THE ANCHOR

WISCONSIN MARITIME MUSEUM | BIANNUAL

QUEEN OF THE GREAT LAKES GRAIN FLEET

THE *KAMLOOPS* STORY
Isle Royale's Great Ghost Ship

CURATOR'S CORNER
Bringing Shipwrecks to Life

WISCONSIN'S LAKE SUPERIOR NRHP SHIPWRECKS

This early 20th century postcard features Arch Rock. Erosion from the waves and winds of Lake Superior have carved out captivating arches and caves into the sandstone cliffs that edge the Apostle Islands. 2004-1-4877

ARCH ROCK
APOSTLE ISLAND
LAKE SUPERIOR

APOSTLE ISLAND TOURISM
page 24

WHAT'S INSIDE

ON THE COVER
The schooner, **Moonlight,** *the queen of the Great Lakes grain fleet.*

THE PILOTHOUSE

In our Spring/Summer 2023 issue, we turn our gaze north to Wisconsin's Lake Superior coast. I remember my first dive in Lake Superior on the schooner *Lucerne* in the Apostle Islands 22 years ago. On that sunny June morning, I learned something critically important: The water is godawful COLD. The agonizing "ice cream headache" that hit as I descended to the wreck guaranteed I wouldn't forget this lesson anytime soon.

But frigid, fresh, and invasive mussel-free water is also a godsend to those who treasure maritime history. It preserves shipwrecks like nowhere else in the world. Several articles in this issue bring that preservation into sharp focus by exploring the history and archaeology of some of the state's most dramatic and significant submerged maritime landscapes.

Our newest exhibit, *Bringing Shipwrecks to Life*, emphasizes the theme of this issue by showcasing some of Becky Kagan Schott's spectacular underwater photography. She co-curated the project with our chief curator, Kevin Cullen, who selected artifacts from our collection to help transport you to dramatic wreck sites, further enhanced by Becky's digital and 3D-printed models. I recommend seeing it for yourself – without the painful freezehead experience – before the exhibit casts off in November.

Extraordinary archaeological resources, exceptional people, and a maritime history and culture that rivals any ocean or Great Lakes state—that is what we have here in Wisconsin and celebrate at the Wisconsin Maritime Museum. It's always a great time to visit us in Manitowoc, but especially during special events like SubFest—our annual 4th of July celebration of our submarine-building past. This amazing and fun experience has become a much-treasured annual gathering of veteran submariners and enthusiasts from across the nation. Kind of a salty Sturgis!

Cathy M. Green

Executive Director,
Wisconsin Maritime Museum

MOONLIGHT

QUEEN OF THE GREAT LAKES GRAIN FLEET

by Brendon Baillod

After the Civil War, demand for Wisconsin grain grew rapidly, pushing the requirements for larger, faster Great Lakes schooners. Initially, shipyards in the Cleveland, Ohio, and Buffalo, New York, areas built most bulk freighters, since the south shore of Lake Erie was the grain industry's commercial center. However, the center shifted as the ports of Milwaukee, Wisconsin, and Chicago, Illinois, expanded, with many grain schooners changing registry to Lake Michigan ports.

By the 1870s, the innovative Manitowoc and Milwaukee shipyards of builders William Bates and James M. Jones were the driving force behind high quality grain carriers. When the locks and canals connecting the lakes were deepened in 1871, the resulting commerce boom produced almost 200 three-masted schooners, mostly 200 feet long.

Local citizens watched the graceful windjammers with enthusiasm, and they were the subject of paintings and sea chanties. The pride captains and crew took in serving on them often created trans-lake sailing times competitions. Within 20 years, however, steam power ended the Age of Sail. Schooners were cut down to become consorts, vessels towed by steamers and both loaded with bulk cargo. Only *Moonlight* achieved enough notoriety to live in Great Lakes folklore.

David Vance was *Moonlight's* first owner. By the 1870s, he was a successful Great Lakes vessel agent and grain forwarder associated with fellow Milwaukeeans Lemuel Ellsworth, a coal dealer, and E.C. Hibbard, a marine insurer. The consortium was intent on investing in the largest and best grain carrier money could buy, and they hired Wolf & Davidson Shipyard in Milwaukee in late 1873.

At the time, hull 90719 was the largest vessel they had ever attempted: 777 gross tons with an overall length of 208 feet, beam 23 feet, 9 inches, hold 14 feet, 2 inches deep. She carried her maximum load, more than 50,000 bushels of grain, in 14 feet of water. Her mainmast without the top spar towered 105 feet above the deck, and she flew enough canvas to make her the fastest on the lakes. Her innovative design included bolting the deck beams to the shelf (fore and aft timbers) instead of mortising them. Among her more elegant appointments was an unusual half-moon figurehead beneath the bowsprit. The consortium christened their vessel *Moonlight*.

Moonlight was launched Saturday, 14 March 1874, to much fanfare and fitted out in a month. After inspection, the Board of Lake Underwriters rated the hull A1 and valued the schooner at $50,000. Vance chose 25-year-old Denis Sullivan, known for his fast sailing and flying clouds of canvas, as her captain. Sullivan had earned his master papers recently, making him the youngest to command a grain schooner.

Moonlight's maiden voyage that May was eventful. Bound for Detroit, she stopped briefly in the Straits of Mackinac, dropped her anchors, and they parted from the chains for
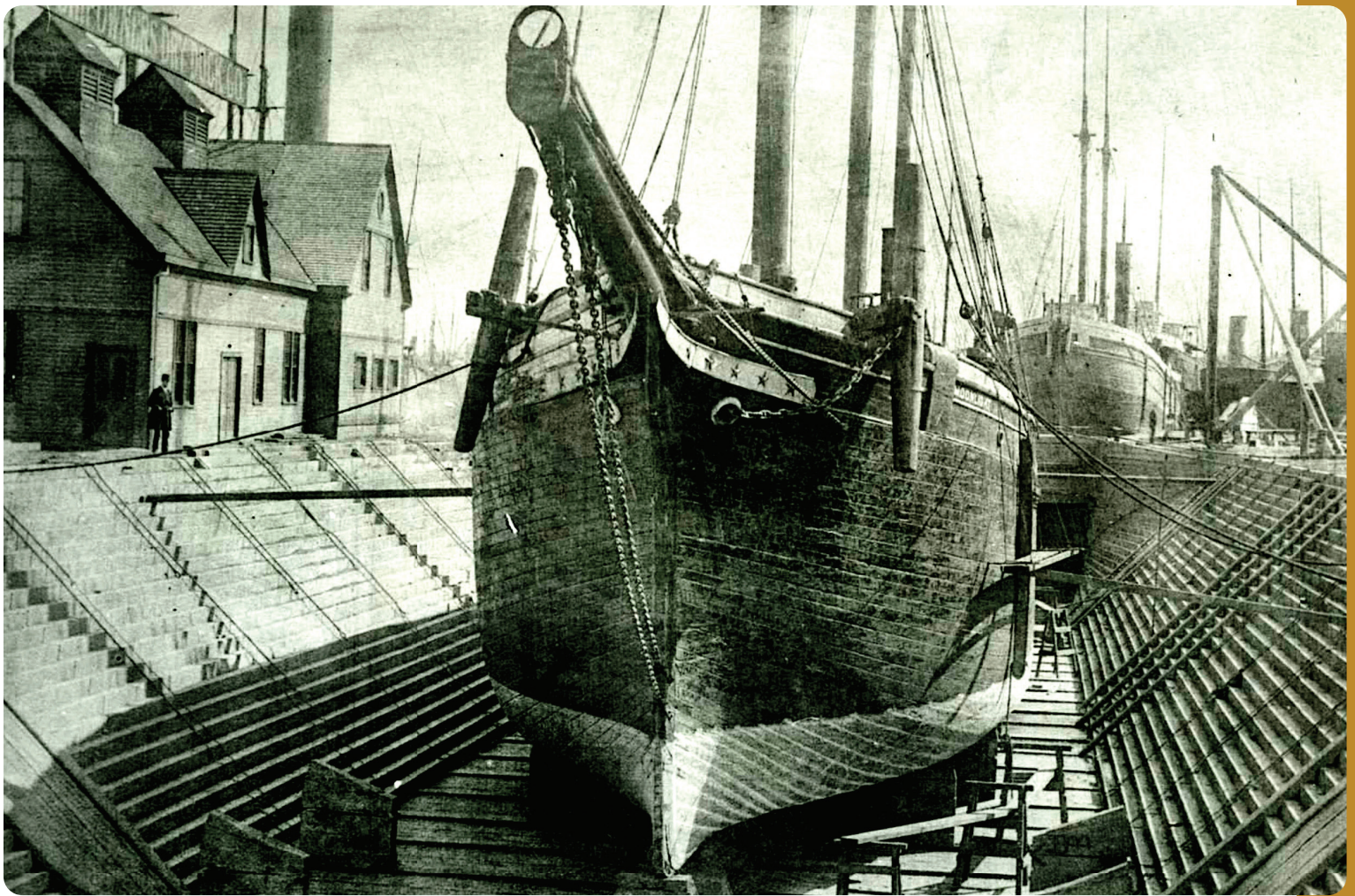
*The schooner **Moonlight** in drydock, 1894 at the Ship Owner's Drydock Company, Cleveland, Ohio. Courtesy of the Labadie Collection.*

Nickerson illustration of Moonlight. Courtesy of the Historical Collections of the Great Lakes at Bowling Green State University.

a loss of $250. Her afternoon arrival at Detroit on 5 May attracted a crowd, prompting local newspapers to comment: "Her unusually fine lines and unmistakable proofs of strength called forth admiration from all who visited her." In June, she struck *J.I. Case* a glancing blow while passing the 230-foot schooner through the Straits, resulting in a $100 repair bill.

After the ice cleared the Straits in April 1876, *Moonlight* was one of the first vessels to enter the lower lakes. That year she also set a record by making 21 round trips between Milwaukee and Buffalo, a feat never equaled by another windjammer.

By 1880 *Moonlight* was regarded as the Queen of the Lakes, but the schooner *Porter* (1874), in command of Captain Orville Green, had a similar reputation. *Porter*, built at the Milwaukee yard of Allen, McLelland & Co., was 205.33 feet long and nearly the same dimensions as *Moonlight*. That summer Sullivan challenged Green to a race down the lakes to Buffalo and back. Loaded with wheat, both schooners set sail from Milwaukee as telegraphs around the lakes spread word of the contest. People lined the shores wherever the schooners approached until they arrived almost side by side in Buffalo's harbor.

On the return leg, harbor tugs blasted their whistles to send the schooners bowsprit to bowsprit up Lake Erie, through the rivers at Detroit, and into Lake Huron.
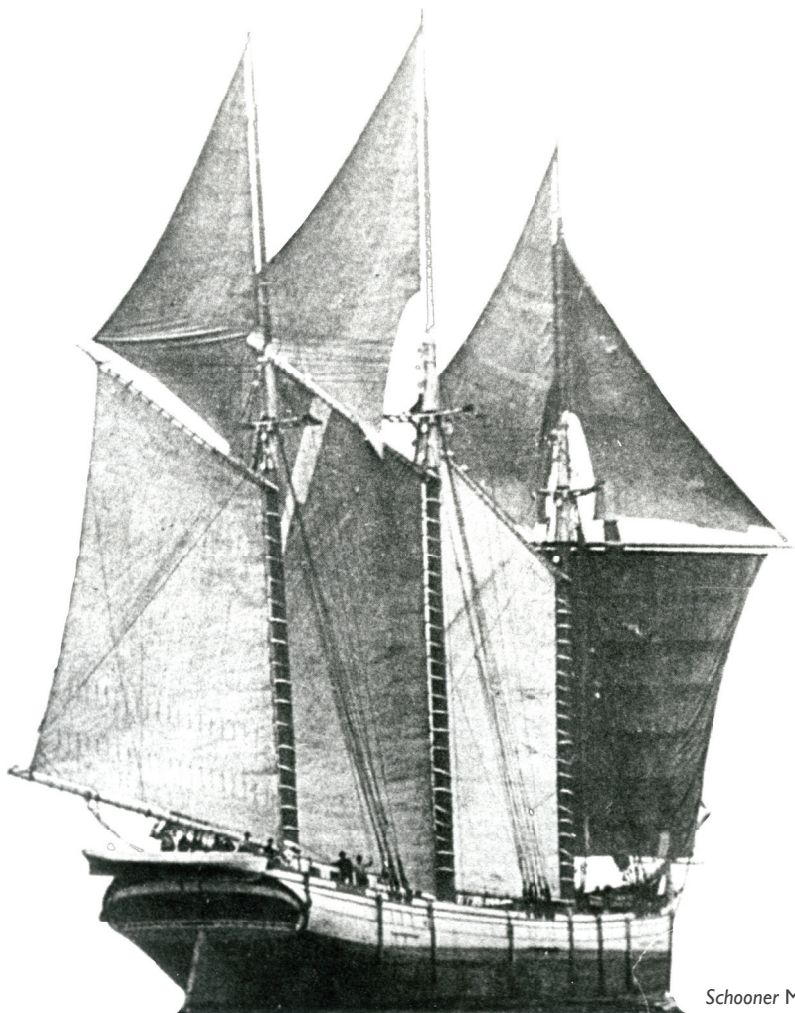
They cleared the Straits, then encountered the first hint of foul weather while passing Mackinac Island. Although the storm became a gale as the vessels ran down the west coast of Lake Michigan, many spectators stood their ground to watch them pass. Those in Sheboygan on 5 June saw every sail still set on the yards, even as the contenders listed severely in winds gusting to 63 miles per hour.

