Form No. 10-306 (Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR FEDERAL PROPERTIES

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SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC
Shipwrecks of Isle Royale National Park (Thematic Group) TR A 10
AND/OR COMMON

2 LOCATION

STREET & NUMBER
Isle Royale National Park, 87 N. Ripley — NOT FOR PUBLICATION
CITY, TOWN
Houghton — X VICINITY OF
CONGRESSIONAL DISTRICT
STATE
Michigan
CODE
26
COUNTY
Keweenaw
CODE
083

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	X PUBLIC	__OCCUPIED	__AGRICULTURE	X MUSEUM
__BUILDING(S)	__PRIVATE	X UNOCCUPIED	__COMMERCIAL	X PARK
__STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	X YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	__YES: UNRESTRICTED	__INDUSTRIAL	__TRANSPORTATION
X Thematic Group Nomination	Not Applicable	__NO	__MILITARY	X OTHER Sport SCUBA diving by park visitors

4 AGENCY

REGIONAL HEADQUARTERS: *(If applicable)*
National Park Service, Midwest Regional Office
STREET & NUMBER
1709 Jackson Street
CITY, TOWN
Omaha — VICINITY OF
STATE
Nebraska 68102

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC. Please see individual unit nomination forms
STREET & NUMBER
CITY, TOWN
STATE

6 REPRESENTATION IN EXISTING SURVEYS

~~XXX~~ The shipwreck locations are known as a result of informal isolated searches by private individuals and/or by common knowledge of ISRO park staff and island inhabitants. No systematic surveys have been conducted.
DATE
__FEDERAL __STATE __COUNTY __LOCAL
DEPOSITORY FOR SURVEY RECORDS
CITY, TOWN
STATE

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
X EXCELLENT	X DETERIORATED	X UNALTERED	X ORIGINAL SITE
_GOOD	_RUINS	_ALTERED	_MOVED DATE_____
_FAIR	_UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

CONTEXT

The Role of Isle Royale

Three interrelated factors have influenced the roll which Isle Royale has played in the demographic activity, economic development and maritime history of the Lake Superior region: natural harbors, weather patterns, and natural resources.

Lake Superior was the last of the Great Lakes to be opened to direct access via connecting waterways. Differences between the lake levels created a natural barrier to boat traffic and it was not until the completion of the lock system at Sault Ste. Marie in 1855 that Lake Superior was readily accessible. Limited availability of natural harbors around Lake Superior influenced settlement of the region, and thus navigational and transportation routes across the lake. Hulse (1981:18) lists 16 principal areas around Lake Superior where conditions were such that early harbor facilities and population centers developed. Of these 16 only 3, Thunder Bay (previously called Prince Arthur's Landing, then Port Arthur and Fort William), Ontario, Grand Portage and Grand Marais, Minnesota, constituted virtually the only harbor facilities on the entire northshore.

Navigational routes on the Great Lakes prior to 1920 were informally decided upon by the shipping companies and ships' masters depending upon the cargo being carried and its final destination (Johnson 1948 in Hulse 1981:25). Routes traveled by passenger vessels and by bulk freight carriers were quite different due to the markets they were serving. In any case the economics of shipping dictate that regardless of the number of interim stops or nature of final destination, crossings be made as quickly as possible and as in a straight line as possible. Hazards to navigation, such as peninsulas, islands or points imposed certain restrictions on vessel traffic. Several course changes might be required to circumnavigate the hazard and to maintain a margin of safety while skirting as close as possible to shore to minimize the distance traveled. Isle Royale is located directly in the path of virtually all vessel traffic entering or departing Thunder Bay, the major Canadian port in that area of Lake Superior.

Upbound and downbound sailing lanes across Lake Superior were separated by convention and by basic rules of the sea. It was not until after 1920 that federal regulation formally separated these lanes of traffic generally along historically navigated routes.

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Protection from storms afforded by good harbors are scarce on Lake Superior, particularly along the northshore. Unlike the lower lakes with limited sea-room and dangerously nearby shores, Superiors' broad expanse afforded mariners the option of riding out a storm on the open lake although Superiors' fetch also posed severe problems. Storms coming from the southeast, east and northeast are the most severe, creating "a short, ugly sea [which] gets up very quickly after the wind begins to blow hard" (Mansfield 1899:45) forcing vessels to head for limited relief behind a peninsula, point or island, hazards normally to be avoided. Isle Royale, the largest obstcle on the lake also provided a safe haven on her lee side for vessels caught on the open lake during a hard blow. Prior to the wide spread use of radar, seeking shelter in the lee of Isle Royale, or passing between Blake's Point at her eastern end and Passage Island, the traditional navigation route up or downbound, was a dangerous maneuver in fog or other bad weather. Numerous temporary groundings around Isle Royale occurred as a result of misjudging distances from shoal or shore and of the ten major ship losses addressed in this thematic group nomination six can be directly attributed to inclement weather. In addition, during navigational seasons of short duration traffic on the lakes is compressed into fewer days with vessels pushing the limits of suitable weather by attempting earlier and later trips than usual, increasing the dangers associated with heavy weather crossings. The prediction of shifting weather patterns was left to the ship's captain, often with disasterous results.

