

WRECK

...uncover the past

DIVING™

Magazine

In This Issue

*Avalanche • Coron Bay • George J. Whelan • Gunilda
R.H. Rae • Sea Hunt • SS Clifton*



Hidden Beauty
in the Great Lakes

ISSUE 44 US\$12.99

83>



WRECK DIVING MAGAZINE

Wreck Diving Magazine

Avalanche • Coron Bay • George J. Whelan • Gunilda • R.H. Rae • Sea Hunt • SS Clifton

Issue 44 20

DISCOVERY OF THE SS CLIFTON: LAKE HURON'S LOST WHALEBACK

Text and Photographs by David & Mickey Trotter with Jared Daniel

Lake Huron, with over 23,000 square miles of surface area, holds secrets. The Great Lakes have been recognized as the world's greatest fresh-water transportation system, providing some of man's most inexplicable and eerie unsolved mysteries.

Great ships have left their ports with capable captains and crew, never to be seen again, and have become "Ghost Ships" - phantom vessels that sailed away into the unknown. Only the Great Lakes have the answers and only grudgingly do they give up their secrets.

This is the story of Lake Huron's giving up one of its most closely-held secrets to an intrepid team of shipwreck hunters and explorers.



Clifton in dry dock for conversion to self-unloader.

ALEXANDER MCDUGALL: This true visionary of boat design for operational efficiency in the Great Lakes built 44 odd-looking and strange ships for hauling cargo throughout the “inland seas.” Many of these ships were to see service in the salt water oceans of the world.

McDougall’s new boat looked like nothing seen before on the Great Lakes. The vessels had rounded hulls with conical ends, and superstructure with cabins resembling turrets. These vessels, when loaded, were very low in the water with only 6-8’ of hull above the water line. The hull design resembled that of a submarine, riding through the harsh conditions created in Great Lakes storms as the waves washed over the deck. The design proved to be an economic success, with 18 built as steamers and 26 as consorts during the years 1888 to 1898.

The whaleback design was cheaper to build and to operate. After all, the purpose of the vessel’s existence was to be profitable for her owner(s), but not so much fun for the crew, however. The decks were very wet in bad weather and the crew stayed in the bow or stern during storms. The engine room, the boiler area, and the forward compartments were extremely hot, not to mention being very wet in heavy seas. For the crew, there was not much to like about making a living aboard a “pig boat.”

The 308-foot-long *Clifton* (38’ beam) was launched as the *Samuel Mather* in 1892 and was to serve 31 years while moving grain, coal, and other commodities throughout the Great Lakes. This included a stint transporting new automobiles secured to her deck.

As larger, more efficient steel ships came into being, the *Clifton*’s limitations (size, cargo hatch design, crew size, and incompatibility with newer loading/unloading systems) caused her to be sold.

Leathem Smith purchased the *Clifton* to implement his vision - a radical, new design for a self-unloading system to be installed in the smaller ships. This converted her to haul aggregate from his stone quarry throughout the Great Lakes. The conversion to a “tunnel scraping self-unloader” was completed in the summer of 1924. Within a few days of her new career, with a full load, she left Sturgeon Bay, Wisconsin, took on water and began to list. She was run into shallow water to prevent more damage. While not unusual, this event was a precursor to the tragedy that followed a month later.

FINAL RUN: Loaded with 2,200 tons of crushed stone (aggregate), the *Clifton* departed from the Smith Company quarry in Sturgeon Bay on September 20, 1924. Her destination was Birmingham Sand and Stone Company in Detroit, Michigan. It was a destination she would never see.

Moving out of the Sturgeon Bay Canal into the open waters of Lake Michigan, she moved up the lake and into the Straits of Mackinac. Once in the Straits, she headed down the south channel between Bois Blanc Island and the mainland. A stiff southwest wind was blowing as she left the protection of the mainland and turned into the open waters of Lake Huron, heading downbound toward Port Huron.

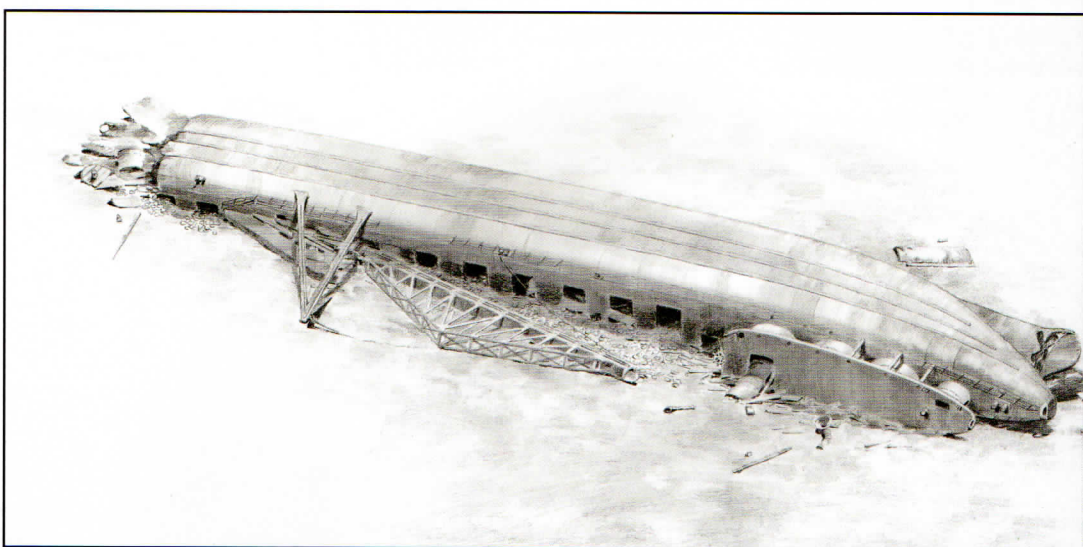
The *Clifton*, as was true with most ships of the time period, had no wireless communication, only the whistle and bell as communication devices. The salvage tug, *Favorite*, of the Great Lakes Towing Company was upbound, off Forty Mile Point. Captain Alex Cunning noted, “The *Clifton* was taking water over her decks but making good weather of it.”

