

Day in the Life of the Hudson River 10/22/19
LASHER PARK, GERMANTOWN
RIVER MILE: 108.5
Salt Front: ~ RM 53
Hudson High School – Jim McDarby
Columbia Land Conservancy- Heidi Bock
40 students 10-12th grade, 9 adults
Latitude 42.1589 N & Longitude – 73.9959 W



Location: Lasher Memorial Park, Boat Launch, Northern Germantown Landing, Columbia County, NY
Area: Grassy area, boat launch, pier, parking lot- used for picnics and boating
Surrounding Land Use: 5% Forested; 80% Urban/Residential; 5% Beach; 10% Industrial/Commercial
Sampling Site: Park with mowed lawn, beach, riprap in area
Shoreline: 75% Sandy; 20% muddy; 5% rocky
Water: 60 cm
River Bottom: Muddy, weedy, sandy
Plants in water: 60-80% water chestnuts, 10% sweetflag, 10% bulrush (cattail), 5-10% spatterdock, 5-10% duckweed, common reed, golden club, water celery



<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature</i>	9:25 A M	56 ° F	13.3 ° C	
	9:35 AM	57.2 ° F	14 ° C	
	10:15 AM	59 ° F	15 ° C	
	10:55 AM	59 ° F	15 ° C	
	11:45 AM	60 ° F	16 ° C	
	11:55 AM	59 ° F	15 ° C	
	12:05 PM	62 ° F	17 ° C	
	12:40 PM	59 ° F	15 ° C	
	1:05 PM	59 ° F	15 ° C	
<i>Wind Speed:</i>	9:25 A M	Beaufort 1	SW	
	10:15 AM	Beaufort 1	S	
	11:45 AM	Beaufort 1	S	
	12:40 PM	Beaufort 2	S	
<i>Weather today</i>	Overcast (>75%)			
<i>Weather the past 3 days:</i>	Rained on Sunday. Monday was chilly but seasonal			
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Height (in)</i>	<i>Rate of Tidal Change (cm/min)</i>
	9:15 AM		At top of the stick	NA
	10:00 AM	Still	85 cm	NA
	10:50 AM	Ebb	75 cm	0.2
	11:35 AM	Ebb	65 cm	0.22
	12:15 PM	Ebb	55 cm	0.25
	12:25 PM	Ebb	45 cm	0.14
	1:05 PM	Ebb	40 cm	.0125
<i>Current-</i>	<i>cm/second</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Still</i>
	9:15 AM	0		Still
	9:35 A M	0		Still
	10:15 AM	0		Still
	10:20 AM	5.6	0.114	Still

	10:40 AM	4.1	0.079	South	Ebb
	11:40 AM	13	0.252	South	Ebb
	11:50 AM	7	0.136	South	Ebb
	12:40 PM	17.5	0.34	South	Ebb
	12:45 PM	7	0.14	South	Ebb
Water Temperature	9:15 AM	11 ° C, 12 ° C			
	10:05 AM	12 ° C, 12 ° C		51.2 ° F, 51.2 ° F	
	11:36AM	12 ° C, 13 ° C			
	12:35 PM	12 ° C, 13 ° C		54 ° F, 55 ° F	
Turbidity- long sight tube	9:40 AM	16.75, 15.25 cm, 22.5 cm, Avg: 18.16 cm			
	10:35 AM	24.2 cm, 23 cm, 24.2 cm, Avg: 23.8 cm			
	12:00 PM	16.8 cm, 20.5 cm, 19.5 cm, Avg: 18.9 cm			
	12:55 PM	16.25 cm, 19 cm, 15 cm. Avg: 16.75 cm			
Chemical					
Salinity- LR Quantabs	<i>Time</i>	<i>Chloride ppm CI</i>		<i>Total Sal. Ppm</i>	
	9:40 AM	< 28 ppm		Below Detection	
	10:25 AM	< 28 ppm		Below Detection	
	11:35 AM	< 28 ppm		Below Detection	
	12:40 PM	< 28 ppm		Below Detection	
DO – Drop count kit	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>	
<i>*DO readings seem high, perhaps there was an air bubble or didn't swirl after each titration drop</i>	9:50 AM	12	10	90%	
	10:45 AM	12	18	>140%	
	10:55 AM	12	12	130%	
	12:06 PM	12.5	18	>140%	
	12:20 PM	12.5	19	>140%	
	1:00 PM	12.5	14	130%	
pH – Color Match Kit	9:25 AM	7, 7			
	10:15 AM	6.8, 8.3, Avg: 7.5			
	11:45 AM	7.75, 7.25, Avg: 7.5			
	12:40 PM	7.5			
Fish	Number	Name	Length of longest		
Seine: 25' # Pulls: 4	2	Striped Bass	9 cm	9-10 am	
	8	Spottail Shiner	8 cm		
	1	Banded Killifish	7 cm	10-11 am	
	1	Gizzard Shad	8 cm		
	3	Spottail Shiner	9.5 cm		
	1	Goldfish	7.5 cm		
	6	Spottail Shiner	9 cm	11:30-12:30 pm	
	2	Spottail Shiner	8 cm		
	1	Striped Bass	9 cm	12:30-1:15 pm	
	5	Spottail shiner	9 cm		
	1	White Perch	15 cm		
	1	Herring spp.	11.5 cm		
Fish Totals	TOTAL: 32	Diversity: 7			
Macroinvertebrates	Number	Name	Length of longest		
	1	Blue Crab (M)		10-11 am	
	1	Amphipod			
	2	Blue Crab (M)		11:30-12:30 pm	
Macroinvertebrate Totals	TOTAL:4	Diversity: 2			
Boats	Time	Name/Color	North/South	Loaded/Light	
Commercial	9:30 AM	Unknown	North	Light	
Recreational	9:40 AM	Small Cruise	South	Loaded	
Commercial	11:55 AM	Oil Barge	South	Loaded	
Commercial	11:55 AM	Rock/sand barge	No moving	Loaded	