As the natural resources of the Lake Superior basin were discovered and exploited the Twin Cities of Port Arthur and Fort William (now Thunder Bay), Ontario, became a focal point for rapidly developing iron ore, lumber, and grain trades and immigrant traffic. It was this need to get people to the iron ranges, forests and farming districts of the northshore that further solidified shipping routes around Isle Royale. Downbound cargos of iron ore and wheat from Canada's interior were designed to minimize the time and distance traveled to the processing centers around the lower Lakes. Vessels traveled as straight across Lake Superior as possible, with individual routes varying only slightly from ship to ship (Hulse 1981:26). Upbound traffic, consisting of expendible supplies necessary in the support of

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growing population centers springing up around mines, mills and farms, followed similar navigational routes.

The combination of the geographic location of Lake Superior's natural harbors, Isle Royale's proximity to the major Canadian northshore harbor at Thunder Bay, weather patterns and the need to transport goods and people in association with exploitation of natural resources, has resulted in the clustering of shipwrecks around Isle Royale.

Vessel Development

Passenger, passenger and package freight and bulk cargo vessels evolved to meet specific transportation and economic needs of the Great Lakes region. Passenger vessels saw heavy use throughout the Great Lakes in the 1880s, reaching a peak about 1910. Mass transport of people to the Canadian frontier and the expanding Midwest to meet the need for the labor intensive industries of mining, lumbering, and agriculture prompted heavy investment into passenger vessels. Early steamers had already proven to be efficient passenger carriers on the western river system; their reliability and independence from weather conditions and maneuverability in narrow locks connecting the lakes made them well suited for the Great Lakes passenger trade. The same qualities needed for passenger service were also demanded of both the package and bulk freight trade. Although the completion of the Michigan Southern and Central Railroads in 1852 did have a net adverse effect on boat traffic in the passenger trade, it did not change the movement of bulk cargos or package goods. This was primarily due to the fact that the cost for transporting bulk and package freight over water was less than any form of overland transportation available.

While passenger carriers and passenger/package freighters visited a wider number of destinations than bulk carriers due to the nature of their respective cargos and were also limited by depth of harbor considerations, all vessels traveling between the lakes were restricted in width, length and draft by the size of the connecting channels, locks and canals. Changes in the size and carrying capacity of commercial vessels followed very closely channel and major harbor improvements which in turn were spurred by westward expansion and rapid economic growth. All three vessel

types saw wide use on the Great Lakes and evolved along parallel lines with respect to major technological advances.

Passenger vessels: Sailing vessels enjoyed a measure of popularity for passenger transport until the 1870s, however, it was the development of the quick, reliable passenger steamer which contributed materially to the growth of the Midwest and Central Canada. Immigrants from Europe and the Northern states used the Great Lakes waterways transportation system almost exclusively and by 1832 more than half of the westbound immigrants traveled via the Great Lakes (Mansfield 1899:183).

Originally side-wheelers, passenger steamers quickly established a high standard for passenger service and accommodation. Great Western, commissioned in 1838, was a prototype of the side-wheel steamers on the lakes. She had a length of 183-feet and breadth of 34-feet 4-inches, 60-feet across the guards and a tonnage of 781; the most for any vessel until that time. Her entire hold was occupied by boilers and fuel. The aft main deck was ladies' cabins and staterooms, with the main cabins on the hurricane deck. The upper cabins, running the full length of the vessel, were the first to appear on the lakes (Mansfield 1899:399). Although equipped with mechanical propulsion, the vessel was rigged with sail on her three masts and her bow retained the shape of the clipper sailer.

After 1840 vessels began to appear with a single stack and the boilers were moved up on deck, much like the style of the eastern and western river steamboats. Passenger vessels grew in size over time, up to about 600 tons burden before 1845 and to 1,200 tons soon after, with some 16 commercial lines operating in 1850 (Mansfield 1899:400-401).

