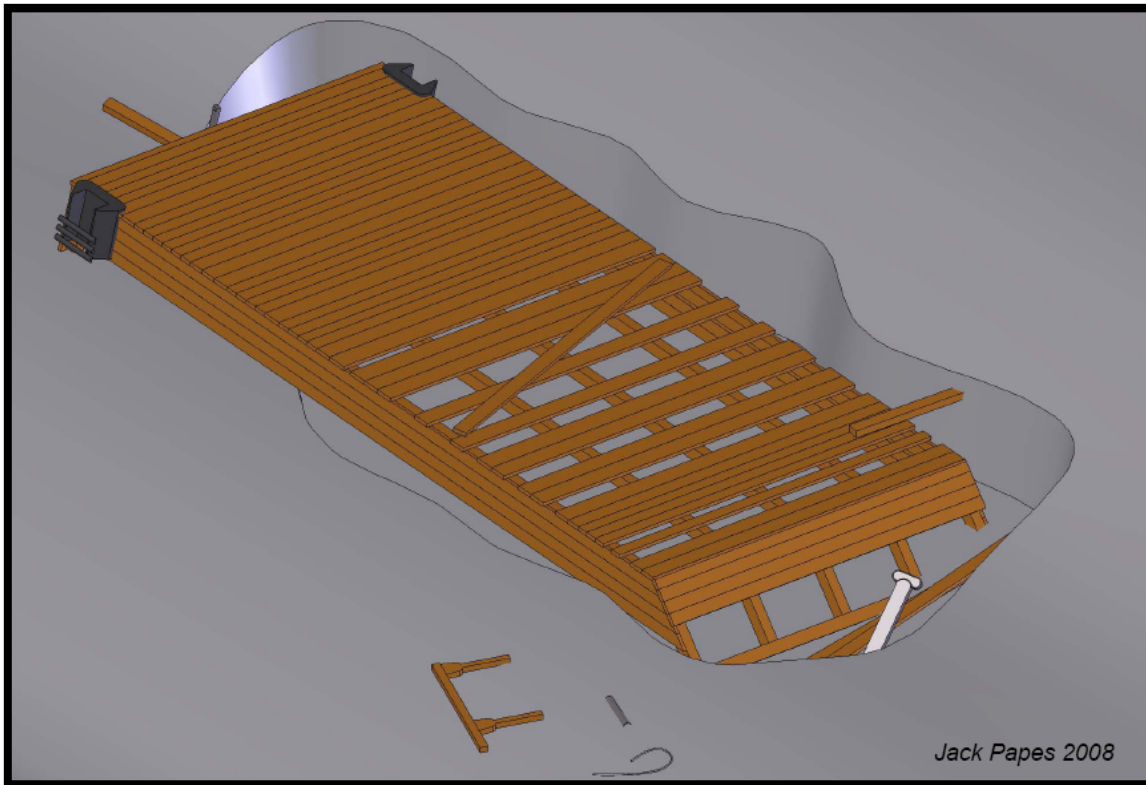


REPORT OF INITIAL SURVEY OF AN
UNKNOWN BARGE OFF OF CEDAR POINT, SANDUSKY, OHIO

July 26-27, 2008

Submitted to Cleveland Underwater Explorers, Inc.

By
Jack Papes



SUBJECT

Report of Initial survey of an unknown barge discovered by Mr. Tom Kowalczk of Cleveland Underwater Explorers (CLUE).

LOCATION (General)

Lake Erie, approximately 6 miles off of Cedar Point, Sandusky, Ohio, USA ^(R2)



Figure 1: General Location on the Great Lakes

VESSEL TYPE

- Wooden, Working Barge of Undetermined Type.

SURVEY DATES

- July 26-27, 2008

SURVEY TEAM (All members of the Maritime Archeological Survey Team)

- Mike Chrisopulos, Wadsworth, Ohio, USA (July 26)
- Glenn Fisher, Akron, Ohio, USA (July 27)
- Ed Noga, Akron, Ohio, USA
- Jack Papes, Akron, Ohio, USA

SURVEY CONDITIONS

- Topside:
On both days, Sunny, 85 ° F, Light Haze, Wind Variable S to SW. Waves 1-3 ft.
- Bottom:
75 °F from the surface to the thermocline at 40 feet. Visibility in this range was about 20 feet. Below 40 ft, the temperature was 65 ° F and visibility dropped abruptly to 5 feet or less.
- Additionally, an approximately ½ knot current was present on the bottom, heading West on both days.