It was the last time the Clifton was seen.....for over 90 years.

As the *Clifton* proceeded downbound, a furious storm swept Lake Huron from the southwest. The gale, according to the captains that were on Lake Huron at the time, reached “a screaming, roaring, crescendo,” and was the worst storm the captains had ever seen.

September 24: The owners of the *Clifton* announced that the vessel was 50 hours overdue and that there had been no news. The next day, lake vessels began to search for the missing *Clifton*. Military aircraft from Selfridge Army Air Field in Mount Clemens searched the Lake Huron coastline, to no avail.

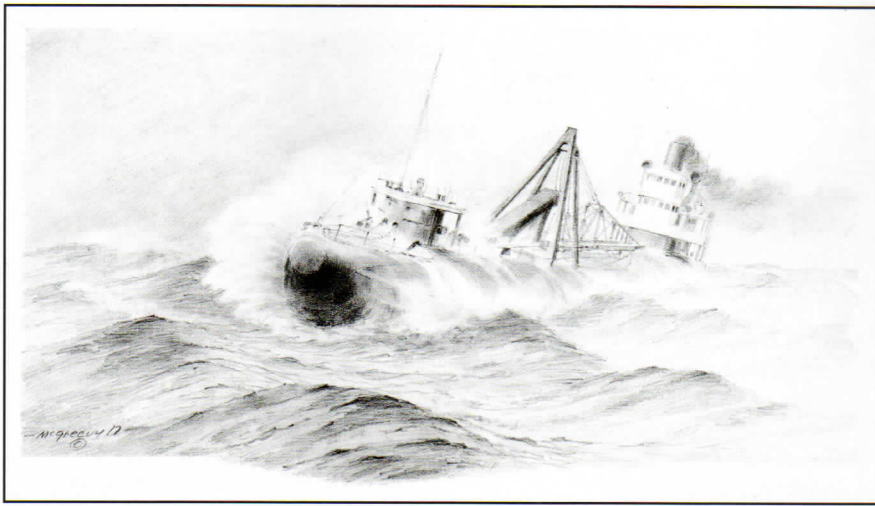
After days of fruitless effort, on September 28, wreckage was found midlake, with more wreckage located in the



Top: The whaleback *Clifton* discovered on the floor of Lake Huron.
Marine Artist: Robert McGreevy.

Right: Alexander McDougall.
David Trotter collection.





following days. The steamer Glencairn was downbound in Lake Huron when the boat encountered wooden hatch covers “practically in the center of the lake.” The top and front portion of a pilothouse was recovered, and, when the wreckage was pulled on board, the Glencairn crew noted that the *Clifton*’s pilothouse clock had stopped at 4 o’clock. It would be more than two weeks later that the first body was located on October 16. In the following weeks, into January of 1925, approximately 10 bodies were recovered of the 30 crew and passengers aboard the *Clifton*.

In early December, the brother of the *Clifton*’s Captain Gallagher, Clyde (also a steamer captain), began a long and difficult search for his brother’s body along the desolate Canadian shoreline. Clyde walked north from Goderich, Ontario, along the coast for approximately 250 miles

to the Saugeen Peninsula. He reported finding “considerable wreckage from the *Clifton*,” but no bodies. It is apparent that Lake Huron does not easily give up her dead.

As the search effort for the ship and its missing crew faded, the inevitable questions arose about the loss of the *Clifton*. Was it the new self-unloading equipment installed a few months earlier causing the ship to be top heavy? Could it be that the cargo of aggregate stone shifted in the gale-force conditions, causing the vessel to roll over and plunge to the bottom? Is it possible the

self-unloading equipment secured to the deck broke free, causing an uncontrollable shift to the port or starboard side, and a “roll to the bottom?” These were questions without answers.