The first screw propeller on the lakes appeared in 1841 on Vandalia. The switch to "props" was rapid and by 1856 Lloyds listed 118 propellers and 120 paddle steamers along with 1,150 sailing ships on the Lakes (Ericson 1968:2). Elegant side-wheel steamers, however, continued to be built as late as 1895 and were used into the 20th century for passenger service (Mansfield 1899:407). Propeller driven passenger steamers adopted the style and ornate appointments of the side-wheeler in order to lure the passenger trade. In the mid 1880s the identical sister ships

Alberta, Athabasca and Algoma were introduced in the passenger trade. Screw steamers, these vessels were the first steel-hulled boats on the lakes and were equipped with electric lights, ornamental gilding and iron work, the finest furniture and china, steam screw steering, numerous auxiliary engines to run pumps, loading and unloading equipment, etc. Although steel-hulled, these vessels still retained wooden cabins and upper deckworks and three schooner-rigged masts.

Passenger vessels flourished on the Great Lakes from the 1880s reaching a peak about 1910. The development of the automobile, completion of the Minnesota northshore highway, increased trucking and the depression all cut into the passenger and package freight business which came to a virtual halt on Lake Superior by the 1930s. It was simply cheaper and more efficient to transport people and goods by truck or auto. The bulk freight trade, however, has continued to increase steadily throughout this century.

Package freighters: One of the principal distinguishing attributes of the vessel involved in the transport of package freight was the presence of side-loading hatches or gangways in the hull, normally in the "tween-deck" space above the main deck. Side hatches were apparently developed in the 1830s and 1840s. They also appeared on propeller passenger ships, e.g., Eastland, built in 1914, and were common on sidewheelers.

The side hatches allowed a vessel to pull up to a dock and offload with carts, obviating the need for lift machinery. Although the "classic" Great Lakes package freighter had both Sampson or King Posts and side loading hatches. Without the daily variations of marine tides, the dock and hatch alignments could be more or less standardized along the lakes. This is a departure from what was feasible in most of the western rivers as there were few areas outside of the Mississippi itself where the depth of water and width of channel allowed the construction of docks. The vessels were simply run onshore bow first and gangways extended for loading of cargo (Hunter 1969:79).

Many vessels were equipped to carry both package freight and passengers. Addition of the upper cabin on passenger vessels, first appearing on the side-wheeler Great Western in 1838, allowed

the development of freight decks on passenger vessels. The upper cabin also appeared on propellers; Hercules (1843) was designed with her small engine and auxiliaries close on the keelson in the stern needing only 6 feet of space thus leaving a very large area below deck for storage while still having room for fourteen 6-foot square staterooms and 46 berths on the upper deck (Mansfield 1899:404).

Three types of package freight vessels developed on the lakes: the canal schooner and steamers, the passenger/package freight steamer and the single purpose package freighter. The early canal schooners had shallow drafts to permit passage through the Welland Canal; these were quickly surpassed by the steamer in both speed and carrying capacity. The combination passenger/package freighter was often used in transporting immigrants and their household goods and supplemental consigned freight. The special purpose package freighters were designed soley for that trade although some of these vessels were modified to take advantage of the predominant downbound bulk cargo trade after unloading miscellaneous upbound package freight.

Bulk freighters: The first special purpose bulk freighter was built in Cleveland in 1869. R.J. Hackett, initiated a series of events which was to break the monopoly held by sail powered bulk carriers. She represented an innovation in design and construction techniques and was specifically designed by her builder, Eli Peck, to carry iron ore (Barry 1972:107).

The design of Hackett, based on the sailing schooner and first called a steam barge, incorporated many basic features that became standard in subsequent bulk carrier construction. She had the engines in the stern, like the 1843 Hercules, and the boilers on the main deck like the 1840 Missouri. The cabins were above the deck like the 1839 Great Western, the pilot house forward, the crew quarters aft. She carried a single stack like the 1840 Chesapeake. The vessel had three masts like the 1830 Sheldon Thompson, the first steamboat to carry that rig on the Great Lakes (Mansfield 1899:610). What was new was the unbroken deck between the fore and aft cabins, which allowed easy access to the hatches set on 24-foot centers to conveniently mate with the ore dock loaders with chutes 12-feet apart (Barry 1972:109). This deck arrangement is unique to Great Lakes ships and represents an

adaptation to both the environment and the need for extensive cargo space. Arches or hogging trusses, which normally rose above the hull in other classes of steamers, were reduced to rise no higher than the top of the hull in order to leave open access to the deck. A photograph of Hackett's sister ship, Forest City (Barry 1972:108), suggests that the hull actually had two arches for support, with steel sheeting on the outside of the hull planks. The 211-foot R. J. Hackett could carry about 1,200 tons of bulk freight through the existing 11 1/2-foot deep Sault Ste. Marie locks (Ericson 1968:5).