To spare his vessel and crew, Sullivan ducked *Moonlight* behind the Port Washington bluffs, but Green, with *Porter* under shortened sail, pressed on. Off North Point near Milwaukee and with hundreds watching, a gust tore out *Porter's* masts, leaving her helpless in the fierce waves. Milwaukee harbor tugs awaiting the winner raced to rescue her crew, then towed the schooner into the harbor for extensive repairs. *Moonlight* sailed in the next day, and while Green was honored for his feat, *Moonlight* was awarded the more lucrative grain contracts because of Sullivan's sound judgment.

Although *Moonlight* was now at the height of her career, she was beginning to show her age. Her hull value dropped to $30,000 in 1881 and, a year later, her rating dropped to A1 ½, indicating that she was no longer new. Simultaneously, the Wisconsin grain trade was declining and schooners compensated by adding iron ore to their manifests.

At the conclusion of the 1885 sailing season, Sullivan retired from *Moonlight* to captain the steamer *Veronica* and later became a well-known marine insurance agent. Meanwhile, the Vance consortium sold *Moonlight* on 29 January 1889 to Captain William S. Mack of Cleveland for $28,000. It was a fair price, given the schooner's condition and her netting more than $9,000 profit the previous year. Mack was involved in the Lake Superior iron ore trade and wanted the schooner as a consort for his steamers.

After serious incidents during the 1895 sailing season, Mack sold *Moonlight* to Joseph C. Gilchrist of Cleveland on 19 June 1896 for $25,000. Gilchrist, who was building his fleet for the iron ore trade, placed *Moonlight* under the command of Captain John Schuck and registered her home port as Vermillion, Ohio. During their first season, *Moonlight* was towed by *City of Genoa* and ran to Marquette, Michigan, and Superior, Wisconsin. By 1898, *Moonlight's* value had decreased to $17,000, prompting Gilchrist to send her to Burger & Burger Shipyard in Manitowoc for a refit. Between May and July, workers removed the center mast and cut down the side rails, converting her to a schooner barge.

Meanwhile, the Atlantic Transportation Company of New York was experiencing a dearth of barge tonnage for the East Coast coal trade and began offering top dollar to charter lake barges. Gilchrist quickly signed *Moonlight* and she sailed for Ogdensburg, New York, on 30 September 1898. Once fitted for ocean service, she

Schooner Moonlight.
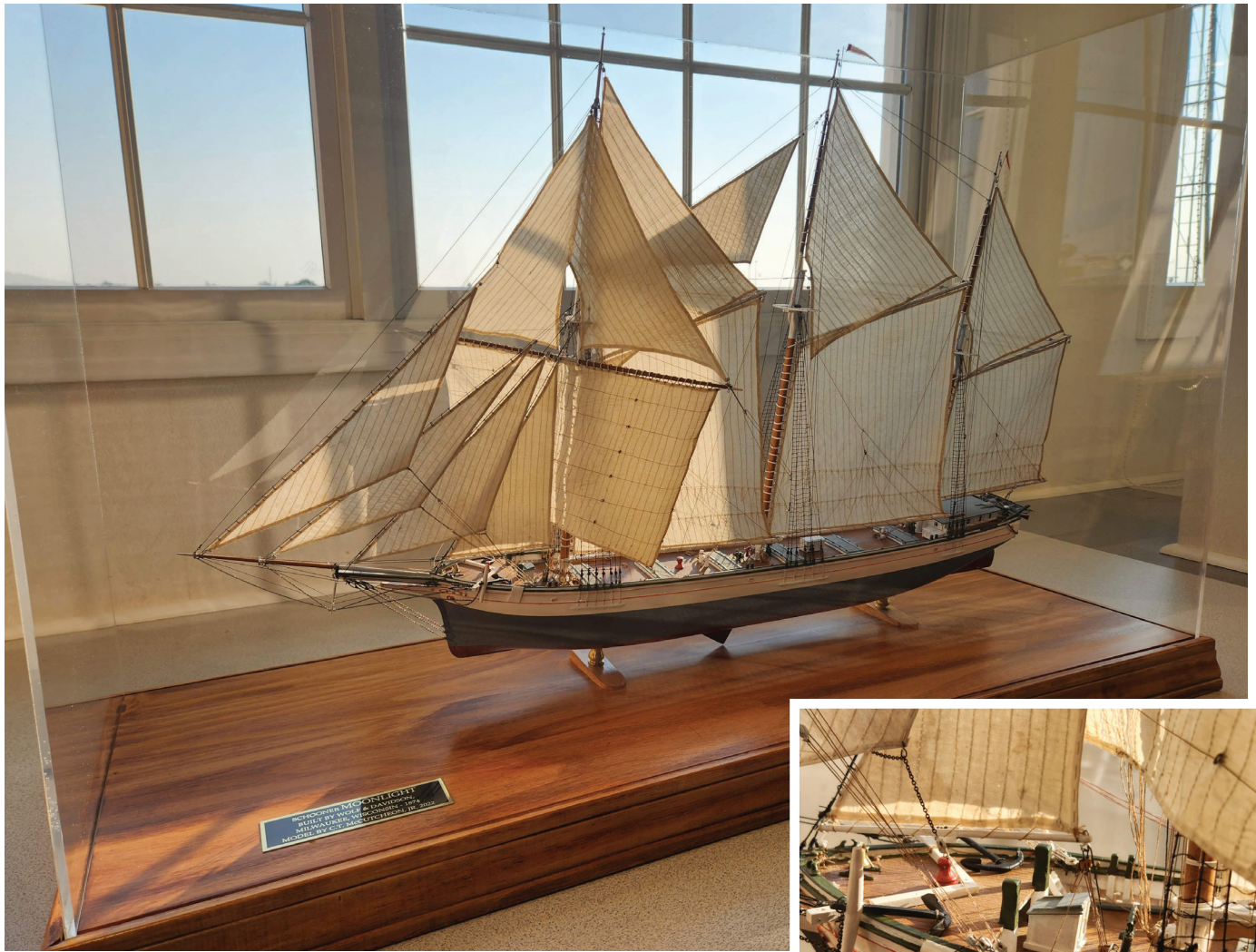
Scratch-built Moonlight *model by C. Ted McCutcheon, 2022.*

received a temporary certificate of registry at Ogdensburg, enabling her to sail in international waters to Newport News, Virginia, via Nova Scotia, Canada.

On 4 August 1900, *Moonlight's* certificate of registry was surrendered at Sandusky, Ohio, and she returned to the iron ore trade after her weather deck was caulked. Captain W.R. Harlow was at the helm for the Gilchrist company and steamer *Volunteer* provided the tow. On 21 April 1903, *Moonlight* received her final enrollment when Gilchrist transferred her home port to Fairport, Ohio, and assigned Captain E.E. Campbell as master. *Moonlight* and *Volunteer* made several trips to Lake Superior that year.
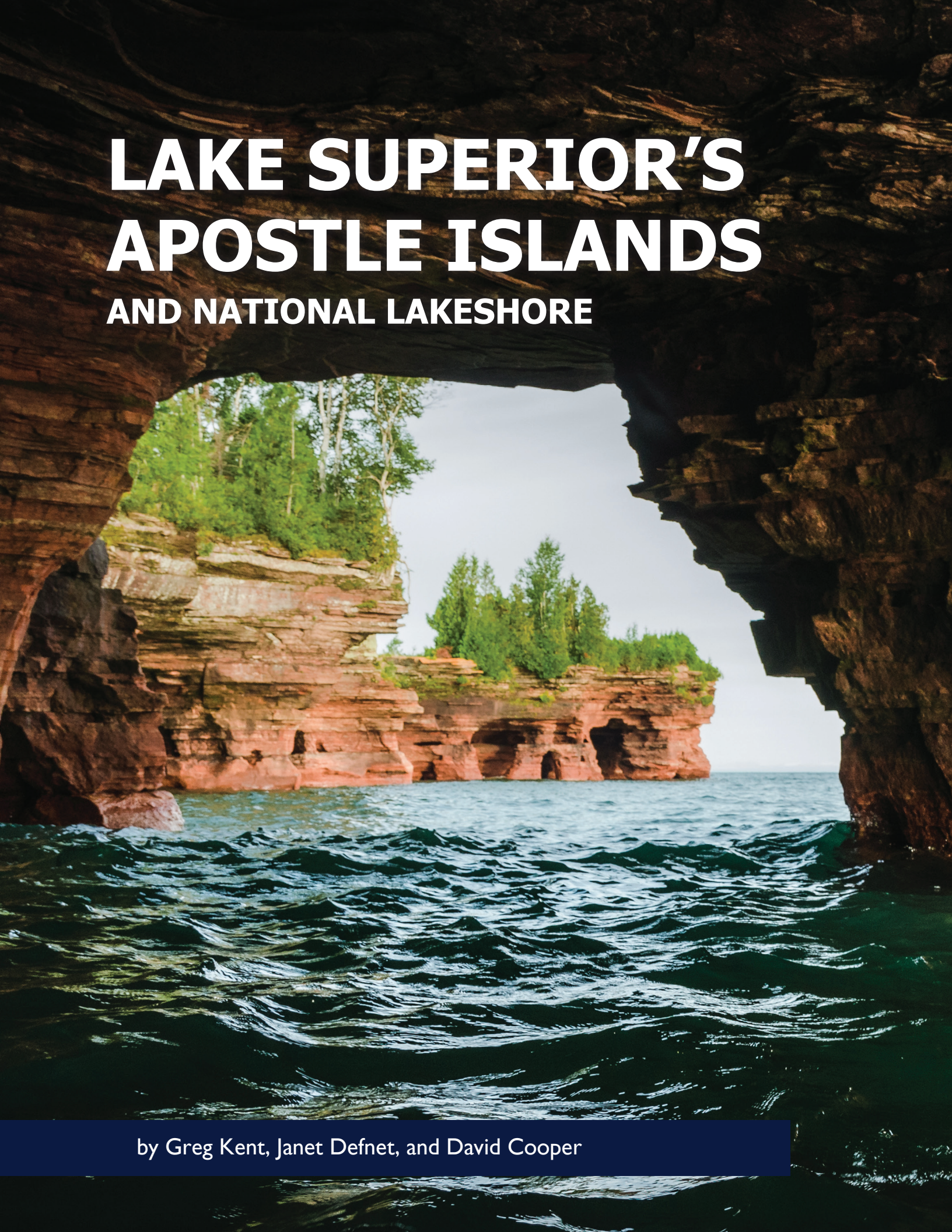
In September, *Moonlight* took on 1,400 tons of iron ore at Ashland, Wisconsin, and *Volunteer* took on 2,900 tons, but a two-day storm delayed their departure.

During a lull, the vessels left port. Once in Lake Superior, the wind swung to out of the northwest, driving waves broadside against *Moonlight's* hull. As the vessels approached Michigan Island in the Apostle Islands, Campbell signaled *Volunteer* that he was taking on water. The crew attempted to start *Moonlight's* pumps, but could not raise steam quickly enough to counter the flooding. *Moonlight* settled rapidly and Campbell signaled *Volunteer* to come alongside. The maneuver was dangerous in the pounding waves and *Moonlight's* weather deck was nearly awash by the time *Volunteer* drew near. With great effort, the crew jumped aboard *Volunteer* before *Moonlight* sank on 13 September 1903.