THE DISCOVERY: “Shipwrecks will be found when they want to be found,” according to Garry Kozak, the maestro of sidescan survey. One of the finest sidescan operators in the world, he spent many years searching for one of the most elusive of Great Lakes shipwrecks, the *Dean Richmond*. Before Garry finally located the ship, he surveyed more than 500 square miles of Lake Erie and found 27 previously missing ships

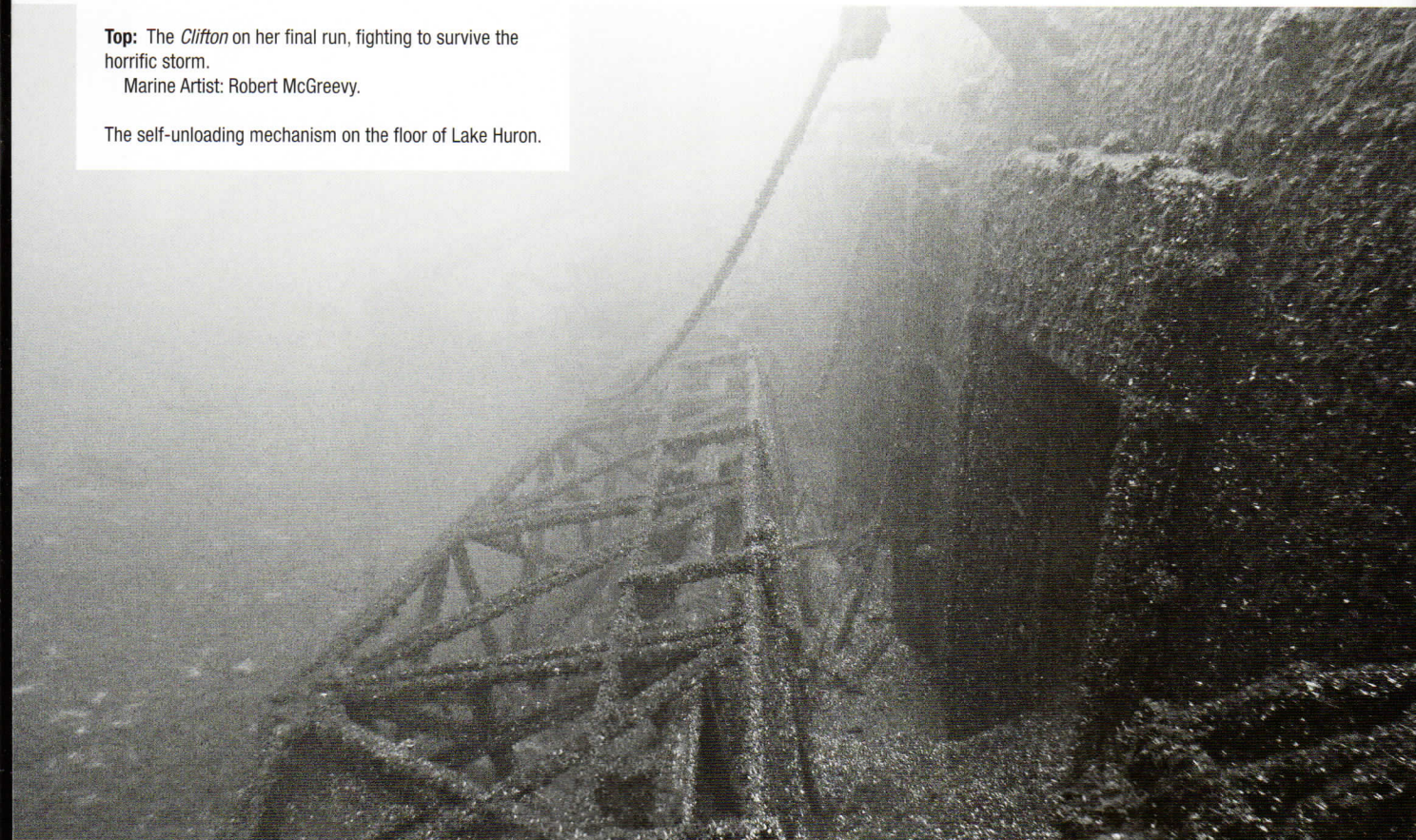
It is all about dedication to the task at hand.