Onoko, the first iron-hulled steam barge, launched on the Lakes in 1882, was the next step in bulk freighter evolution. Over 280-feet long and 2,164 net tons, the vessel refined the basic characteristics of these special purpose vessels which continued for the next 75 years (Ericson 1968:5). The vessel was propeller-driven with engine aft, bridge and forecastle forward, and an open cargo hold amidships. For 10 of her 16 seasons Onoko carried the largest cargos of any vessel on the Lakes and is considered the first of the modern iron hulled freighters (Mansfield 1899:413). Insurance underwriters, not entirely trusting iron ships, granted lower premium rates to wood sheathed vessels. Composite vessels of iron and wood were built primarily to take advantage of this situation. These vessels had iron frames, oak planking, and iron plates sheathing the wood from the water line to main deck (Barry 1973:136). The first composite hull freighter, Fayette Brown, was launched in 1887 from the Detroit Dry Dock Company. Between 1887 and 1890 five more composite freighters were launched from this company. Composite vessels, however, remained in use for a relatively short time as steel quickly gained in popularity (Ericson 1968:5-6; Barry 1973:136).

Spokane, the first steel-hulled freighter, was launched in 1886 from Globe Iron Works' Cleveland yards, four years after Onoko. Three-hundred ten feet long and capable of carrying over 3,000 long tons, steel-hulled steamers like Spokane quickly replaced iron-hulled and composite vessels.

The size and length of the bulk freighter increased rapidly after the introduction of steel hulls.

> Every year has seen an average growth of from ten to twenty feet in the length of vessels, with a corresponding [proportional] increase in the beam and depth. At every advance vesselmen said the boats were as big as they could be economically handled, but generally the next contract showed them to be mistaken. In 1897 it was announced that the Zenith Transportation Company of Duluth, had given an order for a steamer 450 feet long to the Cleveland Shipbuilding Company; old-time vesselmen again said it was the limit of size for a successful lake carrier. The Bessemer Steamship Company has since added 25 feet (Mansfield 1899:413).

Changes in bulk freighter size and capacity since the hey-day of the wooden schooners in the 1860s up to the era of Emperor, the most recent bulk carrier wrecked at Isle Royale in 1947, are given below (after Ericson 1968:6).

Year	Type	Nominal Length-Ft	Capacity Long Tons
1860	Wooden sailing ships	200-250	300-700
1869	Wooden "propeller"	210	1,200
1882	Iron-hulled steamer	300	3,000
1886	Steel-hulled steamer	300	3,000
1895	Steel-hulled steamer	400	5,800
1900	Steel-hulled steamer	500	8,200
1907	Steel-hulled steamer	600	12,000
1938	Turbine-powered, coal	610	14,000
1942	Turbine-powered, coal	640	18,000
1952	Oil-fired turbine	650	20,000

OVERVIEW OF GREAT LAKES SHIPPING DEVELOPMENT AND SHIPBUILDING TECHNOLOGY

1776 Great Lakes sailing ship design a little more rakish than ocean going vessels with shoal draft hulls fitted with a drop keel on a center-board. "Lakers" recognizable by square stems and mizzen

	mast shorter than fore and main masts.
1780-1820	Vessels on the St. Lawrence limited to 6' draft, 100' length, 20' beam.
1788	Naval experts observed fore and aft rigged vessels were more suitable for Great Lakes sailing.
1804	Colonel John Stevens operates first steamboat on Hudson River.
1807	Robert Fulton operated first commercial steamboat, CLERMONT from New York to Albany.
1816-1817	FRONTENAC and ONTARIO, first steamboats on the Lakes, introduce mechanical ship propulsion on Great Lakes.
1818	WALK-IN-THE-WATER, first steamer above Niagra, operates between Buffalo and Detroit; 338 ton, 135' long, 32' beam. Essentially auxillary powered sailing craft, side paddle-wheel passenger vessel.
1819	Steamship SAVANNAH crosses the Atlantic.
1829	Opening of first Welland ship canal around Niagara Falls.
1830	SHELDON THOMPSON first three masted steamer on lakes.
1830-1840	Side loading hatches developed.
1835	Sailing vessel JOHN JACOB ASTOR on Lake Superior; less than a dozen ships on Lake Superior.
1837	Screw propeller introduced.
1838	Steamer GREAT WESTERN first lake side paddle-wheel passenger vessel with exposed upper deck

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cabins.

1840 First single-stacked steamer, CHESAPEAKE; boilers moved to main deck on MISSOURI. Only 8 vessels making regular trips from Buffalo to Chicago.

1841 Steamer VANDALIA first steam propeller on Lakes. First commercial craft to use Ericsson's screw prop.

1843 Propeller HERCULES introduced smaller sized engines and auxilaries, leaving almost entire main deck for cargo.

1844 MICHIGAN and SURVEYOR first iron-hulled steamers on Lakes.

1845 PRINCETON first propeller steamer on Lakes with upper deck cabins. Propeller steamer INDEPENDENCE portages around Sault to Lake Superior after trip from Chicago.

