CLUE, 2011-06-18 - "Dump Barge"

On Saturday, June 18, 2011, David VanZandt, Jim Paskert, and Kevin Magee of the Cleveland Underwater Explorers (CLUE) boarded Dave’s boat Sea Dragon in Cleveland, Ohio, to dive a new sidescan sonar target discovered the previous season off Cleveland. It was discovered on October 10, 2010, in approximately 30-35 feet of water but not dove at that time due to the lateness of the season and the lack of any visibility. It was unknown whether the target was made of metal or wood or whether it was a schooner, barge, or even a large section of cribbing. However, it was measured off the sidescan as a large target at approximately 140 feet long $\times 30$ feet wide $\times 5$ feet high and divided into eight obvious sections.

The day was pleasant at 78 degrees $F$ with flat seas and bright sunshine when the wreck was hooked. Descending to the bottom, an acceptable 5-8 feet of visibility and 68-69 degree F water was encountered with no thermocline. The wreckage stands high on a sandy bottom and is oriented roughly northeast to southwest. It was quickly determined to be a barge filled with rock rubble, broken concrete, and bricks. The barge is made of wood and has eight separate cargo bays with solid wooden dividers between them. Interestingly, the side walls of the bays are tapered inwards at approximately a 45 degree angle and are lined with metal plating. In some places the metal plates are rusted through or detached, exposing the wood underneath. A large ledge exists along the top edges of the barge on both sides. At some locations the outside hull is missing entirely, exposing large vertical posts with diagonal support beams running between them, and at other locations the outer hull is intact, hiding the internal structure of the barge.

Along the top of the ledges on both sides at various locations are long sections of halffoot diameter metal pipe or rod supported by large bearing blocks. At some locations rusted chain was also noticed to be attached to the pipe/rod. Most cargo bays are filled half way, but the three near the southwestern end are filled almost completely to the top. The bricks and concrete were noticed mostly on the ledge areas and not in the bays, which are filled predominantly with stone. The northeastern end of the wreck has no wall and terminates with an open bay to the outside. The southern end has a divider wall that closes off the end of the bay from the outside. At this end on both sides was also found polypropylene rope tied or snagged near both corners, suggesting divers may have previously been on this wreck. Finally, the whole barge was observed to be heavily covered in freshwater sponges, something rather unusual.

Based on the observed features, the wreck appears to be a dump barge used for hauling trash and debris out into the lake for disposal. The metal-lined, funnel-like bays were filled with whatever was desired for disposal or dumping. The barge was then towed out into the lake, and its bottom was opened, allowing the contents to be dumped to the bottom. The pipe/rods along the sides were then used to crank closed the barge's bottom for the trip home. Since the bays of the barge were never watertight, they were always awash with water, and all flotation came from the surrounding outer hull, much like a floating drydock. Given the stone and clean fill observed in the barge's holds, it was probably not hauling trash to be dumped in the lake when it sank, but rather material for a water intake crib or the Cleveland breakwall itself. Based on its style of construction, the barge probably dates from the late 1800s to the middle 1900s. CLUE is not aware of any similar representative vessel in Lake Erie, making this wreck unique. Further research will hopefully identify the barge and its story.

## CLUE, 2011-08-06 - "Dump Barge"

On Saturday, August 8, 2011, CLUE returned to the dump barge to perform a formal survey of the wreckage. Aboard were David VanZandt, Cindy LaRosa, Kevin Magee, and observer Chris Rogers. It was hot and sunny with an 80 degree $F$ air temperature, and a slight north breeze caused 1 -foot seas. Surface visibility was 3-5 feet with a 7880 degree $F$ water temperature that extended all the way to the bottom with no thermocline. On the bottom was found 10 feet of very good visibility, allowing a thorough survey to be performed. Dave performed still photography and video of the wreck while Cindy and Kevin obtained measurements in order to be able to produce a sketch of the wreck. This sketch later revealed the metal pipes/rods on the side ledges alternated sides every bay with the pipe missing on the second bay at the northeastern end of the wreck. This pipe/rod was found lying on the bottom next to the wreck. The already abundant sponges seemed even more abundant than previously seen, and a significant number of large carp, bass, and perch were also observed all over the wreck. The improved visibility allowed a large spilled rock debris field to be observed off the south side of the wreck at the southwestern end. The ship's dimensions were measured at 135 feet long $\times 28$ feet in beam, and each bay is approximately 15 feet long x 21 feet wide.

Upon surfacing the wind had increased the waves to 2 feet in height. Once the boat was underway, detailed sidescan images were obtained of the wreck to be able to complete the survey. This wreck is an enjoyable target to dive, and it proved to have a lot to see and discover on it. Its identity remains a mystery for the time being, however.