Gilchrist had insured the vessel and cargo, valued at $9,000 and $6,000 respectively. Her papers were surrendered on 15 March 1904, exactly

30 years to the day of her christening. On hearing of *Moonlight's* loss, Captain Sullivan, then the vessel manager for U.S. Steel in Chicago, remarked: "I feel as if I had lost an old friend. There was never a better or truer ship flying the American flag. I remember the feeling I had on the first day *Moonlight* went into commission. I would not that day have exchanged places with the president of the United States."

A scratch-built model of SV *Moonlight* by master modeler C. Ted McCutcheon is on display in the Model Boat Gallery at the Wisconsin Maritime Museum.

LAKE SUPERIOR'S APOSTLE ISLANDS
AND NATIONAL LAKESHORE

by Greg Kent, Janet Defnet, and David Cooper
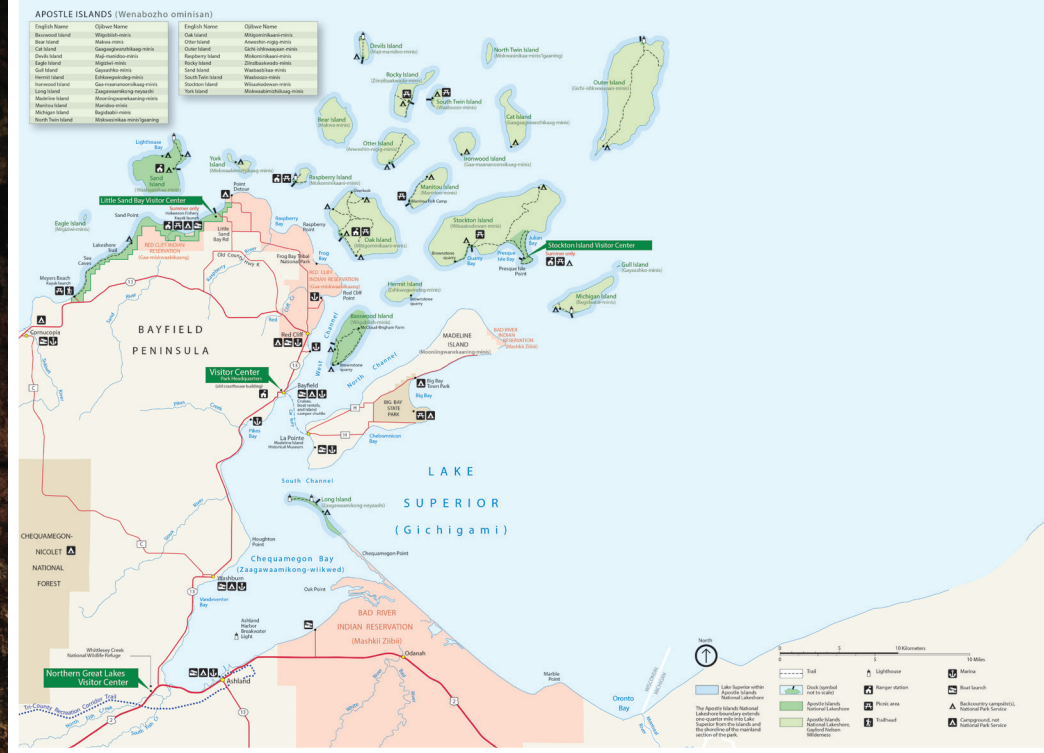
Apostle Islands Map, National Park Service.

In Wisconsin's far northwest lies a scattered group of islands surrounding a peninsula – the Apostles.

Volcanic activity created a landscape that the melting Laurentide Ice Sheet eventually eroded approximately 20,000 years ago, and the deep chasm scoured out by glacial movement became Lake Superior. Wind and wave action then eroded limestone and sandstone formations from the mainland to create this massive archipelago. Referenced on French maps from the early 1700s, the dozen largest islands allegedly were named by the Jesuit missionary Pierre Francois Xavier de Charlevoix for the 12 apostles.

Established in 1970 through an act of Congress, Apostle Islands National Lakeshore (Wisconsin) preserves and protects 21 of the islands: Basswood, Bear, Cat, Devils, Eagle, Gull, Hermit, Ironwood, Long, Manitou, Michigan, North Twin, South Twin, Oak, Otter, Outer, Raspberry, Rocky, Sand, Stockton, and York. The 22nd island, Madeline, is privately owned. Access to the islands within the park is possible only via personal watercraft.

The islands sit near the twin cities of Duluth-Superior, two of the busiest shipping ports in the world, and both areas are part of a larger Lake Superior maritime cultural landscape. The islands are the homeland and spiritual center of the Anishinaabe (Ojibwe) people. Euro-Americans engaged in fur trading, logging, fishing, farming, shipping, and quarrying. The park preserves a broad spectrum of cultural and natural resources reflecting both heritages.

The islands' seven light stations with 10 historic towers are the largest collection of lighthouses in the National Park system. All are important tourist attractions. The outer chain of lights helped keep Duluth-Superior shipping away from the islands, while an inner chain of lights guided traffic in and out of Chequamegon Bay. Each lighthouse has an interesting story tied to shipping and shipwrecks. Some stations have more than one light tower, but all have multiple structures from boathouses to barns. Their historical integrity includes original flowerbeds, ornamental plantings, and even graffiti from the keepers' children. The light stations or their individual towers are listed on the National Register of Historic Places and the cultural landscape reports are at: nps.gov/apis

The islands have 5,000 years of documented human history and the mainland has 10,000 years of it. Much of the earliest archaeology is submerged or was disturbed during glacial intervals and changes in lake level, but some sites from the Archaic and Woodland periods have been documented. Fishing, of course, was probably the most ancient human activity and the islands still have an active commercial fishery. Ojibwe and descendants of Norwegian, Swedish, and French immigrants represent an evolved mix of fishing technologies, practices, and watercraft.

Timber was an important industry throughout the western Great Lakes, but access to the Apostle Islands made conventional logging with horses more difficult than on the mainland. This brought about some interesting new methods that included bush planes, logging railroads, mechanized equipment, and barges. In the wake of the

Above: Old Michigan Lighthouse Apostle Islands. All photos courtesy of the National Park Service.

Left: Sand Island Lighthouse.

Below: Sailing Past Raspberry Island Lighthouse.

Right: Devils Island Lighthouse circa 1940 and 2009.

loggers came the predominantly Scandinavian hardscrabble farmers, many of whom also subsistence fished or fished as their cash crop.

Today's park, spanning more than 69,000 acres of shoreline, offers breathtaking scenery, old-growth forests with diverse wildlife habitats, pristine beaches, sandstone cliffs and sea caves, well-maintained wilderness campsites, more than 50 miles of hiking trails, abandoned quarries and wharves, and a wealth of historically significant shipwrecks with four on the park's boundaries. Because of the clear water and shallow depths, they are visible from sea kayaks, recommended due to the site locations and potential for challenging lake conditions. During winter, more intrepid visitors can hike a mile across Lake Superior to the spectacular ice caves on the northwest side of the peninsula. Learn more at: nps.gov/apis/mainland-caves-winter

The park also offers paddle sports, sailing, cruising, snorkeling, and scuba diving. Stop at the visitor center in Bayfield for an orientation to the varied attractions via interpretive exhibits and films. The surrounding area has additional recreational opportunities.

SITES FOR SNORKELERS, DIVERS, AND KAYAKERS

SEA CAVES AND CLIFFS

Sandstone caves carved into shoreline cliffs by wave action. Visibility varies due to erosion of clay soils into the lake. Calm conditions necessary for access.

Depths: 10-25 feet

Devils Island, north end
(WGS 84) N47 04 51.2 W90 43 46.7

Sand Island, northeast side
(WGS 84) N46 59 26.5 W90 55 31.9

Stockton Island, northeast side
(WGS 84) N46 57 24.7 W90 30 27.6

Stockton Island, southwest side
(WGS 84) N46 54 11.1 W90 38 10.1

"The Wall"
Submerged sandstone ledges dropping sharply to more than 100 feet
(WGS 84) N46 54 11.1 W90 38 10.1

HISTORIC DOCKS

Submerged dock cribs near sandstone quarries active in the 1890s. Depths: 4-25 feet. The Wisconsin Historical Society with support from the University of Wisconsin Sea Grant Institute has been conducting an inventory and evaluation of these resources since 1990 and has underwater slates and guides of these sites.

Basswood Island, southeast side
(WGS 84) N46 49 53.0 W90 45 22.3

Stockton Island, southwest side, near "The Wall"
(WGS 84) N46 54 29.9 W90 37 34.8

Hermit Island, south side
(WGS 84) N46 52 54.6 W90 40 43.8

SHIPWRECKS

A set of waterproof snorkel/dive guides highlighting most sites may be purchased at: shop.wisconsinhistory.org/lake-superior-shipwrecks-set-i

When planning to visit the park, consult the website or call 715-779-3398 for permits, fees, and park rules. The website also lists contacts for commercial services such as island boat cruises, kayak tours and outfitting, water taxis, and sailing and fishing charters.

While not within the park boundaries, Madeline Island should be on the itinerary for its scenery and activities. The more resort-destination atmosphere features inns, motels, cabins, cottages, rental condos or homes, tent and RV camping, fine dining, grocery stores, shopping, golfing, biking, moped rental, art and craft classes, and horseback riding. The island is accessible via the Madeline Island Ferry Line or private boats and aircraft. The ferries load passengers and vehicles at the northeast end of Bayfield. madelineisland.com.

Visitors to the area should schedule stops in Bayfield and Ashland, as they offer an array of outdoor activities, regional culture, and history (bayfield.org and visitashland.com). The David R. Obey Northern Great Lakes Visitor Center in Ashland is another source for travel information and services (nglvc.org).
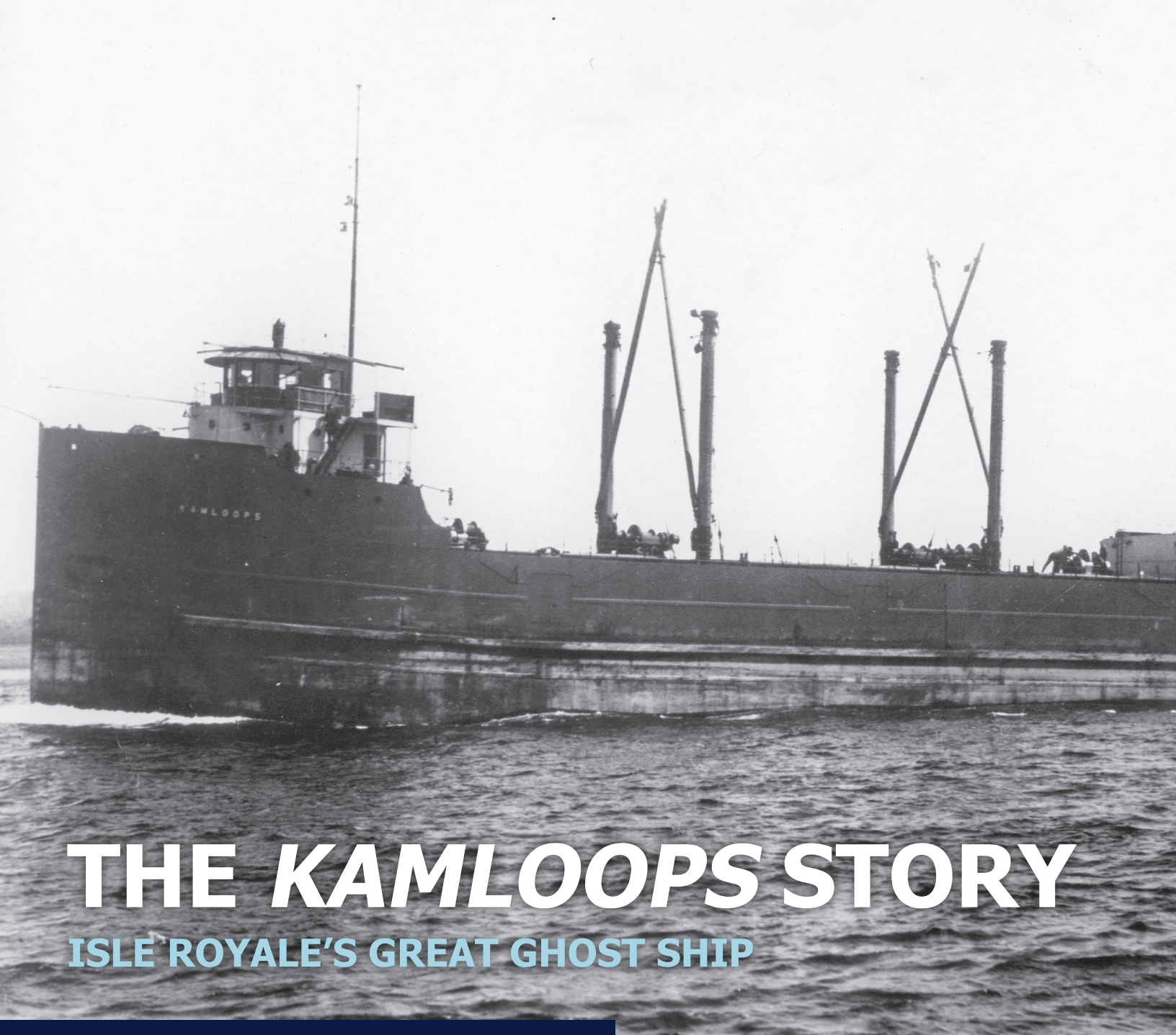
THE *KAMLOOPS* STORY

ISLE ROYALE'S GREAT GHOST SHIP

by Richard Boyd, Ph.D.