1846 Steamer JULIA PALMER portaged to Lake Superior; less than a dozen ships on Lake Superior.

1850 Vertical steam engine introduced.

1852 LAFAYETTE COOK typical early Welland "canaller" launched; 3 masted schooner with boxy hull, 113' long, 17' beam, 11' depth.

1854 First and largest to date Great Lakes passenger steamers launched: PLYMOUTH ROCK, CITY OF BUFFALO, WESTERN WORLD.

Canal opens at Sault Ste. Marie

1855 Brig COLUMBIA carries first cargo of iron ore through Sault Lock. Schooner traffic increases, principal vessel type used in the iron ore trade.

1856 Lloyd's lists 118 propellers on Lakes, 120 paddle

steamers.

1860's — Steam barges making inroads into bulk freight trade.

1861 — Iron-hulled screw steamer MERCHANT built at Buffalo; first commercial iron ship on the Lakes.

1861-1881 — Shipyards continue to build steamers and propellers with wooden hulls fitted with sails.

1869 — Wooden bulk steamer R. J. HACKETT built in Cleveland; prototype of modern Lake bulk carriers. The vessel was 211' long, cabin and pilothouse forward on the bow, cabin and machinery aft in the stern. A continuous open cargo hold extended full length of the vessel with regularly spaced hatches matching ore dock chutes; carrying capacity 1,200 tons of ore, grain or coal on existing 11 1/2' depth at Sault locks.

1870 — Peak of sailing ships era on Lakes, over 2,000 sailing ships listed on upper lakes, 80% schooners, 700-800 ton vessels, 200' long.

FOREST CITY, sister ship to HACKETT, launched. Same deck arrangement as HACKETT but without propelling machinery. Used as a tow barge with HACKETT. Steamer and tow barge arrangement comes into wide use on Lakes.

pre-1871 — Maximum draft of vessels on Great Lakes, 11'.

1874 — V.H. KETCHUM (wooden prop) launched; 233' long, 41' beam, 24' deep, the longest vessel on the Lakes at the time.

1880 — Lake sailing ships fall into general disuse. Passenger ships begin to flourish on Lakes, peaking about 1910. HENRY CHISHOLM built in Cleveland, largest vessel to date at 256'

	long, 39' beam, 20' depth of hull.
1882	ONOKO first iron-hulled bulk freighter launched from Globe Iron Works in Cleveland; 300' long, propeller driven, engine aft, bridge and forecastle forward, open cargo hold amidships, carrying capacity 3,000 long tons of ore/grain. Vessel refined basic characteristics of special purpose ships which continued for 75 years.
1884	ALGOMA, ALBERTA, ATHABASCA first steel vessels operating on Lakes. First recorded use of auxiliary steam engines on Great Lakes. Preponderance of Great Lakes tonnage shifts from sail to steam vessels.
1886	Steamer SPOKANE first steel vessel constructed on Lakes; 300' long.
1887	FAYETTE BROWN first composite freighter on Lakes; 252' long, 1,740 gross tons.
1888	Whaleback vessels appear.
1889	MANITOBA first steel ship built on Canadian site of Great Lakes.
1870-1890	Number of sailing ships, including schooners, barks, brigs, decline steadily.
1895	VICTORY first 400', 5,800 long ton bulk carrier built.
1896	Opening of the largest lock in world to date; Poe Lock at Sault Ste. Marie.
1899	Five-ton mechanical Hulett ore unloader built at Conneaut.
1899-1930	More than 420 bulk carriers built on Lakes ranging in size from 400' to 600'.

1900	JOHN W. GATES and JAMES J. HILL first 500', 8,200 long ton, ore carriers built on lakes.
1905	Steamers COREY, FRICK, GARY AND PERKINS introduce arch construction above cargo space eliminating necessity for center line stanchions.
1906	J. P. MORGAN first 600' vessel built.
1909	Steamer DINKEY example of vessel with four, rather than three, keelsons on each side to achieve stiffer hull.
1910	EMPEROR first 10,000 tonner built in Canada; largest Canadian-built vessel to date.
1916	CLEMSON-type boats appear; introduction of Isherwood Construction; i.e., framing ran lengthwise rather than crosswise of the ship.
1919-1939	Lake freighter design and construction becomes standardized; 600' long, 60' beam, 32' depth of hull, carrying capacity 12,000 to 13,000 long tons, 22' draft. Constructed of riveted steel, deep double-bottoms, vertical sloping ballast tanks, wide hatches on 12' or 24' centers, sectional or telescoping steel hatch covers, triple-expansion steam engines at 1,800, to 2,200 hp, fire-tube Scotch boilers, bituminous coal fired, hand fueled.
1923	HATFIELD and LINDABURY introduce change in the construction of cargo hatches from 9-feet wide, spaced 3-feet apart to 12-feet wide, spaced 12 feet apart.
1924	BENSON FORD and HENRY FORD II first direct diesel powered ships on Lakes.
1925	Steamer ROBINSON, self unloader, introduced turbo electric drive.

