

CLUE, 2013-07-26 and 08-05 - *Plymouth*

On July 26, 2013, David VanZandt and Kevin Magee of the Cleveland Underwater Explorers (CLUE) made a trip on board Dave's boat the *Sea Dragon* out to the site of the Lake Erie shipwreck colloquially known as the "Cleveland Tiller Wreck." The shipwreck was originally discovered on June 18, 1996, by CLUE member Rob Ruetschle approximately 20 miles off Cleveland, Ohio. The existence and location of the wreck were closely held until 2011 when its location was made public by others who also speculated that the wreck might be the two-masted schooner *Mackinaw*. Based on CLUE's historical research, however, this identification was always suspect due to the discrepancy between the reported location of the *Mackinaw's* sinking and the known location of the "Cleveland Tiller Wreck." The purpose of the trip was to survey the wreck and hopefully gather enough data to confidently propose and support an identification.

The day was very agreeable with flat seas, a sunny sky, and comfortable 75 degree F air temperature, making the long run out to the wreck site quick and pleasant. After anchoring, Dave and Kevin descended into the 75-degree F water with an impressive 25-30 feet of surface visibility. A thermocline was encountered at 50-55 feet with 50-53 degree F water below it. Visibility on the bottom at a depth of 75 feet was 5-10 feet. The anchor came to rest near the bow, allowing the dive to begin there. A great amount of floating fish net was snagged on the wreck at the bow, and Kevin spent most of the first dive cutting the nets free to allow a survey tape to be properly run on the subsequent dive. There were also floating nets along the port side of the wreck that needed to be cleared, and while Kevin worked on these nets, Dave photographed and videoed as much of the wreck as time and conditions would permit.

The bow points west and stands 5-8 feet high off the bottom. The bowsprit is snapped off where it passes through the stem's gunwale, but there is a large, elaborate cutwater that juts out 5 feet forward of the stem. At the top of this cutwater are curved headboards that connect the cutwater to the hull on either side. There is also a squared notch at the tip of the cutwater that strongly suggests a scrollhead may have once been fitted there. Several hearteyes or bullseyes are mounted to the hull near the stem. The overall style of construction of the bow suggests an early 1830-1850 date for the vessel's construction.

The bowsprit is joined to the pawl bitt in front of the windlass. The windlass itself is of a simple design with chain from both hawse holes wrapped around it. On the starboard railing is a 90-degree style cathead with a single pulley embedded in a slot at its tip. The starboard wood-stocked anchor hangs by one of its flukes from the railing aft of the

cathead. The stock hangs near the bottom parallel to the hull with the after portion buried in the lake bottom. The port cathead and anchor are missing from the wreck proper, and the port anchor chain hangs straight down from the hawse hole into the mud bottom. It is suspected that the anchor is still attached to the chain since it continues down into the mud bottom at least an arm's length. On the port railing, aft of the windlass, are three deadeyes for the foremast. The same configuration is present on the starboard side with the exception that the forward deadeye is missing. No mast or mast hole is evident adjacent to the deadeyes due to the absence of decking in the area and the debris that fills the center of the wreck.

Intact decking is encountered aft of this area along with a cargo hatch located in the middle of the deck. There is a metal bar extended across the hatch at the centerline, which was likely used to hold the hatch cover or tarp down while underway. It is unusual to see this equipment still in place since it is normally blown off and lost during the wrecking event. There is no obvious cargo inside the hold since the interior of the vessel is filled with silt. The railings immediately adjacent to the hatch are absent, and there is a gap equal to the width of the hatch. This style of construction was common in early Great Lakes commercial vessels and designed to facilitate the loading and unloading of cargo using wheelbarrows and planks from the deck to the dock before more efficient cargo handling methods were developed. The gaps in the railings would normally have been closed with rope or temporary planks when underway to prevent people from falling overboard.

The deck aft of the cargo hatch is intact except in an area on the starboard side where a very large gash is evident. The gash appears as a sharp wedge at the side of the hull and transitions into a jagged channel as it penetrates deep into the wreck and crosses the wreck's centerline. The missing deck planks are cleanly cut perpendicular to their direction of travel along the deck, which would have required an extremely strong and focused force to achieve. The gash ends just beyond the exposed centerboard box under the deck. The top of the centerboard box is heavily damaged, and the top of the centerboard inside is exposed. The gash and damage are obviously the result of a collision with another ship, and the wreck appears to have been struck on the starboard side slightly aft of the forward hatch. The collision damage is unique in its narrowness and extreme depth of penetration into the wreck. Most collision damage observed on other wrecks is wedge-shaped and penetrates only a short distance into the wreck's hull.