In the early days of sail- and steam-powered boats on the Great Lakes, the unpredictable weather and uncharted waters dispatched many unfortunate craft. Some foundered in mid-lake without a trace, while others stranded on nameless reefs or were beached upon some remote, wilderness shore. Vessels that simply vanished earned the posthumous title of "ghost ship." Lake Superior's deep waters conceals many of them. The package-freighter *Kamloops* was such a vessel and her narrative contains every element of an engrossing ghost story.

Kamloops was launched in England in 1924, owned by the Kennedy Shipbuilding Company, and chartered by the Canada Steamship Lines. Built to the limitations of the Welland Canal, she was 250 feet long, 43 feet wide, and weighed 1,700 net tons. As a typical canaller, she passed through the Soo Locks conveying varied cargoes to most Great Lakes ports. In December 1927, *Kamloops* was battling her way through heavy snow squalls and subzero temperatures to Thunder Bay, Ontario, with a cargo of paper mill machinery, piping, shoes, foodstuffs, and coiled wire on deck. When last observed early in the evening of 7 December, she was with fleet mate *Winnipeg* and one quarter of a mile astern of *Quedoc*, a 345-foot bulk freighter, before they were enveloped by the increasing snowstorm.
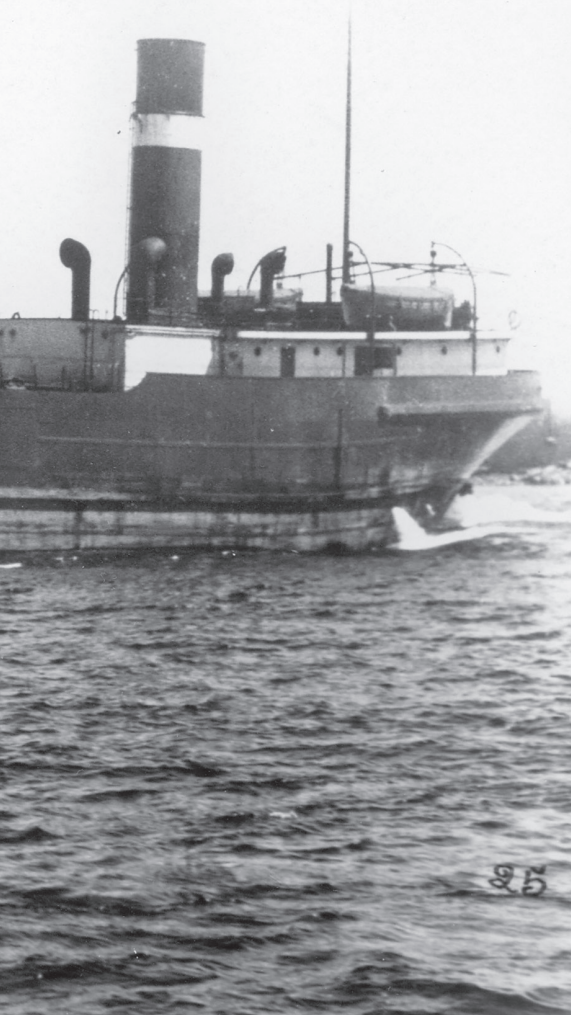
At that time, the rocky coastline of Isle Royale was in the distance. *Quedoc* and *Winnipeg* arrived safely in port; *Kamloops* never did.

Kamloops did not have a wireless (radio), and after no information about her was forthcoming, a massive but fruitless search commenced. Eventually, all hope of finding the freighter or the 22-member crew was abandoned. In late May 1928, Dan Lind and John Linklater, two fishermen listed at Todd Harbor, Green Isle, reported discovering bodies from *Kamloops* near remote Twelve O'Clock Point on the north shore. The Canadian cutter *Crawford* was dispatched and Capt. Christianson confirmed finding two frozen crewmen in a crude shelter of shrubs and brush along with the top of a wheelhouse, a lifeboat, and a spar with a flag marked *Kamloops*. When the ice finally melted along that isolated shore in June, six more bodies were located in other makeshift shelters near Todd Harbor. A final body, that of first mate, Honore Genest, was found farther inland. Several cases of assorted supplies were at the refuge and boxes of Life Savers candies (the sole food source).

The disaster instigated further but futile searches for the freighter near Twelve O'Clock Point, and considerable speculation about her demise. Of the nine bodies recovered, five were identified and returned to relatives; the others were buried at Thunder Bay. In December 1928, a trapper from Sault Ste. Marie, Louis Coutu, found a message in a bottle at the mouth of the Agawa River. It was from Alice Bettridge, the assistant stewardess on *Kamloops*, who relayed that she was stranded on Isle Royale and the last of the shipwrecked survivors. After this, *Kamloops* remained a consummate ghost ship for the next 50 years.

Isle Royale became a national wilderness park in 1940 and is overseen by the National Park Service (NPS). The island, lying about 20 miles off Ontario's western shore, is part of a 45-mile-long archipelago of nearly 400 small islets, remote coves, inland lakes, and backwoods waterways covering almost 900 square miles. Although four lighthouses and other navigational aids mark the waters around the park, the dangerous reefs have claimed various ships, mostly of 20th century vintage.

The steel-hull package-freighter Kamloops.
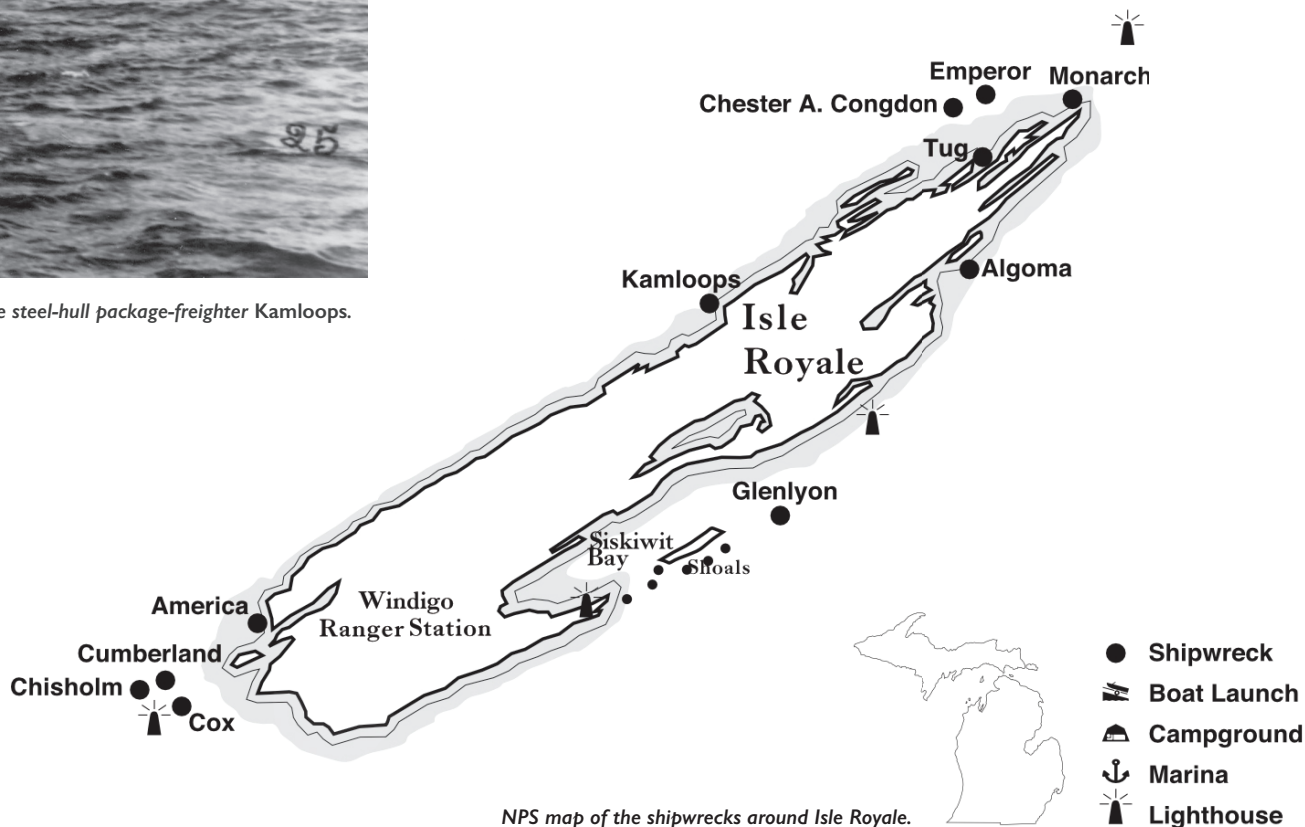
NPS map of the shipwrecks around Isle Royale.

Voyageur II *service vessel. Photo courtesy NPS.*

The area around Twelve O'Clock Point remains almost as secluded as it was in 1927.

For decades *Voyageur II*, a private service boat, has ferried visitors from Grand Portage, Minnesota, to campsites along Isle Royale's north shore. She is equipped with radar and a recording depth finder. In 1977 while rounding Twelve O'Clock Point, veteran Capt. Roy Oberg noticed an anomaly protruding from the bottom of the lake. However, the depth finder could not define its exact nature without LORAN (LOng RAnge Navigation), which was not functional on Lake Superior at the time, and Oberg could not pinpoint the precise location. (The Global Positioning System did not become fully operational until 1993.)

Oberg reported his finding to Ken Merryman, a well-known shipwreck devotee who ran custom dive charters to the island each summer. Beginning in the 1970s, shipwreck hunters had tried to find *Kamloops*, but rugged bottomlands strewn with boulders, submerged cliffs, and rocky pinnacles impaired scanning sonars.

Oberg's area of interest included a sizable parcel of water often exceeding 200 feet deep. Merryman's group decided to tow a grapple over any bottom projection detected on a depth or fish finder, then dive to identify it. They found enormous boulders, glacial deposits, and rock pinnacles, but no wreck. The method also was unproductive because deep dives require strict decompression stops upon ascent to prevent decompression sickness, commonly called the bends. Since multilevel decompression tables for bounce-inspection dives did not exist yet, only one dive per day was deemed safe.

Merryman's team then resorted to shore-and-wall diving, where the diver descends the sheer cliff face and searches left-right at a predetermined depth. During ascent, he uses the cliff's rock shelves for decompression stops. After several dives, the men found some piping strewn along a shelf at 100 feet, and a lateral search at 180 feet produced *Kamloops'* stern. The apparently intact freighter was resting on her starboard side at the bottom of a steep slope. Ken Hafner took some photographs of her remarkable state of preservation.

After the group reported the discovery to NPS, the agency requested it be kept secret for a year because of ongoing artifact looting. Rangers suspected that weekend divers using their fast power boats were evading park patrols, whereas sanctioned dive charter services registered with NPS and rangers monitored their activities. As with most major discoveries, the news soon leaked out.