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1926	LEMOYNE first deviation from standard 600' laker; 633' long, 70' beam, 29' depth of hull, 14,500 tonner. Built for high cubic volume for grain trade.
1930	Passenger vessels decline on Lakes.
1938	RALPH H. WATSON, JOHN HULST, WILLIAM A. IRVIN and GOVERNOR MILLER first steam turbine powered vessels on Lakes. Welded construction introduced in certain areas of hull, side tank bulkheads extended up to spar deck to provide inside tunnels for protected passage fore and aft; one-piece steel hatch covers introduced, moved mechanically on deck mounted rails.
1940	Whaleback vessels cease to be used in iron ore trade, cannot accommodate dock loading/unloading technology changes.
1942-1943	FRASER class of vessels introduced; 640' long, 17,000 LT at 24' draft; welded ship construction appears.
1946	E. J. BLOCK converted to diesel electric propulsion.
1950	WILFRED SYKES built; introduced use of oil-fired boilers for ore carriers.
1951	Steamer EUGENE W. PARGNY converted to geared diesel propulsion.
1952	PHILKIP R. CLARKE, ARTHUR M. ANDERSON, CASON J. CALLAWAY, first of a group of 647-foot long, 7,000 SHP oil-fired turbine ships. JOHNSTOWN, first Lake bulk freighter built on salt water. JOSEPH H. THOMPSON, first 700-footer, converted from ocean cargo vessel at salt water shipyard.
1954	GEORGE M. HUMPHREY, 710-footer built.

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1958	EDMUND FITZGERALD, 729-footer built.
1959	Great Lakes - St. Lawrence Seaway opened for deep draft ships. Maximum vessel size 730' long, 75' wide, 26' draft to pass through all locks.
1960	EDWARD L. RYERSON, 730-footer with 9,000 SHP geared turbine drive, first to use aluminum hatch covers. RED WING, Canadian bulk carrier, first Lake ship to be acquired by conversion from sea-going tanker; turbo-electric drive, 730-footer.
1971	STEWART J. CORT first 1000-foot vessel to operate on the Great Lakes.
Post-1972	1,000 foot bulk carriers came into common use on the Great Lakes.

(The above drawn from Ericson, 1968; Barry 1973; Mansfield, 1899; True 1956; Labadie (p.c.) and others).

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Boundary Justification

This thematic group nomination is designed to incorporte discontiguous units of varying sizes in order to accommodate the vessels and their present condition, i.e., nearly intact to widely scattered remains; a total of eight (8) units are envisioned at this time (one unit includes three (3) vessels). The area includes 625.4 acres (253 hectares) entirely within the boundary of Isle Royale National Park. In most cases the exact locations of the vessels are known, however the full extent of each of the sites has not as yet been determined by a comprehensive survey; complete documentation and survey of the Isle Royale shipwrecks is an ongoing research project of the National Park Service. Because of the nature of the underwater topography around Isle Royale and the natural events (i.e., storm driven waves, high winds, currents, ice shelving, etc.) which accompanied the loss and subsequent deposition of the wrecked vessels, portions may be widely removed from one another, although usually remaining within the same general vicinity. It is not feasible, therefore, to strictly limit boundaries to the currently accepted major concentrations of wreckage. It should be noted here that the massive size of many of the vessels also influenced the size of the area to be included in the nomination; for example, Emperor at 525-feet long and 56-feet in beam covered nearly 3/4 of an acre when intact and not in its present broken and partially scattered condition. The boundaries for each unit have been based upon the best available knowledge of the presently known extent of remains and the potential distribution of wreckage from natural causes and/or salvage efforts following loss of the vessel.

Internal Composition

The thematic group nomination includes 10 vessels which fall into three basic categories: primarily passenger vessels, combination package freight and passenger vessels, and bulk freight carriers. Three passenger vessels are present in the currently known Isle Royale shipwreck population. The wooden Cumberland (1871-1877) an early sidewheeler, the transition type steel-hulled screw propeller Algoma (1884-1885), and a more recent steel propeller George M. Cox (1901-1933). These three vessels represent a cross

section of the development of the elegant passenger service vessel on the Great Lakes.