SITE DESCRIPTION

1. Orientation:

- Vessel lies inverted on a mud and clay bottom, along a trenched wall of hard clay.
- The Northwest end of the wreck is presumed to be the bow due to the approximate 45° draft here. In comparison, the opposite, Southeast end of the site is square (See Figure 2).



Figure 2: Port Elevation

- As this vessel lies inverted (bottom hull up), the Northeast side is referred to as the Port side, and the Southwest corner is referred to as the Starboard side.

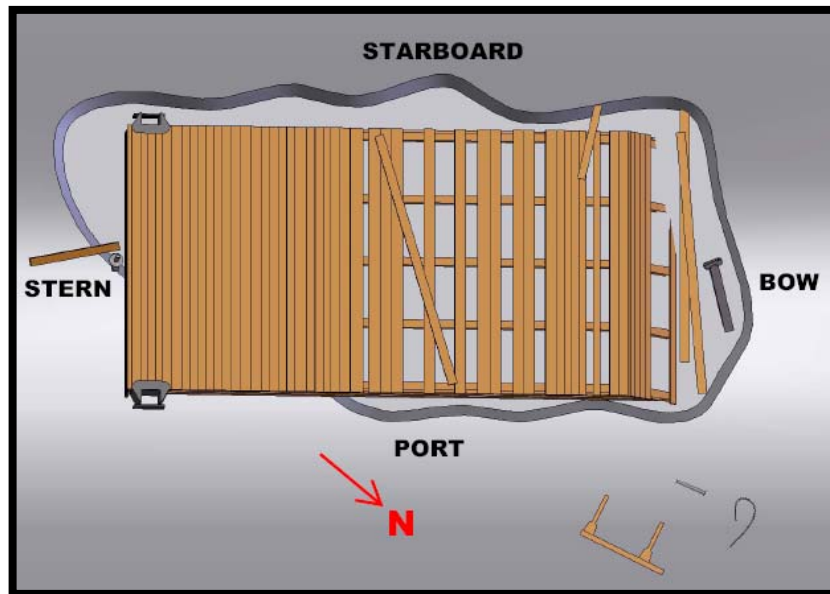


Figure 3: Plan View

Following the above convention, the vessel is orientated as follows:

- Bow Heads 320°
- Side-to-Side List:
 - At Bow, 10° to Starboard
 - At Stern, 18° to Starboard

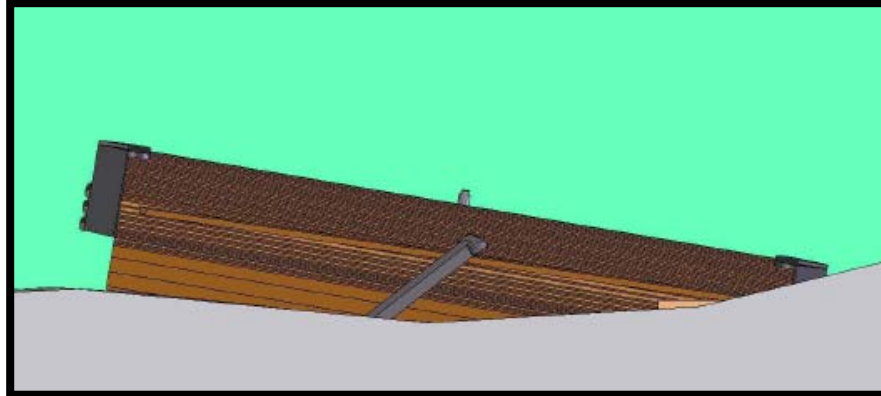


Figure 4: Bow Elevation

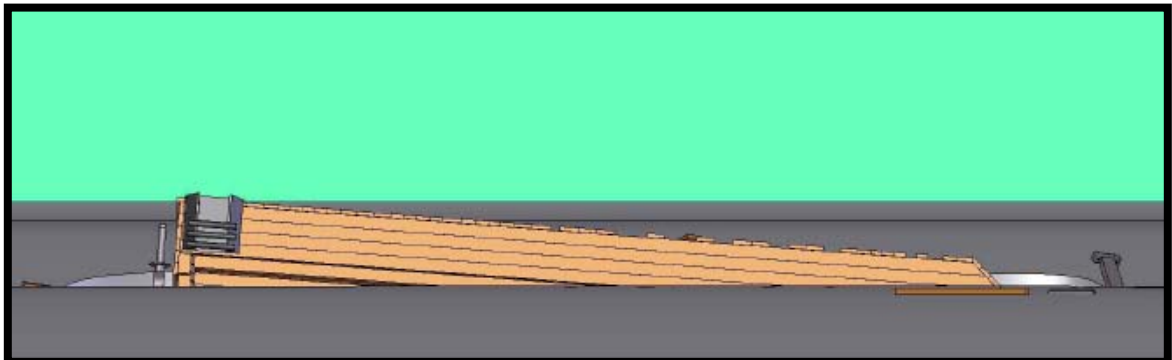


Figure 5: Port Elevation

- Forward-to-Aft List:
 - At Port Side, 4° towards Bow
 - At Starboard Side, 3° towards Bow

2. Topography

- Presumably a product of the West current felt on the site, the forward, starboard (East) corner of the vessel lies in an 8-foot deep trench of hard clay. The bottom at the forward end slopes upward in the SW direction.

