

On Saturday, August 9, 2003, Kevin Magee drove up to Rogers City, MI, to participate in the "Cornelia B. Windiate" archaeological survey. The "Windiate" was a 3-masted topsail schooner that sank late in the season in December, 1875, when it was only a year old. It sailed from Milwaukee (Lake Michigan) bound for Buffalo (Lake Erie) with a cargo of wheat and was never seen again. It was always assumed to have been lost in Lake Michigan since its passage of the Mackinac Straits was never recorded. However, in 1986, Paul Ehorn found this wreck in Lake Huron off Presque Isle, MI, and positively identified it as the "Windiate." This wasn't too hard because this is one of those rare wrecks that still has its name on it. This wreck is considered one of the most intact schooner wrecks found in the Great Lakes, and the purpose of this project was to record all the items on it and to try and determine what happened to it on its final voyage.

Joyce Hayward arranged this survey after diving the wreck for the first time last year. Providing expert guidance was Patrick Labadie, the NOAA representative from the Thunder Bay Preserve 30 miles to the south. He made requests each morning, and the volunteer divers did what they could to accommodate him. Alan and Martha Jensen used their boat "Viking" out of picturesque Presque Isle harbor and provided the charter service necessary to get the divers to and from the wreck each morning. The survey started the week before on Saturday, August 2, and Joyce was leaving the day Kevin arrived. However, there was still much to do.

The first dive for Kevin was on Sunday, August 10. Also aboard were Marty Bailey, Rod Maxson, Joe Hoyt, Alden Greenhouse, and Randall McDonald. The weather was calm at 2' seas, and it was a pleasant trip out to the site. The weather had been very cooperative the previous week with only one blow (fog) day, and visibility was far above average with 30'-80' and one day of 100'+. Much video had been taken of the wreck, and a baseline tape had been laid down the centerline to reference various items' positions. Critical dimensions of all major features had been taken, and some final measurements were needed, including cabin dimensions, spar/boom/mast lengths, and various baseline positions. Some, but not all, of these were completed during the dive.

The "Windiate" lies in 190' of water (not the 180' previously reported), and she stands high off the bottom with her deck at about 170'. The mooring is tied to the top of the foremast, which rises to within 90' of the surface. The topmast is in place, and attached to it is a large square-rigged spar resting at a 45 deg angle, making her a topsail schooner. From the bracing platform the wire rigging can be seen dangling down to the deck and railings below. It is a long descent to the bow, which faces south. The only damage evident anywhere on this absolutely gorgeous wreck is at the extreme bow where the bowsprit is broken and points down to the bottom, port side. Everything else is pristine! There is a small forecabin in front of the windlass. Both anchors are stowed on the catheads on the railings. The anchor chain runs out of the windlass chain locker and up and down the port side in three orderly, looping lengths. The original speculation is

that this was an apparent attempt by the crew to correct a starboard tilt of the ship as she lay trapped in ice. However, there is now speculation that this was the normal procedure before going to anchor to prevent fouling, and that the ship was instead preparing to anchor, perhaps at Presque Isle, the only natural harbor along this section of coastline.

All three masts are standing, but the good visibility showed that the tops of the main and mizzen masts are broken off. The top of the main mast, complete with crosstrees and attached topmast, is lying parallel on the bottom up against the hull amidships on the port side. The rigging still runs from both sets of deadeyes on the railings across the deck and down to the bracing platform. Strangely, there also appears to be another spar attached to the topmast, and it is possible this mast had fallen and was floating next to the ship when it sank. The top of the mizzen mast lies against the starboard side of the ship near the stern and points up across the deck. All sail hoops are neatly stacked around the masts at their bases, showing the sails were probably stowed at the time of sinking. There are unique three-sided fife rails around the masts with belaying pins still in them. All deck equipment is present, including the capstan and centerboard winch amidships with chain running down into the centerboard box. All three cargo holds are sealed tight with the cargo hatches still strapped down, allowing no examination of their interior. On the deck near the stern on the starboard side is a strange open crate with thick wooden walls and a metal-lined riveted interior. It was determined that this is almost certainly an ice box to store perishables and not a rope box as previously suggested.