That same year the late John Steele, a famous shipwreck hunter, reported that the sloping bottom caused *Kamloops* to recline in 180-260 feet of water. The depth presented obstacles for safe scuba diving because compressed air was the standard breathing medium (artificial gas mixtures were still in their infancy). Divers at these great depths suffered heightened nitrogen narcosis that suppressed their physical and cognitive powers, and they faced long decompression times. Any miscalculation could be disastrous and standard U.S. Navy Decompression Tables had a dicey failure rate for deep scuba diving. For example, in 1979 a Canadian diver perished on *Kamloops*, apparently a victim of inexperience and impaired judgment.

Early divers of the wreck soon learned that at least one crewman was entombed along the catwalk in the engine room. Bodies do not decompose in cold, anaerobic waters and adipocere occurs instead. Also called grave wax, this organic substance forms through the anaerobic bacterial hydrolysis of fat in tissue and envelops the corpse in a white shroud. The preserved cadaver is nicknamed Old Whitey.

Despite thorough examinations by divers, *Kamloops*' demise retains an element of mystery: Why and how did the freighter sink? Because the ship's telegraph was set on "finished with engines" and the smokestack was severed, had the steamer been inoperable for some time before sinking? The propeller, shaft, and rudder appear undamaged, so perhaps the engine was under repair. If *Kamloops* had been adrift for an appreciable time, ice could have built up until she capsized. Another suggestion is the starboard bow was breached by hammering against the rock cliff. However, because this section is embedded in the bottom, the degree of damage cannot be evaluated.
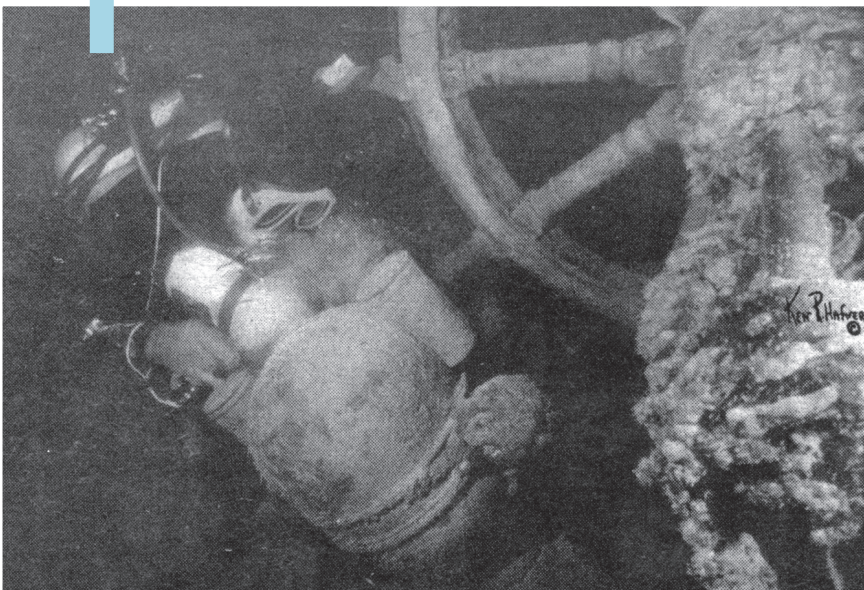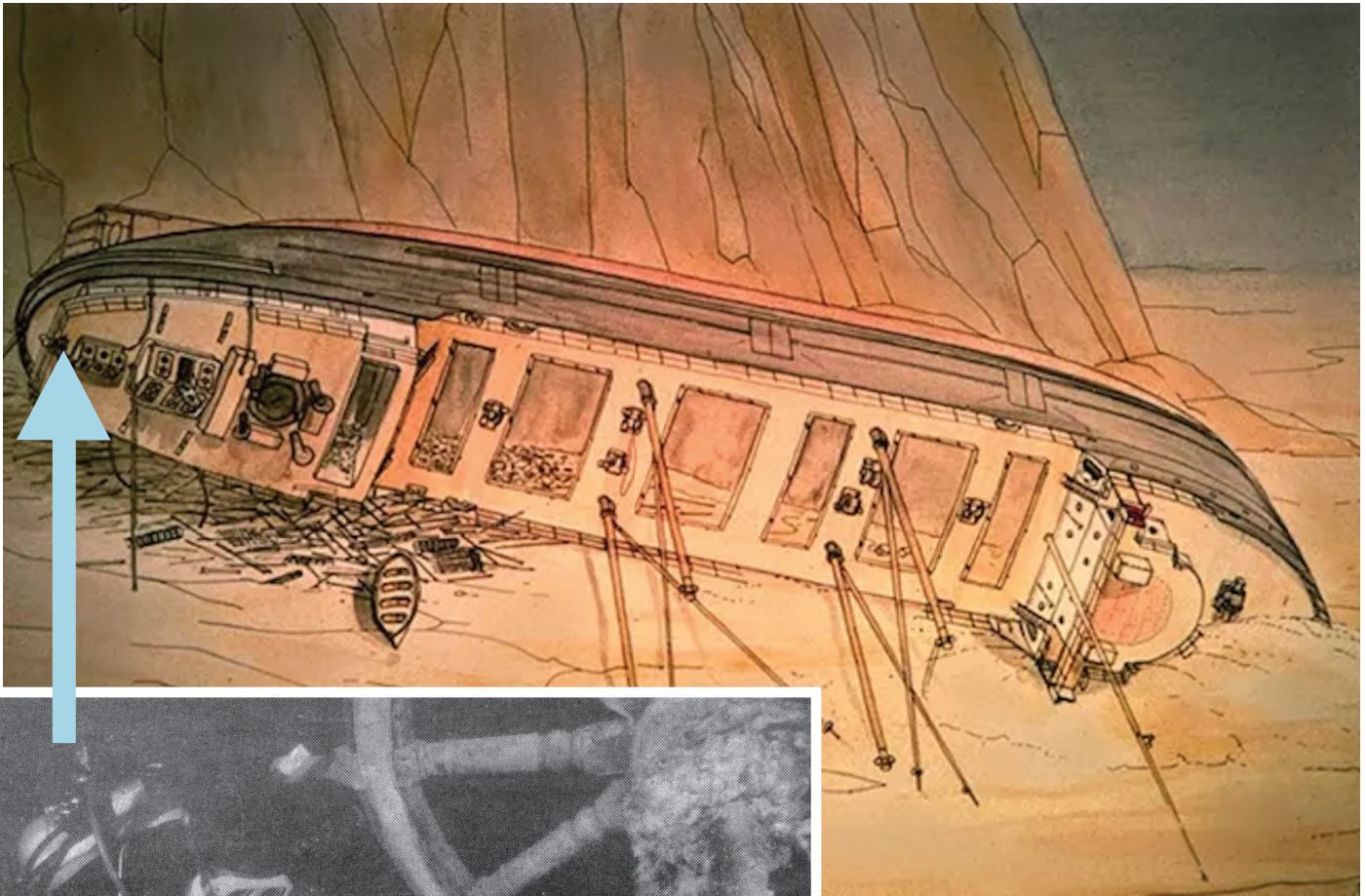
NPS drawing of the Kamloops wreck. Insert shows K. Hafner's 1977 photo of the binnacle and wheel. Author's collection-G. Kent collage.

One lifeboat rests on the bottom off the vessel's stern and is free of its davits. If those still aboard attempted a last-minute escape in it, they did not get far.

As a postscript, great strides have been made in deep-water scuba diving over the past 40 years. The evolution of rebreathing gear and mixed-gas procedures have provided more reliable and versatile breathing media, which mitigates nitrogen narcosis, and divers have depth-compensating, submersible computers with reliable decompression tables. Recently, underwater photographic equipment for use in dark, turbid, or hostile environments has produced outstanding, artful images such as those taken of *Kamloops* by Becky Kagan Schott.
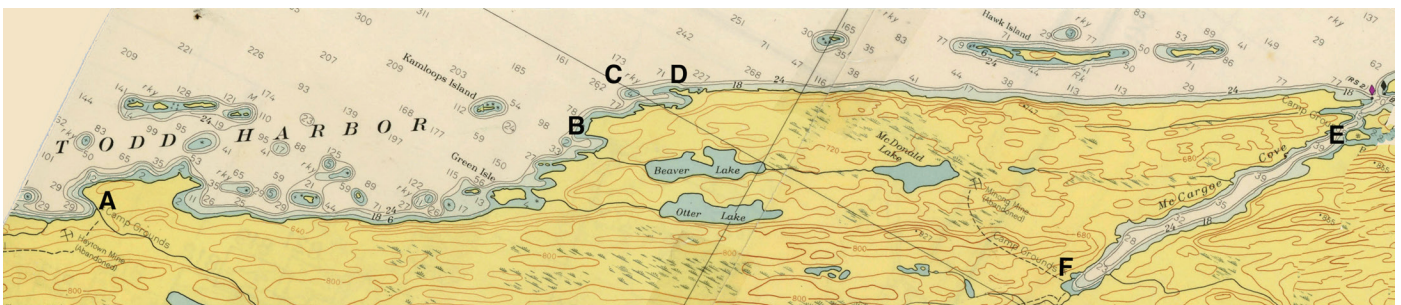
Notable features near **Kamloops**: (A) Todd Harbor Campsite, (B) Twelve O'Clock Point, (C) Wreck Site, (D) Kamloops Point, (E) Birch Island, (F) McCargoe Cove Campsites. NOAA chart.

BRINGING SHIPWRECKS TO LIFE

A DISCUSSION WITH BECKY KAGAN SCHOTT ON HER EXPERIENCE DIVING ON THE KAMLOOPS SHIPWRECK IN LAKE SUPERIOR
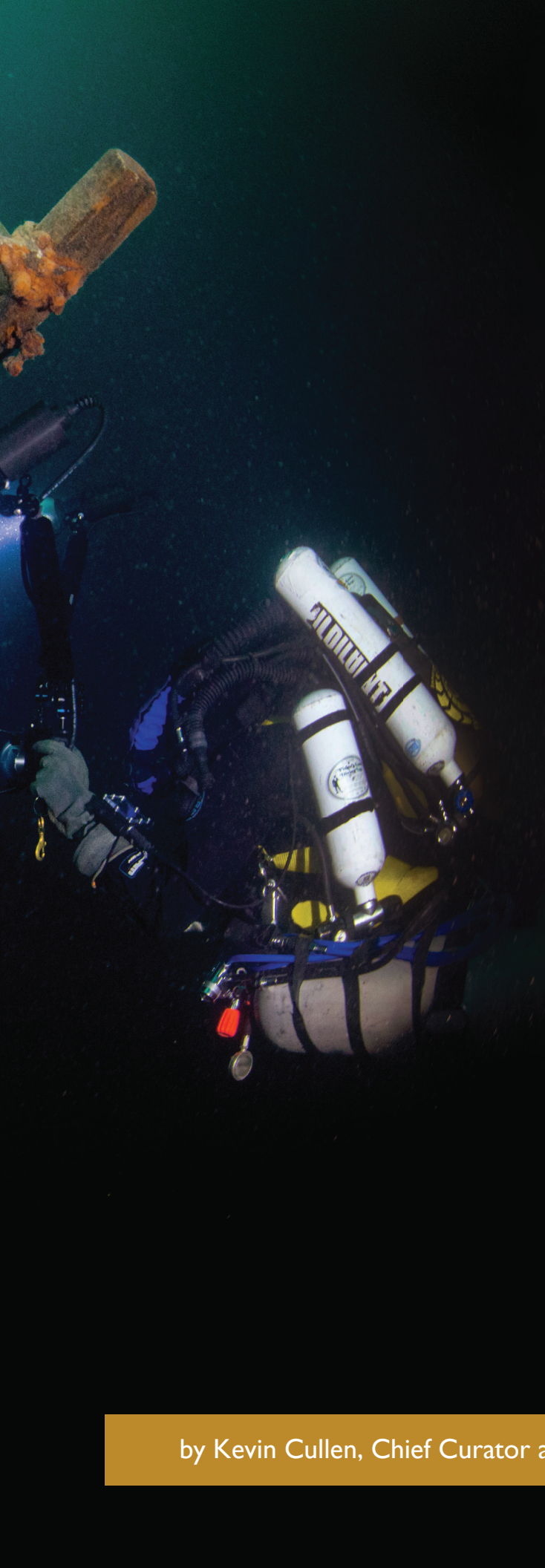
Bringing *Shipwrecks to Life* **is this year's featured exhibit in the museum's Riverside Gallery.**

The space is filled with more than 50 spectacular images of Great Lakes shipwrecks brought to life by five-time Emmy award-winning underwater photographer Becky Kagan Schott of Liquid Productions in Drive Glen Mills, Pennsylvania. Her vivid photography submerges viewers in a world few can access. Schott also is pushing the frontier of 3D imaging by using photogrammetry to create highly accurate digital shipwreck models, several of which are featured in touchscreen interactive. Schott's husband, David, then 3D prints those digital models such as *Cornelia B. Windiate*, built in Manitowoc in 1874 and lost in Lake Huron a year later. On display for the first time are numerous artifacts from the Klopp Collection reflecting the lives of those aboard *Rouse Simmons* and *Vernon* as they sank. The exhibit runs until 6 November 2023.