3. Site Notes:

- The highest point of relief is the Port-Stern corner at depth of 38 feet. The bottom depth varies from 42 feet to 53 feet.
- The aforementioned forward list of the wreck, provides shelter from the current at the forward end, however this, coupled with the thermocline related drop in visibility at depths below 40 feet, made the visibility at the forward end very poor, below 5 feet.
- Conversely, the visibility at the stern, at depths above the thermocline, specifically the port corner, was exceptional, up to 20 feet. Although, the visibility here dropped considerably at depths below 40 ft as well, especially directly aft of the wreck.
- Access to the underside of the vessel (although beyond the scope of this survey) appears possible at the bow and port side of the vessel, and possibly through missing bottom planking.
- No obvious signs of salvage work (tools or damage) or past dive activity (lines) were observed.

4. Vessel Structure

- Overall construction appears crude. The vessel measured 35'-4" wide. The exact length of the site was difficult to obtain due to the draft at the bow, damage, and low visibility at this location. It was approximated at just under 73'. The draft of the vessel exceeds 4 feet.

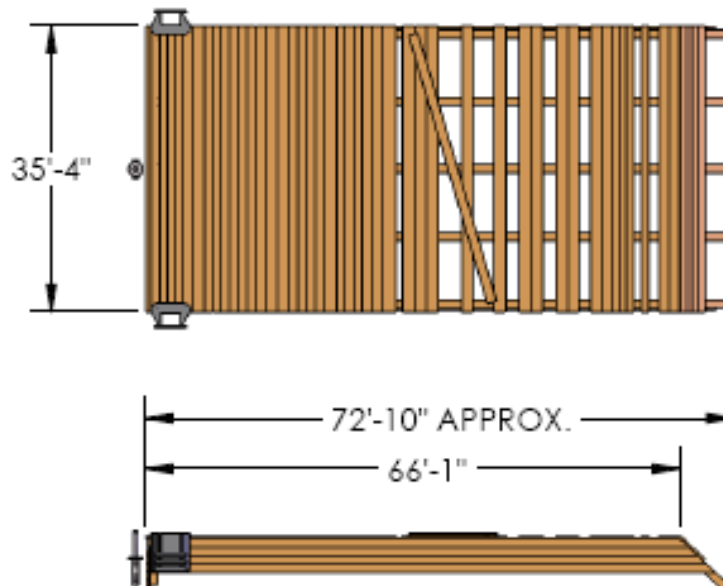


Figure 6: Overall Dimensions

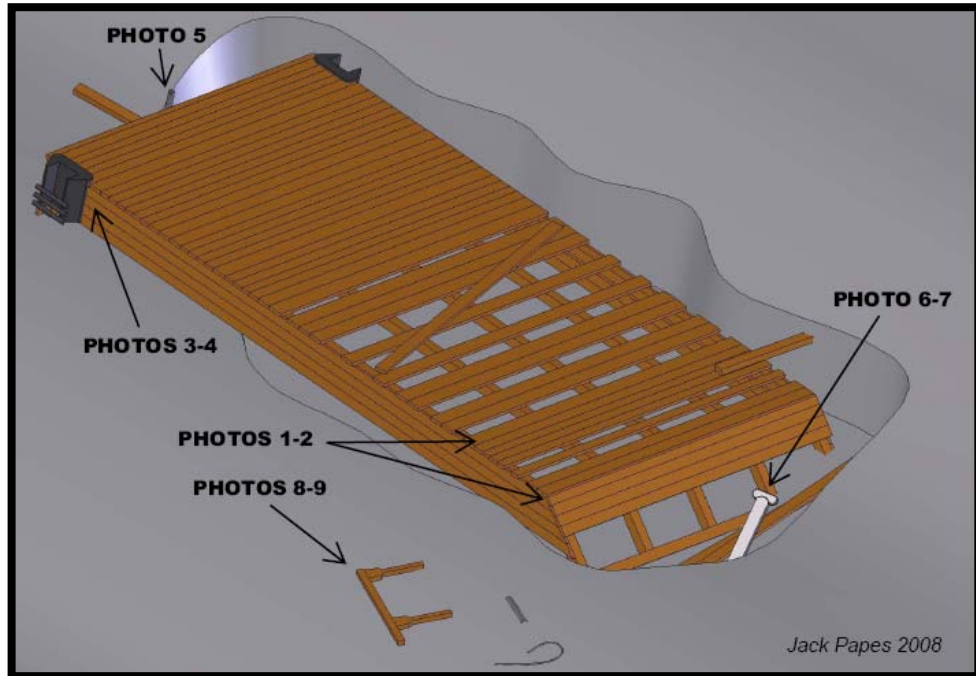


Figure 7: Photo Locations

- The bottom hull planking is 4" thick x widths varying from 11 inches to 18 inches. Metal fasteners join the planking to the under lying beams.

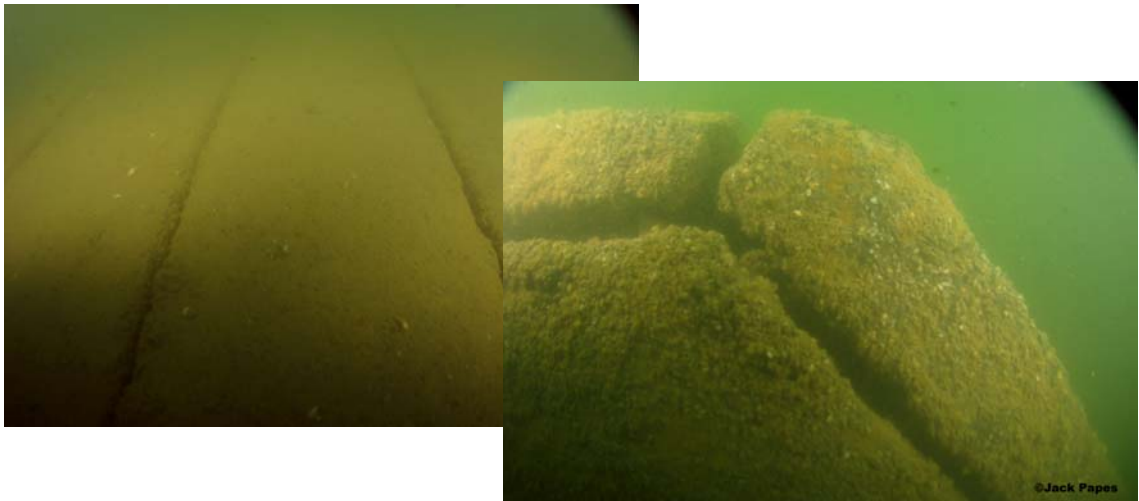


Photo 1: (Left) Bottom Planking

Photo 2: (Right) Port, Forward Corner at Draft

- Two spud “ways or channels” are present at the stern. Material is iron or steel. Opening = 2'-6" x 1'-2".



Photo 3-4: Port, Stern Spud "Way" or "Channel"

- An undetermined device is located mid stern (where a rudder should be). Material is steel or iron.



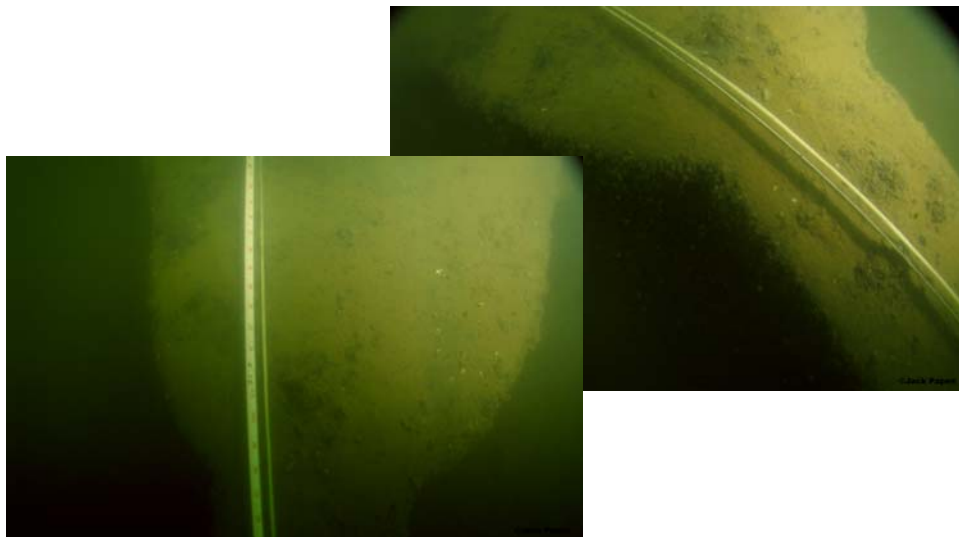
Photo 5: Device at Mid-Stern (looking Forward)

- A large spud or anchor lies 11'-5" forward of the bow, extending 6-8 feet above the bottom, disappearing into the bottom. The width across the flutes is 2'-6". The exposed length is 11'-3". The girth is 5'-3". The finish of the shank of this object is very smooth. Suggesting it was cast versus forged.