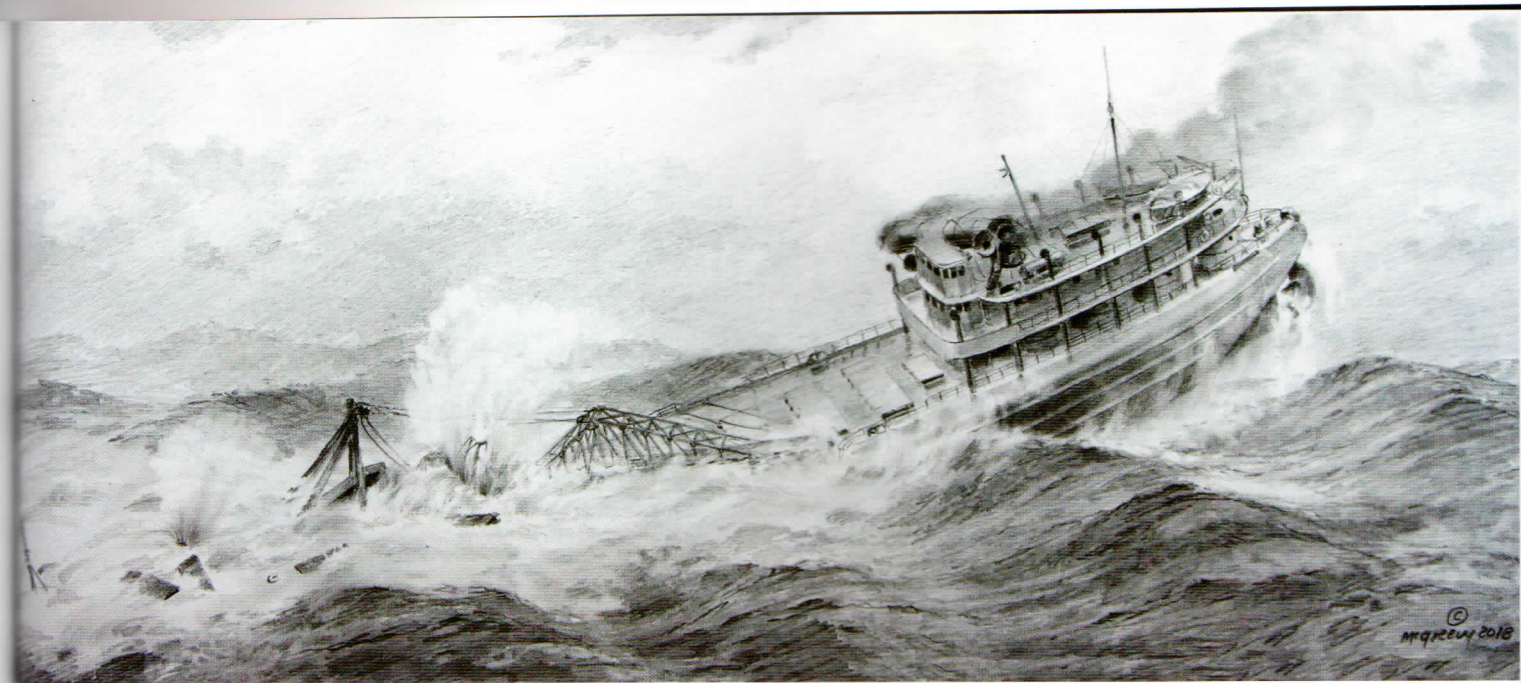
As the last weekend of our survey activity continued into the night, a target appeared at 1:15 a.m. The target was noted and, several hours later, the final survey activity

Top: The *Clifton* on her final run, fighting to survive the horrific storm.

Marine Artist: Robert McGreevy.

The self-unloading mechanism on the floor of Lake Huron.





for the year was wrapped up. It would be three months before we returned to the site of the mystery shipwreck. The reason for the delay: two beautiful, intact schooners that we had discovered in previous years were our exploration/documentation project for the summer. The Venus and the Montezuma are another story for another time.

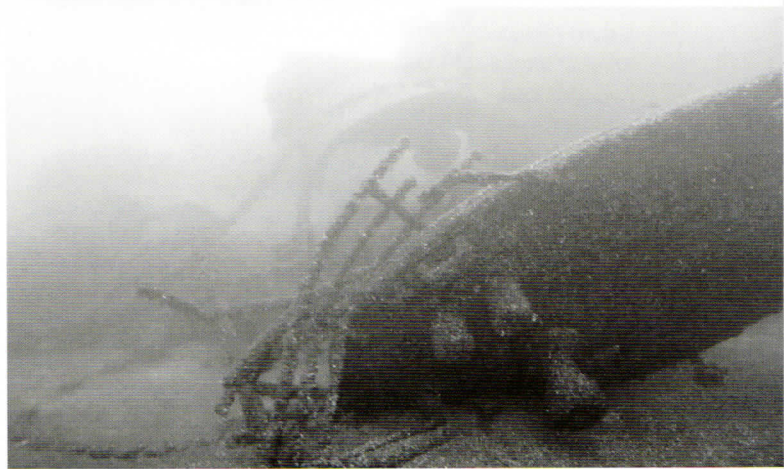
INITIAL EXPLORATION: Finally, in mid-September, 30 miles off shore, our dive boat, *Obsession Too*, was over the site of the unidentified shipwreck. The grapple hook was sent over the rail and it quickly hooked into the site below. Due to the depth, the four divers employed trimix, travel gas, and oxygen to complete the initial dives.

Visibility has changed in several of the Great Lakes, for the better. The accidental introduction of the filter-feeding mussels has at times provided visibility of 100 feet. This has been at the expense of coating the shipwrecks with layers of mussels, often hiding ship details and smaller items of interest from explorers. However, the impact of seeing a ship on the bottom with excellent visibility is a great experience.