The following interview was done on 29-30 April when Schott was in the gallery to discuss her work.

by Kevin Cullen, Chief Curator and Deputy Director, Wisconsin Maritime Museum

CULLEN: Wasn't "Bringing Shipwrecks to Life" your title for the exhibit?

SCHOTT: It was, because I'm passionate about trying to show and tell these powerful shipwreck stories to the public through imagery, photogrammetry, and video.

CULLEN: You've taken haunting images of the 250-feet-long steamship *Kamloops*, which sank in Lake Superior in 1927. What was it like to dive on it recently?

SCHOTT: The wreck starts in 180 feet of water and ends with the bow at 260 feet. The cliff on which the starboard side rests has a very odd slope, so it's a little disorienting. It's a very dark, spooky shipwreck and why it sank is a mystery. *Kamloops* disappeared in December and in the spring they found some passengers and crew dead from exposure.

When I say I try to bring shipwrecks to life, this story gives me chills. Can you imagine surviving a shipwreck only to die of exposure on shore? There was a message in a bottle from a young woman telling her family goodbye. Then when I see the shipwreck, it looks like it went down yesterday.

CULLEN: It's almost 100 years since *Kamloops* sank. Divers found the wreck in 1977 and that was 10 years before the Abandoned Shipwreck Act passed to protect them. Yet here is your recent photo with the helm intact and a chain attached to it. What do you know about this?

SCHOTT: I believe Ken Merryman put the chain on the beautiful wheel so nobody would take it, because it was a big prize at this time. He helped preserve it for future generations like myself. This would be a completely different dive and shipwreck if artifacts like the telegraphs, binnacle, wheel, and other stuff wasn't there. I don't think it would be as powerful.

CULLEN: There can't be more than 100 elite divers who have been to this deep wreck. What is that like?

SCHOTT: Probably less than 15 divers visit *Kamloops* per year, as it's a serious dive. It's extremely dark and cold. We're breathing trimix gas, a mixture of oxygen, helium, and nitrogen that enables us to think clearly, but even on rebreathers

BRINGING SHIPWRECKS TO LIFE

MARCH 16 - NOVEMBER 6, 2023
WISCONSIN MARITIME MUSEUM
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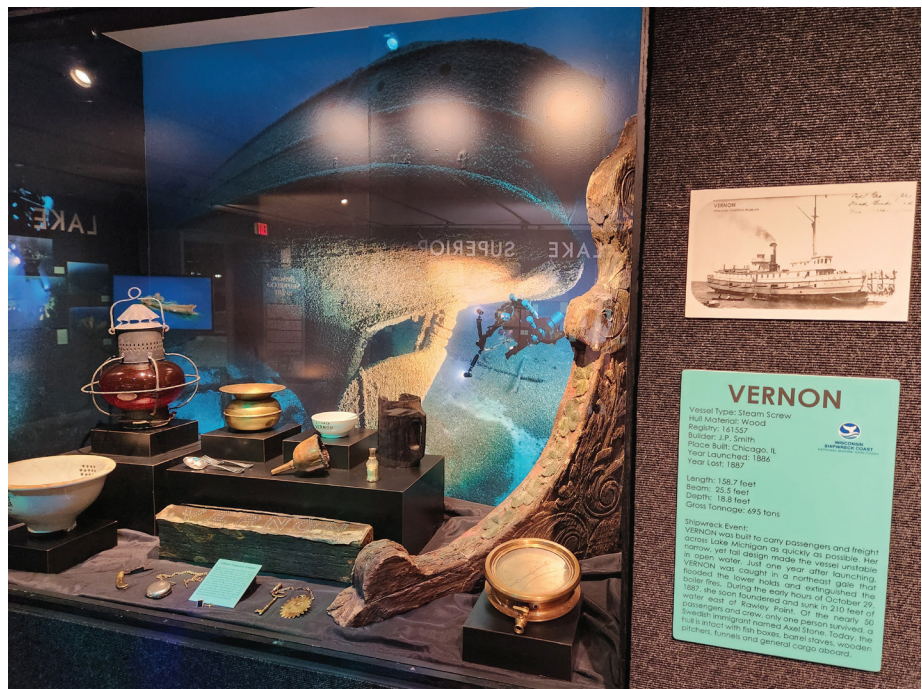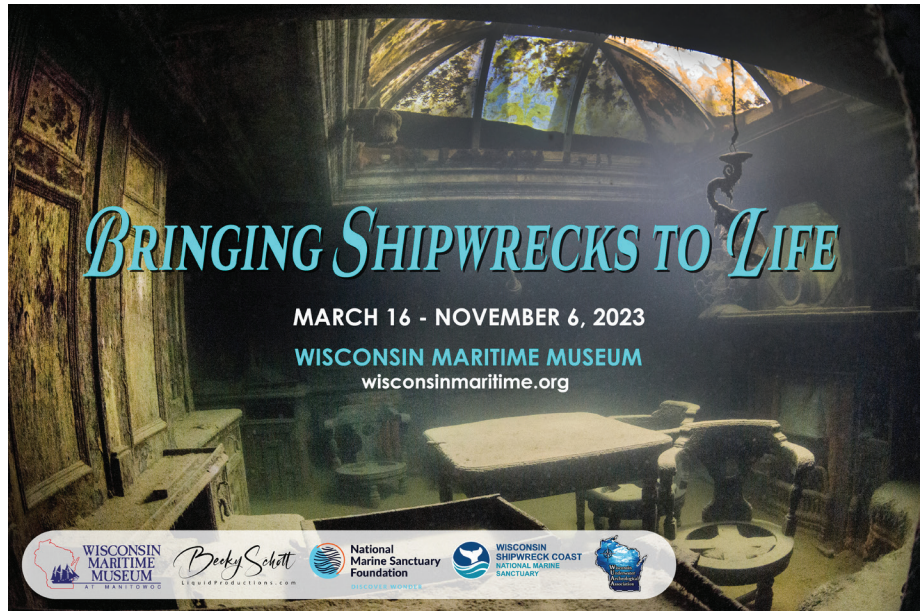
we have only 25 to 30 minutes of bottom-time because it takes maybe two hours to decompress on the way up. So, we do multiple dives to see different portions of the wreck.

There's so much to see on *Kamloops*. On the stern is the parlor room. There's toothpaste and boxes with rolls of Pep O Mint Life Savers everywhere. The most striking thing to me is the candy wrappers are 96 years old and I can still read the wording on them. Besides the helm, divers can go inside the engine room and work their way down to the cargo holds, which broke open. Coal pours out of one while shoes hang out of others. I find looking at the shoes very creepy. There are match sticks and whiskey barrels, just so much to see.

CULLEN: Do you know if the rolls of Life Savers still contain candy?

SCHOTT: I'm positive the candy has dissolved. When I'm asked if I see treasure on the wrecks or what is the coolest thing I've ever seen, it's always these incredible Life Savers.

Becky Kagan Schott

Becky Kagan Schott

"JUST ME"

IN DECEMBER 1928 LOUIS COUTU, A TRAPPER FROM SAULT STE. MARIE, FOUND A MESSAGE IN A BOTTLE AT THE MOUTH OF THE AGAWA RIVER. He claimed it had been written by Alice Bettridge, the assistant stewardess (cook) on *Kamloops*, and her mother, Emma, confirmed it was her daughter's handwriting. The family donated the note to Ontario's Bruce County Museum & Cultural Centre in November 2022. Pieces of the paper have holes and the family reconstructed the missing letters or words from the context.

Bettridge states that "the bare wire cargo became loaded with ice and we capsized in 18 fathoms of water." She made it to shore by herself, it was -48°, and she was freezing and starving to death ("SOS SOS, cold cold!! bitter wonderous cold!!"). Bettridge urged the finder to notify the Canada Canal office or *Sault Daily Star* "so my people will know my fate. Tell them it was just me who is not dead."

Alice Bettridge's remains were identified by the papers she carried and by her natural teeth. Jannet Grafton, the head stewardess on *Kamloops*, had false teeth. This was Grafton's last season and the second season for 23-year-old Bettridge.

Divers have identified the wire as page fence wire with a 2- by 3-inch mesh. The reference to "bare" means the wire was uncovered on deck.

Above: Alice Bettridge, probably age 23. Courtesy of the Bruce County Museum & Cultural Centre: A2022.081.001

WISCONSIN'S LAKE SUPERIOR NRHP SHIPWRECKS

by Tamara Thomsen

Historic records indicate that 66 vessels have been lost within Lake Superior's 156 miles of Wisconsin coastline, yet only 24 have been located and only half are listed on the National Register of Historic Places (NRHP). Shipwreck sites within surf zones are broken up and largely devoid of cultural materials. However, many deeper sites also are broken up, a condition common to wooden vessels that sank while carrying iron ore. Just three known sites remain intact – the schooner barge *Antelope* and the tugs *T.H. Camp* and *Thomas Friant*. Known sites represent vessels constructed in Illinois, Michigan, New York, Ohio, Pennsylvania, and Wisconsin. Vessel types include schooners, schooner barges, scows, wooden tugs, a sloop, wood and steel steam screws, a steam paddle, and a wooden barge.

Shipwrecks listed on the NRHP within Wisconsin's waters of Lake Superior include:

Antelope (1861), a 523-ton schooner-rigged tow barge built at Newport, Michigan, as a steamer. Initially she carried passengers between Buffalo and Milwaukee for the Ward Line. In 1869, the ship caught fire and the remains were converted to a tow barge before being rigged as a schooner barge in 1893. On 7 October 1897, *Antelope* was loaded with 1,000 tons of coal and under tow of the steamer *Hiram W. Sibley* when the barge began taking on water and foundered off Michigan Island. The wreck site was discovered in 2016 by Ken Merryman and Jerry Eliason of the Great Lakes Shipwreck Preservation Society (GLSPS). Today, *Antelope* sits upright and intact in 300 feet of water with two of the three masts upright. The site was listed on the NRHP in 2018.

Lucerne (1873), a 727-ton, three-masted schooner built at the Parsons & Humble Shipyard in Tonawanda, New York. On 15 November 1886, *Lucerne* took on iron ore at Ashland, Wisconsin, departed for Cleveland, and encountered a violent snowstorm near the Keweenaw Peninsula, forcing her to turn around and run for shelter. Unable to find Long Point and the entrance

to the protection of Chequamegon Bay (an inlet of Lake Superior near Ashland), the schooner set anchor and attempted to ride out the storm. During the night of 17 November, she succumbed to the gale and sank. The crew lashed themselves to the rigging to prevent being swept overboard, but all were lost. Today, the wreck lies partially intact in 20 feet of water off Long Island (an extension of the spit off Chequamegon Point). *Lucerne* was listed on the NRHP in 1991.

Marquette (1881), a 1,343-ton wooden bulk freighter built at the Globe Iron Works in Cleveland, Ohio, and christened *Republic*. As the renamed *Marquette*, she sprung a leak on 4 October 1903 after departing Ashland with a load of iron ore. Today, the wreck lies partially broken in 215 feet of water 5 miles east of Michigan Island. *Marquette* was discovered by Ken Merryman, Kraig Smith, Randy Beebe, and Jerry Eliason of the GLSPS in 2005 and listed on the NRHP in 2008.

Moonlight (1874), a 777-ton, three-masted schooner built at the Wolf & Davidson Shipyard in Milwaukee,

Wisconsin, and cut down to a schooner barge in 1896. She sprung a leak on 17 September 1903 while carrying iron ore from Ashland and under tow by the steamer *Volunteer*. Today, the wreck lies broken in 235 feet of water 7 miles east of Michigan Island. *Moonlight* was discovered by Ken Merryman, Kraig Smith, and Jerry Eliason of the GLSPS in 2006 and listed on the NRHP in 2008.