Photos 6-7: Spud or Anchor forward of Bow

- Search sweeps run forward and aft failed to uncover any type of debris. Several objects were found on the bottom, off of the port bow. Including a partially buried section of 2" diameter cable (42'-3" x 80°), a piece of approximately 8-inch diameter pipe x 4 feet long (32'-8" x 80°), and a section of wooden structure (32'-6" x 95°). (Distance x Heading – from Port, Forward Corner)



Photos 8-9: Section of Wood Structure on Bottom off of Port Bow

CONCLUSION

Aside from hull materials, this initial, external survey uncovered very few artifacts, in which to use to date the vessel. Further study of the ironwork present may narrow the time frame.

The site gave me the impression that machinery, such as a derrick or steam shovel, should be lying somewhere in the vicinity. Only evidence of this was the section of cable buried in the bottom off of the port bow. Additional search sweeps off of the port and starboard sides would be on top of my agenda for a return visit.

APPENDIX I: APPARATUS

- Dive Related: Dives were conducted, by all team members, using redundant open circuit SCUBA rigs, a breathing gas of air, and drysuit thermal insulation. Compasses, HID lights, and dive reels were used to aid in navigation in the low visibility.
- Survey Related: Length measurements were obtained using three separate fiberglass, reel style-measuring tapes (Error between these devices presumed to be 1" per 50 foot). Reported depth measurements were obtained with an Oceanic dive computer – error presumed to be +/- 1 foot. Bearings to objects found during sweeps were measured using a compass board (error assumed at +/- 5 degrees). Data was recorded underwater using Mylar paper and number 2 lead pencils.
- Dive Vessel and Related: 18.5 foot, "Deep-V" hulled, "Bayliner Trophy" Motor vessel. Site was located using GPS receivers. To minimize impact on the site, the mooring was obtained by dropping an anchor with 200 feet of scope approximately 100 feet upwind of the site. The anchor was repositioned and tied to the wreck on the first dive. A marker jug was left on the site overnight to aid in mooring on day two. This marker was removed at day's end.

APPENDIX II: SURVEY LOG

Project Dive #	Date/Names	Dive # this date	IN		OUT		U/W (Mins)	Depth ft	Temp F	Tasks	
			Air	Time	Air	Time					
7/26/2008											
1	Jack Papes	1	2800	11:02	1000	12:26	84	50	65	Tie in Anchor. Recon. all. Measure Length, Width, Photo.	
2	Mike Chrisopulos	1	3400	13:05	1500	13:46	41	53	65	Investigate Stern, Measure Depth at Stb Corner	
3	Ed Noga	1	3400	13:12	800	14:12	60	50	65	"	
4	Jack Papes	2	900	14:32	300	15:02	30	46	66	Investigate Stern, Recheck Length, Measure Spud Ways, Photos, Retrieve tape	
5	Mike Chrisopulos	2	3400	15:21	1500	15:59	38	48	66	Sketch Spud Ways,	
6	Ed Noga	2	3400	15:25	400	16:14	49	49	66	Sketch Stern Object and Measure Hull Planks	
7/27/2008											
7	Jack Papes	1	2800	10:10	1200	11:36	86	52	64	Tie-in Anchor, Locate/Trilate Fwd Spud, Sketch Spud, Sweep Fwd-Port	
8	Glen Fisher	1	3200	10:17	800	11:32	75	50	64	Trilate Fwd Spud, Sweep Fwd-Stb	
9	Ed Noga	1	3400	11:41	1100	12:46	65	49	64	Finish Stern Object, Measure all Bottom Planks	
10	Jack Papes	2	1100	13:15	250	14:05	50	49	64	Sweep Stb to Stern, & Port-Fwd	
11	Glen Fisher	2	3200	13:17	1200	14:20	63	50	64	Sweep Fwd	
12	Ed Noga	2	3500	14:28	500	15:05	37	50	64	Sweep Aft	
Total							11.3				

11.3 Hrs