

**Day in the Life of the Hudson River 10/16/18 Data**

**COHOTATE PRESERVE**

**Coxsackie, NY - RIVER MILE: 115**

*Salt Front: ~RM 24*

**Coxsackie Athens High School, Environmental Science**

**18 students 12<sup>th</sup> grade, 1 adults**

**Andrew Randazzo, Cornell Cooperative Extension of Greene County**

**Anthony Loughran, Coxsackie Athens HS**

**Latitude 42°14.642' N & Longitude 73° 50.359'W**



**Location:** Cohotate Preserve- Ice house site

**Area:** The ice house is flat, grassy, and on the river with several cotton wood trees. It is situated at the bottom of a forested hill. Large waterfront vegetation. The artificial shoreline of the bulkhead dominates the eastern shore. Shoreline is characterized by tidal mudflats. Area is used recreationally for picnicking, hiking, and fishing. Ice house is approximately ½ mile walk from the parking area.

**Surrounding Land Use:** 85% forested, 10% beach, 5% urban/residential

**Sampling Site:** Beach area, shoreline includes tidal mud flats in the southeast and a rocky shore further south. To the north of the tidal mud flat there is an old bulkhead with another tidal flat to the north of the bulkhead, riprap in sections. The banks have been altered at the bulkhead (entire ice house area is likely dredge spoil), wood and debris are collected in the southern mudflat, there is a lot of vegetation and no pipes entering the water. Brick pieces on the shoreline.

**Shoreline:** 10% sandy, 45% muddy, 45% rocky

**Water Depth:** 2 feet

**Plants in area:** 5% Spatterdock, water chestnut seeds

**River Bottom description:** muddy, weedy



Strong winds caused 'blow out' tides in some areas of the estuary exposing large mudflats along the riverfront.

<b>ITEM</b>	<b>Time</b>	<b>Reading</b>		<b>Comments</b>
<b>Physical</b>				
<i>Air Temperature</i>	9:15 AM 10:59 AM 12:00 PM	10 °C 13.34 °C 15.56 °C	50 °F 56 °F 60 °F	
<i>Wind Speed: anemometer</i>		3 mph	2.6 knots	
<i>Weather today</i>	No rain, clear			
<i>Weather recently</i>	Rain			
<b>Water Temperature</b>	9:30 AM	15 °C	59 °F	
<b>Turbidity - long sight tube</b>	10:00 AM	75cm, 78cm, 76cm		Average: 76.5cm
<b>Chemical</b>				
<i>Salinity- Low Range Quantabs</i>	9:30 AM	38-48 ppm Cl <sup>-</sup>	~77.68 ppm Total salinity	
<i>DO – Sparkview Pasco Probe</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	9:40 AM	15 °C	8.05	80%
	9:50 AM	15 °C	8.17	80%
<i>pH – meter</i>	9:25 AM	7.69	7.59	Average 7.65
<b>Fish</b>	<b>Number</b>	<b>Name</b>	<b>Length of longest</b>	
<i>Seine</i>	72 1 2 14 13 7 2 11	Spottail Shiner Brown Bullhead Channel Catfish American Shad Banded Killifish White Perch Striped Bass Tessellated Darter		<b>Comment:</b> *Site reported one Striped Killifish which would be unrealistic so we added to the banded killifish total.
<b>Fish Totals</b>	<b>TOTAL: 122</b>	<b>Diversity: 8</b>		
<b>Macroinvertebrates</b>	<b>Number</b>	<b>Name</b>	<b>Length of longest</b>	
	18	Blue Crab		
<b>Macroinvertebrate Totals</b>	<b>TOTAL: 18</b>	<b>Diversity: 1</b>		
<b>Boat Traffic</b>	<b>Name</b>	<b>Color</b>	<b>North or South</b>	<b>Loaded or Light</b>
9:50 AM 11:27 AM	Boat Boat	Gray Blue and White	North North	Light Light