The railing at the collision site on the starboard side is destroyed, but is again present aft of this location and remains intact all the way to the stern. The port railing is undamaged along its entire length. A set of three deadeyes can be found amidships on both railings, and in the middle of the wreck adjacent to the deadeyes is the stub of the missing mainmast. Just forward of the stub is a large single-barreled hand pump with

linkages that attach it to a wooden handle lying on the deck. A simple centerboard winch inside a wooden frame is located in front of the pump. The pump and winch are aligned with each other but are offset to the port side relative to the ship's centerline by about a foot. Offset centerboards were prevalent on ships prior to 1866, after which they were not allowed by the Board of Lake Underwriters. A metal trough used to funnel bilge discharge from the pump to the chain hole of the centerboard box extends between the pump and the centerboard winch. This is an unusual and novel arrangement since most pumps discharged directly onto the deck to allow the water to run off to the sides.

A small metal rail is mounted to the deck on the centerline in front of the centerboard winch. This metal rail served as a purchase point for the running rigging attached to the foremast boom. On the port side just slightly forward of the winch is a heavily corroded grappling hook lying on the deck.

Immediately aft of the mainmast the decking ends across the width of the wreck, but the outline of a small square hatch coaming can be seen lying on the bottom on the ship's centerline. Wood debris and mud fill the center of the wreck from this point to the stern. The stern is fairly intact, and the starboard railing leads to a five-foot long lifeboat davit with two pulleys embedded in slots at its tip jutting out from the wreck. The port davit is missing. The transom is also missing, but two deck beams run across the width of the wreck marking the stern's outline. Standing in the center of the stern is the rudderpost, and attached to it is an impressive eight-foot long tiller turned 45 degrees to the starboard side. This feature of the ship is the basis for its informal name "The Cleveland Tiller Wreck." Until the 1850s sailing vessels used tillers, not wheels attached to steering gear, to control the direction of travel.

The top board of the transom lies on a diagonal from the starboard corner down into the mud close to the port side. On top of this beam at the center is a line chock carved into the wood with small wheels embedded at each end to help line move more easily through the slot without damaging either the rope or the chock. Another example of this unusual style of line chock is built into the gunwale at the bow and represents one of the many interesting details observed on this wreck.

Detailed measurements and survey notes were taken on the second dive and again during two follow-up dives on August 5 with CLUE member Cindy LaRosa. The measured length of the wreck was 106 feet, 11 inches, with a beam of 23 feet, 1 inch. The *Mackinaw* was 112 feet, 10 inches, in length with a 23 foot, 3 inch, beam. While the beam measurement is quite close, the length of the measured wreck is too short. Wrecks are frequently measured to be longer than they actually are due to outward sagging of the wreck, sagging of the tape measure, and extra tape measure length used to run it around and over obstructions along the centerline. To measure 6 feet shorter

therefore makes the wreck unlikely to be the *Mackinaw*. The length of any candidate ship was estimated to be from 101 to 107 feet. Furthermore, the location of the “Cleveland Tiller Wreck” is far outside the area described by historical documentation for the *Mackinaw*, again making this ship an unlikely candidate.

After performing extensive archival research, CLUE researcher Jim Paskert has identified a clear candidate for this wreck. It is the *Plymouth*, a two-masted schooner that sank on the night of June 23, 1852, after a collision with the sidewheel steamer *Northern Indiana*. The *Plymouth* sank quickly after being struck by the steamer, but fortunately the crew escaped in the lifeboat, and no lives were lost. The schooner was sailing from Huron, Ohio, to Buffalo, New York, with a mixed cargo of wheat, flour, staves, and two boxes of goods. The *Northern Indiana*, with a full load of passengers, was travelling at high speed, approximately 17 mph. The steamer failed to notice the *Plymouth* and without turning or checking speed struck the schooner amidships on its starboard side at nearly a right angle. The collision was so violent that the steamer’s stem was driven “nearly to the centre [sic] of the deck of the schooner.” Sidewheel passenger and freight steamers of the early 1850s had sharply raked bows to allow for high speeds, and the unusual and unique collision damage observed on the wreck very closely matches the size and shape of a sharply raked bow. The accident location was described as about 20 miles out of Cleveland which coincides nicely with the actual wreck location of 19 miles from Cleveland’s east breakwall.

Furthermore, the measured dimensions of the wreck are a good match for the *Plymouth*, which was built in Huron, Ohio, in 1847. The original enrollment measurements of the *Plymouth* were 106 feet, 0 inches, in length with a beam of 23 feet, 3 inches. This compares very closely with the wreck’s measured length of 106 feet, 11 inches, and beam of 23 feet, 1 inch. The *Plymouth* also had a scrollhead listed on its enrollment. A scrollhead may have been present on this wreck as evidenced by the observed empty notch in the cutwater at the location below where the bowsprit was attached. After conducting the CLUE reconnaissance survey dives, all of the survey and accumulated historical data was analyzed using the VanZandt Historical Shipwreck Identification Method (VHSIM). The result of the analysis strongly suggests that the wreck is indeed the schooner *Plymouth*, and this name can now be confidently applied to this formerly unidentified shipwreck off Cleveland.