The team of four trimix divers descended, with the *Clifton* coming into view nearly 100' before any of them touched the side of the hull. As she unfolded before the eyes of the explorers, the scope of the tragedy became very apparent. She was found resting on her portside with 30 feet of her bow missing, broken and scattered on the lake floor. It looked as though the bow literally exploded as the ship hit the floor of Lake Huron. It was hard to visualize what happened, and would only be subsequently understood by studying the video shot by the divers.

Due to the depth of the dive and the size of the ship, all the divers were operating dive propulsion vehicles (DPV's) which enabled the circumnavigation of the ship. The self-unloading mechanism was found intact, resting alongside the deck on the lake floor. It was apparent that the mechanism did not break free and swing out from the ship, causing the ship to roll over in heavy seas. This negated the theory of the *Clifton* sinking due to the self-unloader mechanism breaking free.

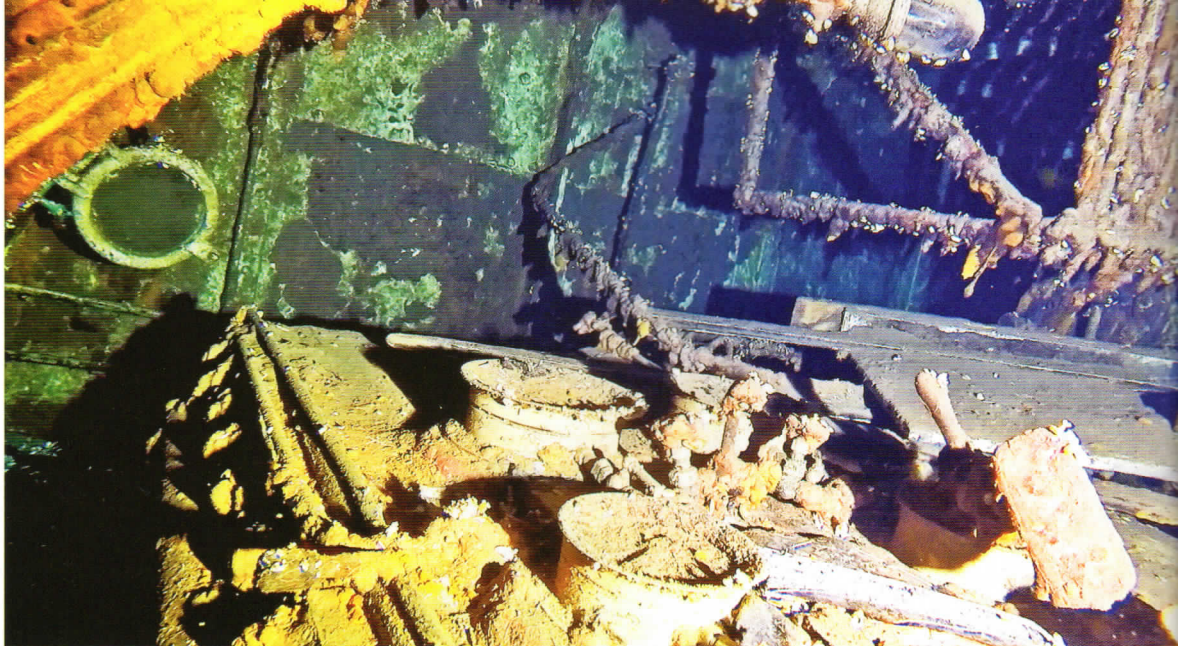
Moving along the deck toward the stern, divers could see that cargo hatches were blown off and aggregate



Top to Bottom: The *Clifton*'s plunge to the bottom. Marine Artist: Robert McGreevy.

The roof over the front turret. Two bits and a capstan remain attached to the roof.

