

Day in the Life of the Hudson River 10/05/2023

Alpine Boat Basin, Alpine, NJ

RIVER MILE: 19

Salt Front: ~ 52

Alpine School- Lisa Wolfe

Palisades Interstate Parks- Liam Keegan and team

23 students, 6th grade, 4 adults

Latitude 40.94793°N & Longitude -73.91847°W

Location: North end of the Alpine Boat Basin, adjacent to a sandy beach area

Surrounding Land Use: 74% Forested, 10% Beach, 16% Pier & Boats

Sampling Site: Sandy beach, altered banks, rip rap, bulkhead, pier, concrete, parking lot

Shoreline: Sandy

Water: NR

River Bottom: Muddy

Plants in the water: No Plants in Water

*NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature</i>	9:44 AM 11:10 AM	24° C 24° C	75.2° F 75.2° F	
<i>Wind Speed:</i>	9:49 AM 11:13 AM	<i>Anemometer</i>	<i>Beaufort</i> 2 2	<i>Direction</i> North/Northeast North/Northeast
<i>Weather today</i>	9:50 AM 11:09 AM	<25% Cloud Cover <25% Cloud Cover	No Rain	
<i>Weather the past 3 days:</i>	Unusually Warm, No rain			
<i>Tides- NR</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>		<i>Height (cm)</i>
<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>
Collected from the pier	10:07 AM 10:10 AM 10:13 AM 11:26 AM 11:30 AM 11:32 AM 11:35 AM 11:38 AM	28..6 16.1 20.8 77 59 19 17 19		
				Ebb Ebb Ebb Flood Flood Flood Flood Flood
<i>Water Temperature-</i>	10:20 AM	20°C		
<i>Turbidity- Secchi at end of pier & Long Sight Tube (120 cm)</i>	10:19 AM 10:26 AM 11:43 AM 11:45 AM	64 cm 16.5 cm 90 cm 81.7 cm	Secchi from pier <i>Turbidity tube</i> Secchi from pier Secchi from pier	
Chemical				
<i>Standardized Salinity- High Range Quantabs – 7.6 QT units</i>	11:00 AM	5,588 ppm total salinity		5.6 ppt TS 3093 ppm Cl-
<i>Student Salinity- hydrometer</i>	10:40 AM	8,500 ppm		8.5 ppt Average of 8 & 9 ppt
<i>DO – NR</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
<i>pH – Test Strips – not sure they were still good</i>	2:20 PM	7		

<i>Fish-Seine</i>	<i>Number</i>	<i>Name</i>			<i>Length of longest</i>	<i>Notes</i>
	18	Atlantic Silverside			7.6 cm	
	3	White Perch			17.78 cm	
	3	Hogchoker			15.24 cm	
	1	Flounder Spp.			13 cm	
Fish Totals	TOTAL: 25	Diversity: 4				
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>			<i>Length of longest</i>	<i>Smallest</i>
	2	Blue Crab			14 cm	3 cm
	1	Moon Jellies			2.5 cm	
	1	Palaemonetes Shrimp			7.6 cm	
	1	Eastern Oyster			5 cm	
Macroinvertebrate Totals	TOTAL: 5	Diversity: 4				
<i>Sediment Core -NR</i>	<i>Time</i>	<i>Oxid Top</i>	<i>H₂S Smell</i>	<i>Oil</i>	<i>Grain Size</i>	<i>Other Features</i>

Boats					
Commercial/ Recreational	Time	Type	Color	Southbound/ Northbound	Light/ Loaded
Commercial	9:39	Cargo Ship	Black	Still	Loaded
Commercial	9:40	Cargo Ship	Black	Still	Loaded
Commercial	11:04	Cargo Ship	Black	Northbound	Loaded
Recreational	11:25	Boat	White	Southbound	