Noquebay (1872), a 684-ton wooden schooner barge built at the A.A. Turner Shipyard in Trenton, Michigan. While in tow of the steam barge *Lizzie Madden* in consort with the schooner barge *Mautenee*, *Noquebay* caught fire with a cargo of hemlock lumber on 5 October 1905 and was run aground at Stockton Island. Today, the wreck lies broken and buried in 15 feet of water in Julian Bay. *Noquebay* was listed on the NRHP in 1992.

Ottawa (1881), a 610-ton wooden tug built as *Boscobel* at the Miller Brothers Shipyard in Chicago, Illinois, for handling log rafts. Reid Wrecking Company acquired *Ottawa* in 1901 as a salvage tug. While working in this capacity, the tug caught fire and burned to the waterline on 29 November 1909. Today, the lower hull lies in 10

feet of water north of Red Cliff Bay a few miles north of Bayfield. *Ottawa* was listed on the NRHP in 1992.

Pretoria (1900), a 2,790-ton wooden schooner barge built by James Davidson Shipyard in West Bay City, Michigan, and the largest wooden ship ever built on the Great Lakes. *Pretoria* took on iron ore at Superior and was in tow of the steamer *Venezuela* when a violent storm hit. The schooner-barge's hydraulic steering gear failed, the towline parted, and she began taking on water, sinking on 2 September 1905 northeast of the Outer Island Lighthouse. Today, the wreck lies broken in 55 feet of water. *Pretoria* was listed on the NRHP in 1994.

R.G. Stewart (1878), a 197-ton wooden steam screw built at the George H. Notter Shipyard in Buffalo, New York. She caught fire during a salvage attempt on 4 May 1899 on the east side of Michigan Island. Today, the only remains are a widely scattered debris field, which was listed on the NRHP in 1991.

Sevona (1890), a 3,166-ton steel bulk carrier built as *Emily P. Weed* at the F.W. Wheeler Shipyard in West Bay City, Michigan. Later lengthened and renamed *Sevona*, the vessel ran aground on Sand Island Shoal in a blinding storm on 2 September 1905. Today, the wreck lies broken in 20 feet of water. *Sevona* was listed on the NRHP in 1991.

T.H. Camp (1876), a 58-ton wooden tug built at the C. Reed Shipyard in Cape Vincent, New York. Under the ownership of the Booth Fish Company, the overloaded vessel foundered on 15 November 1900 between Basswood and Madeline Islands. Today, the intact tug sits upright in 185 feet of water and was listed on the NRHP in 2004.

Thomas Friant (1884), a 81.42-ton wooden tug built at the Robertson & Co. Shipyard in Grand Haven, Michigan, for the passenger excursion service. After being rebuilt for cargo and later repurposed as a fish tug, she was crushed by ice in January 1924 while on an early season fishing expedition. Today, the intact vessel lies upright in 300 feet of water northwest of Port Wing, 30 miles west of Bayfield. *Thomas Friant* was listed on the NRHP in 2019.

Big Bay Sloop, a 27-foot unidentified sloop in Big Bay off Madeline Island. The site is associated with an abandoned log crib. Today, the vessel lies partially intact in 25 feet of water and was listed on the NRHP in 2009.

Antelope. *WHS.*

Lucerne's *bow. WHS*

Marquette's *engine. WHS*

Moonlight's *bow. WHS*

Noquebay's *donkey boiler. WHS*

Ottawa's *wreck site. WHS*

Pretoria's *wreck site. WHS*

Sevona's *wreck site. WHS*

T.H. Camp's *wheel. WHS*

Box of net weights inside fish tug Thomas Friant. WHS.

Big Bay Sloop adjacent to the log crib. WHS

THE HARD-WORKING SIDEWHEEL TOWBOAT *OZAUKEE*

by Bob Jaeck

Loaded with various types of freight, the sidewheel paddle steamer *Ozaukee* left Ashland dock around mid-morning on 26 May 1884. Rather than the usual task of towing log rafts for the Union Mill Company's sawmill, *Ozaukee* was now on a supply run for fishermen living along Lake Superior's southern shore, with a final stop to offload supplies for the Montreal Iron Mine Company on the Montreal River.

Ozaukee, launched on 28 April 1857, was one of several vessels built in Port Washington, Wisconsin, in Ozaukee County and purportedly named after it. Early in her career, the wooden steamer had a single deck and two masts. *Ozaukee* worked as a passenger vessel and a freighter, but was used primarily as a tugboat. Slightly less than 93 feet long, she was around 18 feet wide with a 66 gross tonnage rating.

Built for Alva Trowbridge of Chicago, Illinois, *Ozaukee* changed ownership many times, although the exact details are not always clear. She was sold on 21 July 1860, with her papers processed in the Chicago District. Records show the two masts had been removed when the steamer was sold and measured on 6 November 1865. Her new owner filed in the St. Louis District and information indicates *Ozaukee* worked on the Mississippi River. Purchased by F.B. Gardner of Chicago on 19 July 1866, she operated as a towboat out of Little Sturgeon Bay. In December of that year, some rebuilding was done. On 2 December 1870, *Ozaukee* was docked with no crew aboard when a fire broke out, burning the upper works and damaging much of the machinery. The uninsured hulk was valued at $8,000.

Gardner had the vessel rebuilt at Little Sturgeon Bay and some repairs were made in April 1874. During the winter of 1875-76, *Ozaukee* was rebuilt at Sturgeon Bay. More ownership changes transpired in 1879 before *Ozaukee* was sold to J.R. Shepard and Master H.J. James of Ashland in February 1880. The papers were processed at Marquette, Michigan. Operating now on Lake Superior, *Ozaukee* was purchased by Capt. H.J. James and Charles Gehen of Ashland for the Montreal Iron Mine Company on 29 March 1883. They repaired the boiler in June.

Timeline and service history of the sidewheeler Ozaukee.

Photo of the sidewheel steamer **Waubuno***, similar in size to* **Ozaukee***. Wisconsin Maritime Museum Collection.*

As *Ozaukee* churned through Chequamegon Bay on 26 May 1884, James steered around Long Point, passed the La Point Light on Long Island, and headed east into a strong northeast wind. Working the steam engine hard, they made good headway along the southern coast of Lake Superior despite the conditions and the tug's heavy roll. Around five o'clock that afternoon the supply pipe to the steam whistle broke. Lacking an isolation valve from the boiler to the whistle, steam escaped through the break instead of powering the engine.

James immediately ordered the anchors lowered and the crew set about repairing the broken pipe. Just before midnight, fishermen on shore realized something was wrong with the tug and braved the rough water in mackinaw boats to retrieve their supplies. By daylight the next morning they had transported all of them. Meanwhile, the crew had repaired the broken pipe and built up steam, but by now the storm had become a full gale.

James ordered the anchors raised and set course for Ashland instead of continuing to the Montreal River to offload the miners' supplies. As he pushed the bow hard to port across towering waves, they broke over the deck and entered the hull faster than the pumps could handle the inflow. Realizing his situation, James turned the bow toward land, ordered the lifeboat lowered, and the crew rowed to safety. *Ozaukee* was blown ashore 500 feet west of the Bad River and the hammering surf tore apart the upperworks. Later that evening as the lake calmed, James and crew recovered some remaining freight. The uninsured vessel was valued at $3,000.

In June 1884, workmen recovered *Ozaukee*'s engine, boiler, and machinery and stored them on the Union Mill Company dock for use in a new vessel. It is unknown if this happened. A few remains of the sidewheel steamer may still be present in the moving sands near the Bad River.

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from the **WISCONSIN MARITIME MUSEUM'S COLLECTION**

1952 photo from the Schwalbach Collection with family on the beach in the foreground and a fish tug at the dock in the background.. Commercial fishing began in the early 19th century and is still an important industry in the Apostle Islands. P95-12-147

APOSTLE ISLANDS TOURISM
THE SCHWALBACH COLLECTION

by Hannah Patten, Collections Manager, Wisconsin Maritime Museum

The Apostles have been a source of wonder and curiosity for centuries. First inhabited by nomadic woodland Indian tribes and later the Ojibwe, the islands provided plentiful resources including fish, game, sugar from maple trees, wild rice, leeks, fiddleheads, and berries. Europeans arrived in the 17th century and established a fur trading outpost at La Pointe on Madeline Island.

The Ojibwe refer to the islands as Wenabozho ominisan or Wenabozho's islands. Wenabozho is a cultural hero and trickster figure in Ojibwe tradition. In one myth, Wenabozho dug out Lake Superior and created the islands by carelessly flinging dirt. During the 18th and 19th centuries, commercial fishing, logging, and sandstone quarrying replaced the fur trade.

By the mid-19th century, people began establishing summer residences on the islands and tourists from large cities arrived to escape the heat. They enjoyed boating, fishing, and the natural beauty of the dramatic landscape. Today, tourism is still the main form of commerce on the islands. The Wisconsin Maritime Museum's Photography Collection includes many postcards and family snapshots from trips to the islands over the past century. Here are a few of them.


This ca. 1910 postcard features the Michigan Island Lighthouse. The lighthouse was built in 1856 and was the first constructed on the Apostle Islands. P82-37-13-72A

This 1952 photo from the Schwalbach Collection shows two young children looking out on the water while on a ferry as they approach the Apostle Islands. James A. and Mathilda Schwalbach were renowned Wisconsin artists and educators. Mathilda was a UW art professor and specialized in Scandinavian design. James was also a UW professor as well as a painter and block printer. He hosted a radio program called "Let's Draw," teaching children how to paint. James A. Schwalbach painted and photographed a number of maritime subjects and landscapes across Wisconsin which were donated to the Wisconsin Maritime Museum. P95-12-141

Do you have a piece of Wisconsin maritime history? Interested in donating an object, letter, photograph, or memorabilia related to the maritime heritage of Wisconsin? Contact Collections Manager, Hannah Patten at 920-684-0218 or hpatten@wisconsinmaritime.org.
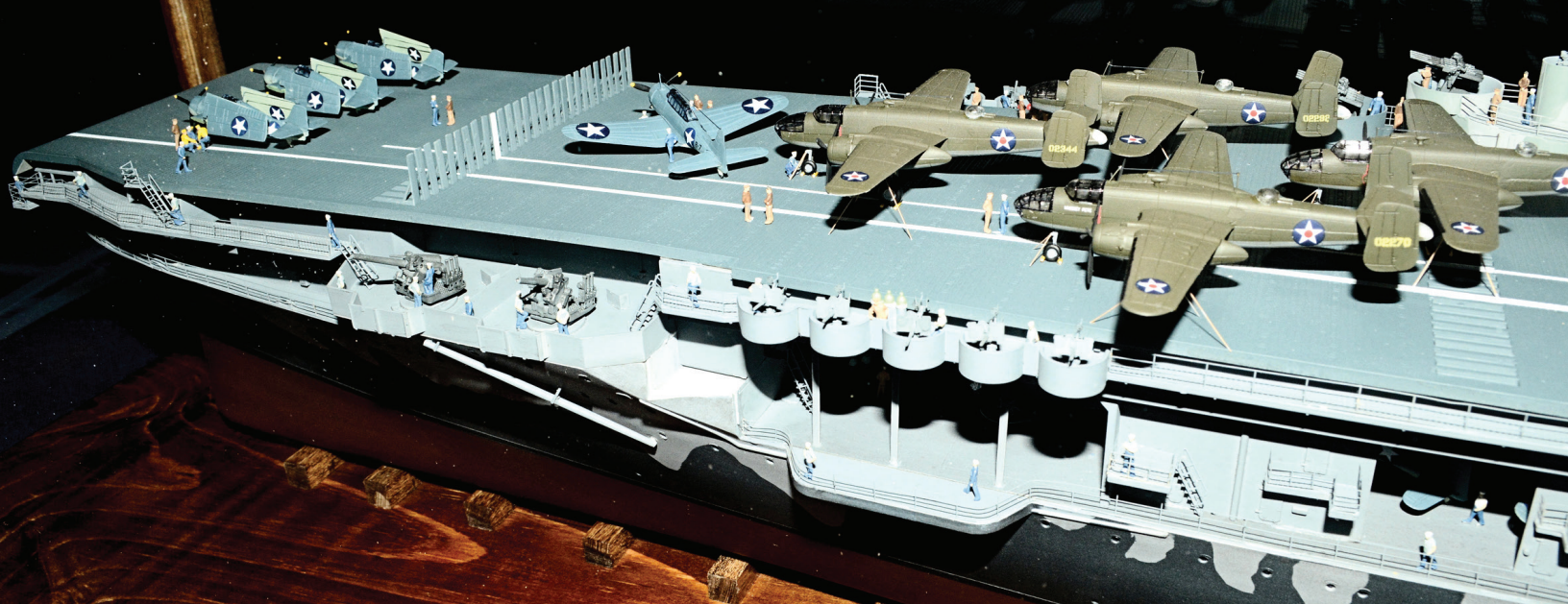
The Modelers' and People's Choice awards and the Badger Airbrush Best Paint Finish award went to Gary Kosiorek of Appleton, Wis., for his 1:200 scale plastic kit model of USS Hornet *(CV-8). In 1942, the warship was one of the first carriers to receive the dazzle-style hull camouflage. Photos by Sam Parent.*

BETTER THAN GOLD

THE MIDWEST'S LONGEST-RUNNING SHIP MODEL CONTEST IS 46 YEARS OLD

by Scottie Dayton

The museum-affiliated competition exclusively for model ships and boats was held at the Wisconsin Maritime Museum this May. Judges Fritz Drexler, Ed Urbanczyk, and Rick Szydelko used a point system to evaluate 47 entries separated into categories for scratch built, wood or plastic kits, operational, dioramas, and nautical crafts. Modelers were ranked novice, intermediate, or advanced.