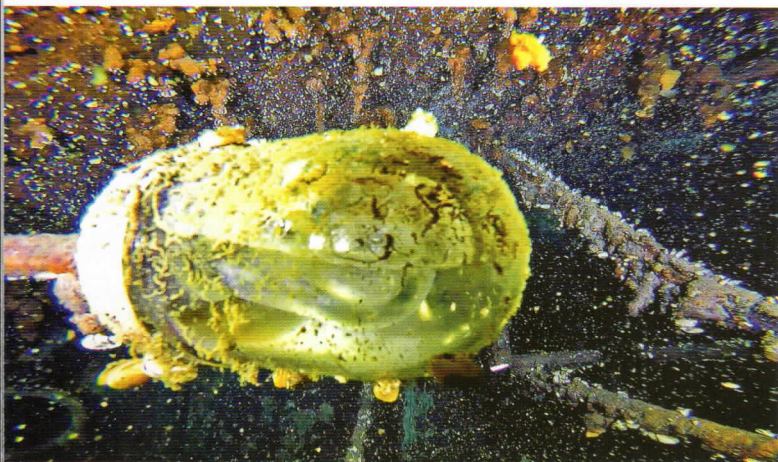
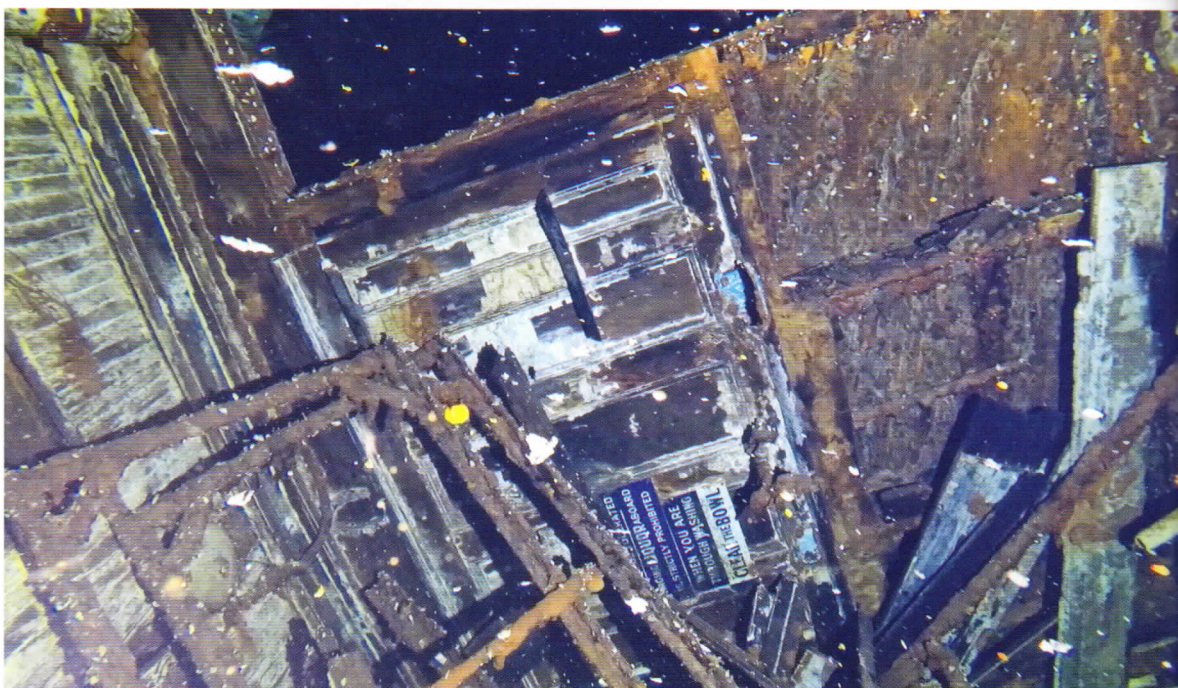
Stern view of the propeller and rudder. The rudder indicates the *Clifton* was not turning. The four-bladed propeller is intact.



Top to Bottom: Gauges adjacent to the engine.

The opening leading to the engine room.

Inside the stern, a globe and light bulb and 1924 "air."



was scattered on the lake floor. Divers swam inside the cargo hatches and were able to view the recently installed Leatham Smith self-unloading mechanism that was still in place. At the rear cargo hatch, a quick look in the coal bunker indicated very little coal was left. Farther back, the wooden, stern pilothouse had disappeared, blown off during the sinking. The steering wheel was exposed, attached and hanging a few feet above the bottom.

Circling the conical-shaped stern, divers found the rudder in place and in line with the hull, so no turn was evidenced. The four-bladed propeller was intact. The hull appeared to be undamaged as the divers moved 300 feet from the stern to the bow, passing the crushed smoke stack on the floor. At the front of the ship, the bow seemed to be sheared off, with the turret cabin structure and anchors unrecognizable in the debris field.

The divers began their ascent and endured the long decompression stops required before surfacing. Back on board the dive boat, several divers announced that the

discovery was a whaleback. I said, "That could be the *Clifton*!" It took several seconds for me to absorb their statements, as this meant the *Clifton* had been found 100 miles from her last sighting in northern Lake Huron!

FINAL HOURS: The discovery of the *Clifton's* final resting place and her position on the bottom of Lake Huron allowed us to form conclusions about her last run. She passed through the Straits of Mackinac to begin her southerly run down Lake Huron in worsening weather conditions. Low in the water with a full load of stone, the waves washed over her decks, forcing a number of the crew to remain in the front turret. There was no doubt that as she moved down Lake Huron past Thunder Bay Island, the velocity of the storm increased. Slowed by the raging storm buffeting the ship, her speed continued to decrease, likely to 5-6 miles an hour.

Coal passers were furiously feeding the two boilers to maintain pressure as the *Clifton* entered the most treacherous area in Lake Huron. This is where Saginaw Bay contributes a much longer fetch by building the escalating waves. The conditions the *Clifton* encountered as she crossed Saginaw Bay, had been reported by captains as the worst storm they had seen in years, which maxed out in intensity at approximately 4 a.m.

THE SINKING: The *Clifton*, with her new self-unloading tunnel scraper system, had shifted her center of gravity. With the increased deck equipment exposed to the waves, and with the peak storm lashing her starboard side, she began to roll over on to her portside with the bow plunging toward the bottom. The violent shock was brutal, with 30 feet of bow crushed on impact. The remainder of ship followed, crashing to the lake floor. Her collision with the bottom was similar to a spear thrown at an angle of approximately 20 to 30 degrees.