Three distinct passenger and/or package freight vessels lay within Isle Royale National Park: Monarch, America and Kamloops. The propeller Monarch (1890-1906) is representative of wooden and iron reinforced passenger/package freight vessels. Originally built to provide handsome passenger service and carry supplemental package freight, the vessel came to be used more as a package freighter, with only limited passenger use after 1905. America (1898-1928) was a passenger/package freighter actively involved in both trades at the time of loss. It is a steel version of this class of vessel which gradually took over the trade from the older wooden-hulled Monarch types. Kamloops (1924-1927), possibly the best preserved wreck at Isle Royale, is representative of the later class of steel package freighter. A "canaller", so named because it was built to the limitations imposed by the Welland Canal, the vessel was designed to be easily convertable to carry package freight upbound and bulk cargo downbound.

Four bulk freighters are a part of the Isle Royale shipwreck assemblage: Henry Chisholm (1880-1898) a wooden propeller, 256-feet long, carrying capacity 1,840 LT; Glenlyon (1893-1924) a steel screw steamer, 328-feet long, carrying capacity 3,800 LT; Chester A. Congdon (1907-1918) a steel screw steamer, 532-feet long, carrying capacity 10,000 LT; and Emperor (1910-1947) a steel screw steamer, 525-feet long with a carrying capacity of 10,500 LT. The development of steam-screw bulk freighters over time is well represented by these four vessels.

Environment

Lake Superior, the largest freshwater lake in the Western Hemisphere, is approximately 350 miles long and encompasses 31,700 square miles of water area. At a mean water datum of 600 feet above sea level, it is nearly 25 feet higher than Lakes Michigan and Huron, 32 feet higher than Lake Erie and 358 feet higher than Lake Ontario (NOAA Polyconic Projection Great Lakes 1979). Isle Royale is located at the western end of Lake Superior, 17 miles from the Canadian mainland.

Geologic events played the major role in shaping the character of the Great Lakes and of Isle Royale. Alternating lava flows and sedimentation formed the rock found in the Superior basin and the matrix for Isle Royale. The layering of these rocks, their differential resistance to erosional forces, along with subsidence in the Superior basin and glacial scouring helped to create the island's ridge and valley topography. These ridges dip southeastward at angles ranging from 5 to 50 degrees, rising up more than 1,360 feet above lake level to form the island's highest peak. Offshore the ridges dip down more than 700 feet in many areas before reaching the lake bottom. The offshore reefs which surround the island are extensions of the visible ridge and valley topography and the same abruptness and ruggedness which are evident on the land have helped to create a ring of treacherous rocks, ridges and submerged islands which plague navigation on this part of Lake Superior.

Intrusions and Data Limitations

Contempory salvage activities on the vessels have, in some cases, resulted in the removal of machinery and the scattering of upper deckworks or sections of the hull. Vandalism on the more heavily visited wrecks has resulted in the removal of smaller items (port holes, gauges, china, etc.) and very likely the movement of these kinds of artifacts around the site. Although salvage activities have by far been the most distruptive activity to site integrity, this has not seriously impaired investigation of vessel construction or potential site interpretation to date. Vandalism, a major problem in the past, has been brought under control through an active cooperative effort between the Park and dive charter boat operations coupled with information dissemination to private boaters and patrols by park rangers. The removal and re-distribution of these smaller artifacts has not adversely impacted the ability of the Park to develop interpretive programs. Some items have been turned over to the Park headquarters and are currently being curated in anticipation of an expanded display or museum devoted to the maritime history of Lake Superior, Isle Royale's unique role, and the many shipwrecks ringing the island. Sport diving around Isle Royale has steadily grown and is the only area of visitation which has shown a significant increase (Morehead, personal communication). A diver survey ranked the

vessels, in terms of number of visits, as follows: America, Cox, Emperor, Congdon, Monarch, Chisholm, Cumberland, Glenlyon, Algoma, and Kamloops (Stinson 1980:15).

Archeological Activities

Investigations to date on the vessels have been conducted by two separate groups, one university affiliated and the second a National Park Service team. A group from Northern Michigan University, under the direction of Frederick Storehouse, spent the month of August, 1978, undertaking a preliminary reconnaissance of three vessels. The Isle Royale Shipwreck Survey 1978 (Stonehouse 1978) defined six objectives for the study which included determination of exact wreck locations and present condition and depth, a complete photographic record of important artifacts, recovery of loose artifacts incidental to the survey, mapping wreckage into an overlay chart, and completion of a report describing survey results.

The National Park Service has undertaken a multi-phase research program aimed at developing a model program for shipwreck management. The Report on a One Week Field Trip to Test and Evaluate Underwater Archeological Research Approaches at Isle Royale (Submerged Cultural Resources Unit 1980) and Underwater Archeology of Isle Royale National Park: An Interim Report Covering the 1981 Field Season. (Murphy, Lenihan and Carrell 1982) summarize the approach and objectives of the National Park Service study.

