemometer</i> 2 mph	<i>Beaufort</i> 1	<i>Direction</i> SW	
<i>Weather today</i>	9:55 AM	51-75% cloud cover	No rain		
<i>Weather the past 3 days:</i>	Unseasonably warm and clear				
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Height (cm)</i>		
<i>Above the head of tide</i>	11:35 AM-12:00 PM	Unchanged	25.5 cm		
<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Slack</i>
<i>Rate of Flow</i>	11:44 AM 11:53 AM 12:22 PM 12:30 PM	6.9 0 4.5 6.7	0.134 0 0.0914 0.13	South NA NR NR	NA NA NA NA
<i>Water Temperature-</i>	11:35 AM 1:38 PM	19.4° C 20.02° C	66.92° F 68° F		
<i>Turbidity- Long Sight Tube</i>	11:14 AM 11:53 AM 2:11 PM	60.4 cm 52.8 cm 66.32 cm			
Chemical					
<i>Salinity- Low Range Quantabs</i>	11:12 AM 12:35 PM 2:07 PM	37 ppm Cl- 28 ppm 37 ppm	67 ppm TS *Below Detection 67 ppm TS	Any salinity would have been background from geology or road salt	
<i>Standardized Salinity- Low Range Quantabs</i>	9:50 AM	BD			
<i>DO – Hach Drop Count Kit</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% Saturation</i>	
	11:35 AM 1:38 PM	19.4° C 20.02° C	10 12	103% 130%	
<i>pH – Color Match Kit</i>	11:26 AM 12:35 PM 1:53 PM	7.5 8.0 7.5			
<i>Nitrates- NR</i>					
<i>Phosphates- NR</i>					
Biological					
<i>Fish -</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>Length of smallest</i>	
<i>Seine – 5 pulls</i>	17 66 1 1 4	Spottail Shiner Banded Killifish Brook Silverside Smallmouth Bass Tessellated Darter	6 cm 10.5 cm 6 cm 7 cm 5 cm	NR 4 cm NA NA NR	
Fish Totals	TOTAL:	Diversity: 5			

	89				
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>Length of smallest</i>	
Macroinvertebrate Totals	TOTAL: 0	Diversity: 0			
<i>Sediment Core - NR</i>					
Length	H2S smell	Oxid Top	Oil	Grain Size	Other Features
<i>Boats</i>					
	Time	Name	Color	North/Southbound	Light/Loaded
Commercial-None					
Residential	10:41 AM	Unnamed Seaplane	White	Southbound	Light
	10:55 AM	NR	Gray & Black	Southbound	Light
	12:31 PM	Starcraft-small fishing boat	Brown	Southbound	Light
	2:11 PM	Starcraft	Gray & Black	Northbound	Light