With the heavy cargo of aggregate and the shifting of the stone, the *Clifton* sank quickly, leaving no time for the captain and crew to escape. Of the ten bodies found, none was reported to be wearing a life jacket.

EXPLORATION: We continued diving activities, being able to identify some portions of the bow area, including parts of the crushed forward turret. The anchor and anchor chain were not located. With the ship lying on her port side, both large boilers, to our surprise, remained mounted to the bottom of the ship. The boiler doors were open, likely indicating continued stoking of the boilers in an effort to keep the fires burning. The interior of the ship, behind the boilers, and the aft section of the stern have been explored, as well as the engine room. For those divers who follow: be careful of the broken, loose pipes, overhead material, and the silt located in the interior of the ship.

EPILOGUE: The discovery of the last of the whaleback steamers lost in the Great Lakes, the *Clifton*, has solved one of Lake Huron's most enduring mysteries. We can only imagine the fear and trepidation of the *Clifton's* crew in the front turret as she quickly slipped beneath the waves, water rushing in, as she plunged toward the bottom. Those in the stern pilothouse felt and watched the ship roll on its portside, ripping off the pilothouse which

thrust the men into the stormy waters. The crew in the boiler and engine room could feel the ship rolling over as the water began to rush into the interior of the ship.

The last stanza from the song, "The *Clifton's* Crew," by Pat Bonner:


*Farewell then, my comrades, no more shall we meet,
Your sweet smiling faces no more shall we greet;
No more your lithe footsteps our pathways shall tread,
Until Huron's dark waters shall give up its dead.*

It is a rare opportunity for people of modest means to be able to discover and explore, and to go where no one has gone before. This opportunity has been offered by the "timing" of life's events - undiscovered shipwrecks, "relatively recent" sidescan sonar development, introduction of Loran C followed by GPS for positioning, and improved weather forecasting. These, combined with "99% perspiration and 1% inspiration," have led to uncovering and solving many of "history's mysteries" in our Great Lakes.

A TEAM EFFORT: Discovery and exploration of the *Clifton* (and other ships) is a team effort. It requires dedicated people willing to invest time and effort to participate with no guarantee of results. The team who made it happen: Andrew Pixley, Bob Martelli, Chad Brunner, David Trotter, Fred Nichols, Greg Geiser, Jared Daniel, Jason Shaw, John Marsh, Keith Columbo, Marty Lutz, Mike Michaels, and Rick Heineman.

Enjoy Great Lakes diving and historical shipwreck exploration at its finest on the *Clifton*. The GPS lat/lon location of the *Clifton* is:

N44° 212.603'/W082° 34.208'

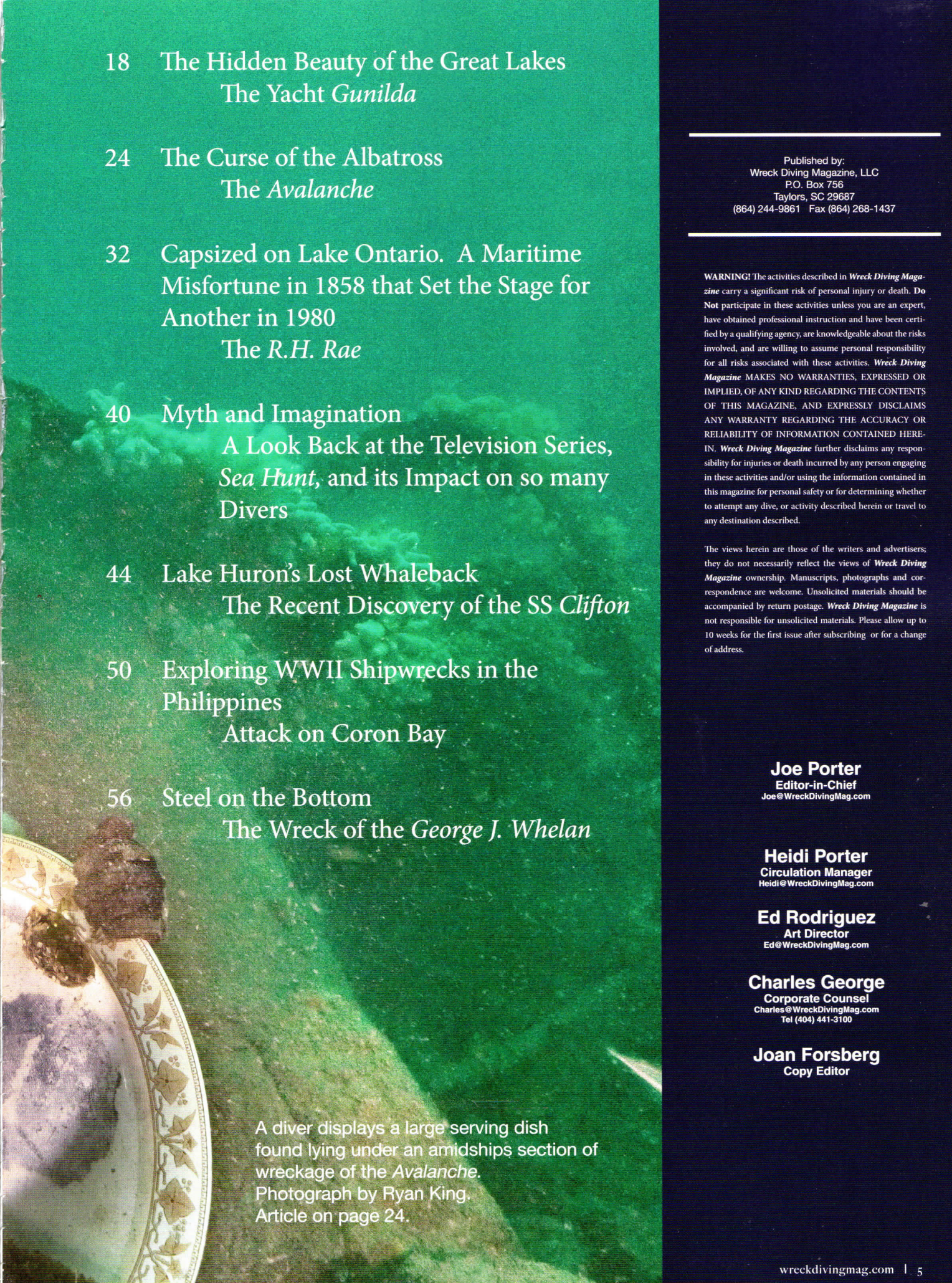
Have fun! 