No bronze plaques were presented, but 12 entries won silver and 32 earned gold. The latter qualified for special awards and USS *Hornet* (CV-8) by Gary Kosiorek of Appleton, Wis., received the Modelers' and People's Choice awards and the Badger Airbrush Best Paint Finish award.

The modified 1:200 scale plastic kit represents the World War II aircraft carrier in route to rendezvous with USS *Enterprise* (CV-6) prior to the Doolittle Raid on Tokyo in 1942. Kosiorek detailed the planes with antennas, tie-downs, and wheel chocks. He added a Douglas SBD Dauntless dive bomber forward of the B-25s followed by crash barriers and three Douglas TBD Devastator torpedo bombers with wings folded at the bow.

Grumman F4F Wildcat fighters and more Douglas bombers wait below on the full-length hanger deck illuminated by LED bulbs. The 20 mm

Ready for the Doolittle Raid on Tokyo, the B-25 Mitchell bombers are in their takeoff order according to tail numbers.
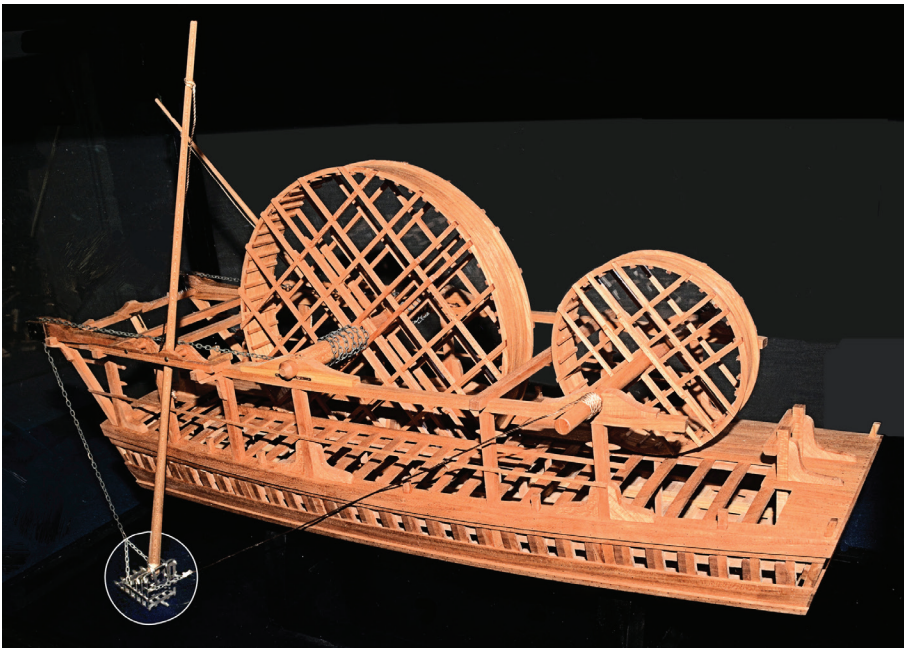
Gregory Davis earned the F.K. Bemis Best of Show award with his 1:36 scale scratch-built model of a port dredger. Men walking inside the two drums powered the machine. Turning the wheels in one direction moved one scoop forward and the other backward. Reversing the direction also reversed the scoop action. Both brass scoops have five teeth, but the starboard scoop's framework is exposed to match the model's open hull and deck.

Davis milled the cherry wood for the model from 4/4 (1 inch thick) lumber. After assembling the frames and three lower carlings (fore and aft timbers between deck beams), he built a notched fixture to stabilize the frames while he installed the interior side strakes and sheer clamps. Components were fastened with three different sizes of copper wire. Davis used a resistance soldering station to assemble the scoops' brass frames and teeth. The build took 10 months.

Plowboy (1905), a 1/4 inch equals 1 foot scale (1:48) Great Lakes passenger and excursion steamer, won the Roger Jaekel Best Great Lakes award for David Saarwen of Ashland, Wis. The vessel had various owners, Great Lakes home ports, and routes before she was abandoned in Buffalo, New York, in 1929.

Saarwen presented the scratch-built wood model as a well-maintained working vessel, but reflecting 15-20 years of regular service. Unable to locate *Plowboy's* plans, he used hull lines from a similar vessel and photographs to create a representative model. Only the ship's wheel, propeller, and 3D resin deck chairs were purchased; other fittings were fabricated from brass or hardwoods, but the window panes are celluloid exposed X-ray film. Open doors and windows reveal the detailed interior. "The build was more difficult than I anticipated and I won't do it again," he said. "The next model will have plans."

Oerlikon cannon and deck railings are photo-etched parts, but Kosiorek made the stenciling for the dazzle-style hull camouflage. Crewmen work everywhere aboard the 49-inch-long model.

The judges selected a 1:36 (1 inch equals 3 feet) scale scratch-built port dredger (1750) by Greg Davis of Green Bay, Wis., for the F.K. Bemis Best of Show award. Scoop dre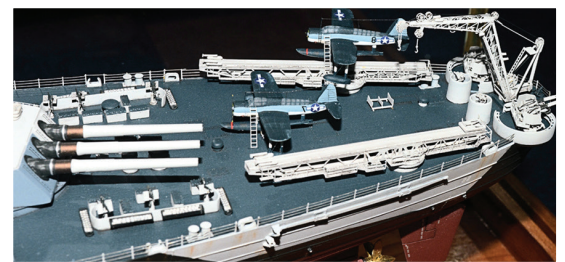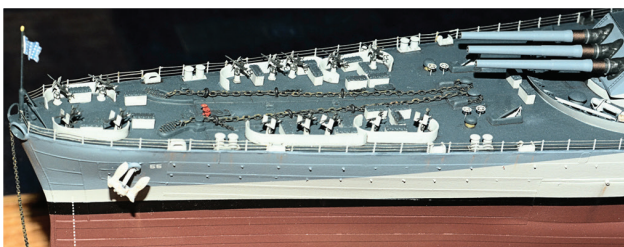dgers powered by drum wheels were common in 18th century France, and this model represents a design by contemporary engineer Bernard Forest de Bélidor as detailed in Gérard Delacroix's 2013 monograph.

Port dredges were towed into place and moored with four lines, anchors, or both. Material from the underlying bed was scooped up and deposited in an accompanying barge, which nudged the dredger to a new location by adjusting the mooring points.

Bob Steinbrunn assembled the 3,552 parts for the 25-inch-long model in 483 hours over more than eight months.
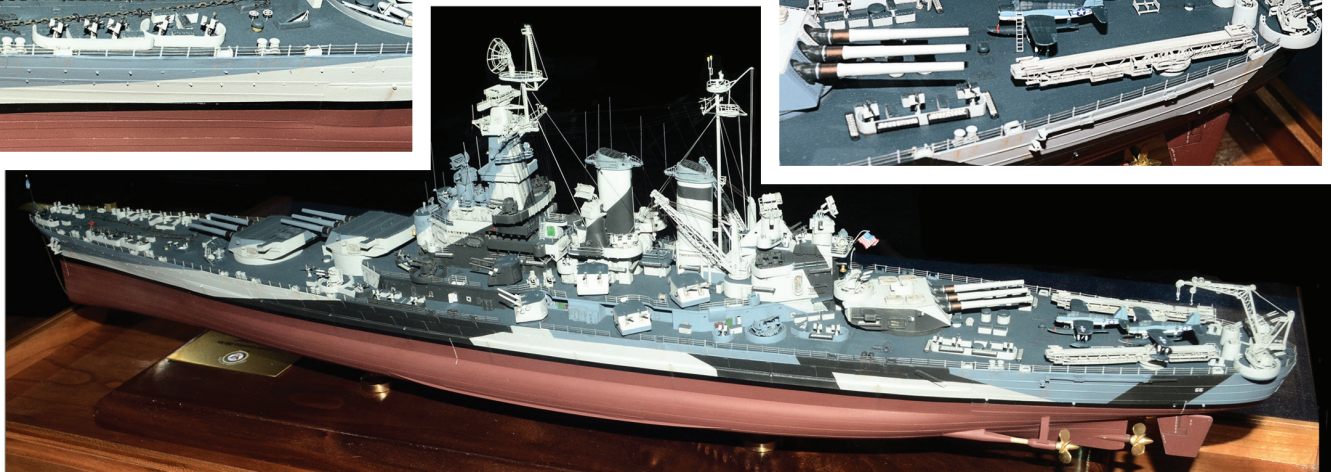
The Dana McCalip Best Miniature award went to Bob Steinbrunn of Phelps, Wis., for his 1:350 (29 feet 2 inches equals 1 inch) scale kit model of USS *North Carolina* (BB-55) as in 1944. "The plastic parts I rejected formed the battleship's own debris field," he said. Resin, brass, styrene, photo-etched and 3D-printed fittings replaced anchors and molded anchor chain, turrets, armament, gun directors, radar screens, ammunition racks, funnels, masts, 40 floater net baskets each with 15 nets, boat booms, watertight doors, propellers, and more.

Steinbrunn added 26 bilge water discharge pipes and squeezed round chain links with pliers to resemble stud-link chain, which leads from the chain locker, around the wildcats, and into hawse holes drilled in the deck and hull. He made styrene deck plates with a concave bevel for around the holes, then affixed guide posts for the chain. Protective screening over the hawse holes and funnel grates is brass mesh and wire respectively.

Steinbrunn drilled out the searchlight lenses, filling the depressions with clear epoxy, and punched out 36 styrene caps for the deck edge bitts. He attached a paravane chain at the bow. After opening five molded deck hatches, Steinbrunn added inclined ladders, hatch covers, and supports. "It's strategic detailing that separates one model from another," he said.

With help from Model Ship World Forum members, first-time model shipwright Darrell Markjohn of Canton, Ohio, won the Steve Wheeler Best Novice Builder award with his U.S. brig *Niagara*, Commodore Perry's second flagship during the Battle of Lake Erie (1813).

Beginning with Model Shipways' 1/4 inch equals 1 foot scale (1:48) kit, Markjohn substituted many supplied parts with scratch-built wood or brass fittings. He cut cherry wood deck planks, turned the masts and yards from cherry or holly, built the ship's boats using lapstrake construction, fabricated many metal components, and built a cherry table and case with LED lighting. His build log is on the MSW Forum.

The contest is supported by the Nautical Research and Model Ship Society of Chicago, Rocky Mountain Shipwrights, Midwest Model Shipwrights, Wisconsin Scale Boating Association, North Shore Deadeyes, and Nautical Research Guild.

Plowboy took four years to complete and measures 25 inches long, 5 inch beam, and 17.50 inches overall height.

Darrell Markjohn custom-mixed and dulled all paint used on his brig Niagara to present a more realistic appearance.

Left to right: Special award winners Dave Saarwen, Darrell Markjohn, Gregory Davis, and Bob Steinbrunn.

WISCONSIN MARITIME MUSEUM
AT MANITOWOC

SS Henry Cort (1892), a 320-foot-long whaleback freighter, was built by the American Steel Barge Company in Superior, Wisconsin, and powered by two coal-fired Scotch marine boilers. She sank four times during her career before running aground at Muskegon, Michigan, in 1934. Photo courtesy Wisconsin Maritime Museum.

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