At the stern, the cabin is completely intact. The mizzen mast runs out of the middle of its roof. A front companionway is on the port side, and a stove pipe exits the roof nearby. Entering into the cabin, the stove can be seen on the floor. Two open doors with porcelain doorknobs can be seen leading to small rooms on the starboard side. A broken stool, table, and other furniture pieces can be seen on the floor. Windows with metal bars and sliding shutters are on both sides of the cabin. At the rear of the cabin, a graceful winding staircase can be seen making a 90 deg. turn up and out of the cabin on the port side. Exiting up the stairs, one finds the wheel and steering gear box with the wheel somewhat tilted up by the fallen mizzen boom. The davits are high-standing, arched metal designs. A wooden pulley can be seen hanging from the end of each davit. On the port railing can be seen the wooden nameplate with "Cornelia B. Windiate" carved into it. Dropping over the transom, one finds a series of ten decorative metal stars, five on each side, attached to the transom in a curving design and underlined by a braided nautical rope design made of carved wood. There are also holes for two unique vertical double-lobed or oval portholes on the transom, but sadly, they are missing and probably stolen. Dropping down to the bottom, the rudder is turned hard to starboard at a 90 deg angle.

Swimming on the bottom over to the starboard side near the stern, the final amazing sight of this wreck is found. The wooden yawl boat can be seen sitting

upright and parallel to the hull about 10'-20' away. Its bench seats and floor boards are in place, and large wooden blocks are inside at each end. These blocks would have mated to the pulleys hanging from the davits. It is a mystery why the crew did not take the yawl boat, but it may have originally been lashed to this side of the ship for boarding just before the ship sank. It would have then sank along with the ship and would have come to rest so neatly next to the wreck.

The bottom temperature was 38 deg F with the thermocline between 50'-60' and 73 deg F water above it. Bottom visibility was a decent 30'-40' with 20'-30' surface viz. Maximum depth was 177', bottom time was 20 minutes, run time was 55 minutes, and 20/35 trimix was used with 50% nitrox and 100% O2 for decompression.

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The next day, Monday, August 11, was a blow day with large 4'-6' seas. An attempt was made to get out, but "Viking" turned back soon after clearing the bay. All divers except Alan and Kevin left at this time, leaving them to finish up the survey work.

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On Tuesday, August 12, the seas were rough but acceptable at 2'-3', allowing the dive to proceed. While gearing up, Alan tore his wrist seal while donning his dry suit. A quick duct tape repair was made, and the dive proceeded with the understanding that Alan would probably get wet and be cold at the end of the dive. Alan and Kevin managed to finish obtaining all the survey points in a longer than planned but fast-paced 25-minute dive. However, as they started to ascend the forward mast, Kevin went to turn on his stage bottles and found that the handle to his O2 bottle was missing, leaving only a small, un-turnable metal stem. He delayed his ascent and quickly searched the bow for the missing handle, but to no avail. He then proceeded with the ascent and went to his bailout tables. After catching up with Alan and showing him his problem, he proceeded normally until the last 20' stop. When Alan switched to his 100%, Kevin started breathing Alan's remaining 50% to give himself more gas margin. Alan was indeed cold from his leaking drysuit and wasn't planning to stay much beyond his planned 58 minute run time. When he left, Kevin took his 100% stage bottle, finished its remaining few hundred psi, then proceeded to finish on his own 50%.

Kevin could have easily finished on his own 50% and 20/35 backgas without Alan's help, but it was convenient that Alan was there to provide an extra margin of safety. In the worse case, it also saved Kevin another 15-30 minutes in the water if he'd had to finish on his backgas. And the situation shows why it is so important to carry a full set of bailout tables (later than planned run times, no

50%, no 100%, no 50%+ 100%) on all dives. Too many technical divers do not do this. The handle falling off is just one of several ways to carry your stage bottles with you at all times and still not have the gas available when you need it. Plan on the worse case, and carry extra gas!

The thermocline was noticeably shallower at 30'-35' on this day, maximum depth was 171', bottom time was 25 minutes, and total run time was 1:18. Afterwards, the data was given to Patrick, and everyone returned home, leaving the NOAA team to digest the data and video. It is hoped a good sketch of the "Windiate" will come out of this project along with some more insights into the possible cause of her loss.