ABOUT THE AUTHOR:

David Trotter has been involved in Great Lakes shipwrecks, searching, diving, exploring, and documenting new discoveries since the 1970s. He has found lost ships in all of the Great Lakes, except for Lake Ontario. David believes the Great Lakes are "our treasure" to be enjoyed by all who love our "inland seas" and maritime history. It is the shipwreck hunter and diver exploring a shipwreck, in 20' or 300', who uniquely enjoys a "real swim back in time."



Wreck hunters Marty Lutz, Mike Michaels, David Trotter, Greg Geiser and Bob Martelli elatedly study the *Clifton's* image on the LCD screen.

- 
- An underwater photograph showing a large, ornate serving dish lying on the seabed. The dish is white with a gold floral pattern around the rim and a central floral design. It is surrounded by green algae and other marine life. The background is a dark, murky green, suggesting an underwater environment.
- 18 The Hidden Beauty of the Great Lakes
The Yacht *Gunilda*
- 24 The Curse of the Albatross
The *Avalanche*
- 32 Capsized on Lake Ontario. A Maritime
Misfortune in 1858 that Set the Stage for
Another in 1980
The *R.H. Rae*
- 40 Myth and Imagination
A Look Back at the Television Series,
Sea Hunt, and its Impact on so many
Divers
- 44 Lake Huron's Lost Whaleback
The Recent Discovery of the *SS Clifton*
- 50 Exploring WWII Shipwrecks in the
Philippines
Attack on Coron Bay
- 56 Steel on the Bottom
The Wreck of the *George J. Whelan*

A diver displays a large serving dish found lying under an amidships section of wreckage of the *Avalanche*.
Photograph by Ryan King.
Article on page 24.

Published by:
Wreck Diving Magazine, LLC
P.O. Box 756
Taylors, SC 29687
(864) 244-9861 Fax (864) 268-1437

WARNING! The activities described in *Wreck Diving Magazine* carry a significant risk of personal injury or death. Do Not participate in these activities unless you are an expert, have obtained professional instruction and have been certified by a qualifying agency, are knowledgeable about the risks involved, and are willing to assume personal responsibility for all risks associated with these activities. *Wreck Diving Magazine* MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, OF ANY KIND REGARDING THE CONTENTS OF THIS MAGAZINE, AND EXPRESSLY DISCLAIMS ANY WARRANTY REGARDING THE ACCURACY OR RELIABILITY OF INFORMATION CONTAINED HEREIN. *Wreck Diving Magazine* further disclaims any responsibility for injuries or death incurred by any person engaging in these activities and/or using the information contained in this magazine for personal safety or for determining whether to attempt any dive, or activity described herein or travel to any destination described.

The views herein are those of the writers and advertisers; they do not necessarily reflect the views of *Wreck Diving Magazine* ownership. Manuscripts, photographs and correspondence are welcome. Unsolicited materials should be accompanied by return postage. *Wreck Diving Magazine* is not responsible for unsolicited materials. Please allow up to 10 weeks for the first issue after subscribing or for a change of address.

Joe Porter
Editor-in-Chief
Joe@WreckDivingMag.com

Heidi Porter
Circulation Manager
Heidi@WreckDivingMag.com

Ed Rodriguez
Art Director
Ed@WreckDivingMag.com

Charles George
Corporate Counsel
Charles@WreckDivingMag.com
Tel (404) 441-3100

Joan Forsberg
Copy Editor