The Submerged Cultural Resources Unit conducted a week of field work at Isle Royale National Park including a preliminary examination of the sites of the Monarch, Emperor, Congdon, and America as Phase I in June 1980. The primary purpose of the effort was to test and evaluate underwater remote sensing formats and test various diving equipment profiles and techniques, while familiarizing personnel with the environmental demands of working in the extremes posed by Lake Superior.

Also during Phase I, video tapes were made at Emperor, Congdon, and Monarch wreck sites and an edited tape with narration was

produced from the raw field tapes. Black-and-white photographs and color slides were taken of the various vessels.

Preliminary assessment of Monarch during the 1980 field season resulted in the identification of numerous intact structural elements of the vessel still on the site. Since Monarch presented a comparatively safe diving environment with easy access, it was decided that it might be an appropriate site to attract divers to if a method to interpret the wreck and enrich the diving experience at the site could be devised. Accordingly, during Phase II, June 1-29, 1981, an effort was made to map the "jumble of timbers" at Monarch and install the first underwater interpretive trail on a shipwreck in the National Park System.

America, the most popular diving site on Isle Royale, was also chosen for additional research in 1981 since it is a prime example of the many intact wrecks that are the main attraction to divers visiting the island's waters. A thorough analysis of the potential hazards posed by diving the lower recesses of the virtually intact vessel was given special attention in Phase II. As a result a door was removed to an innermost room.

An examination of the Cumberland/Chisholm area on Rock of Ages Reef on the southern end of the island was the third priority target for 1981. The two wrecks, intermingled and dispersed, represented an area where relatively little was known. The site is composed of large vessel elements ranging in depths from 25 feet to the intact Chisholm engine sitting upright in 140 feet of water.

Phase III field work on the Cumberland/Chisholm site in 1982 resulted in identification, mapping and photodocumentation of the major sections of wreckage present. Additional preliminary reconaissance of Glenlyon and Cox were completed by the National Park Service team as well.

Phase IV field work, conducted during June, 1983, focused on two vessels, George M. Cox and Glenlyon. A comprehensive planemetric map of the Cox site, a detailed sketch map of the Glenlyon site and photodocumentation of major features at both sites was completed. In addition, environmental mapping at the Cumberland/Chisholm site and selected artists perspective drawings

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of America, Cox, Glenlyon, Congdon and Emperor were finished. A brief visit to The Palisades, the location of Monarch, to clarify questions of gangway construction, fantail assembly and the condition of selected areas of wreckage rounded out the 1983 field season. Follow-up work at the Cox, Algoma, Glenlyon and Monarch sites is planned for 1984.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
__PREHISTORIC	X ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION	
__1400-1499	X ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE	
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	X SCULPTURE	
__1600-1699	__ARCHITECTURE	__EDUCATION	__MILITARY	__SOCIAL/HUMANITARIAN	
__1700-1799	X ART	X ENGINEERING	__MUSIC	__THEATER	
X 1800-1899	X COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	X TRANSPORTATION	
X 1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)	
		__INVENTION			

SPECIFIC DATES 1871 - 1947 BUILDER/ARCHITECT see individual unit forms

STATEMENT OF SIGNIFICANCE

Significance

The vessels included in this thematic group nomination, The Shipwrecks of Isle Royale National Park, are the first series of nominations of the presently known shipwrecks within the Park's boundary. The group is currently representative of a cross-section of commercial vessels constructed for Great Lakes use between 1871 and 1924. These vessels are significant because: 1) they reflect the development of a specifically adapted marine technology, i.e., freshwater, steam-powered bulk, passenger and package freight vessels designed for high environmental stress resulting from short wave periods and extended season use; 2) they reflect the demands upon transportation systems for innovation in design forced by a rapid period of economic growth where carrying capacity, ease of loading and unloading and speed were the determining factors in success; 3) they are in some cases the only known remaining examples within their size and/or class of vessel available for study within the Lake Superior shipwreck population; 4) the people and events associated with the vessels contributed to the socio-economic development of the Northshore and Isle Royale; and 5) their unique state of preservation and protection within Isle Royale National Park has made them invaluable for continued study despite a rapidly eroding shipwreck data base within the Great Lakes.

The vessels included in this nomination are Cumberland 1871-1877, Algoma 1883-1885, George M. Cox 1901-1933, Monarch 1890-1906, America 1898-1928, Kamloops 1924-1927, Henry Chisholm 1880-1898, Glenlyon 1893-1924, Chester A. Congdon 1907-1918, and Emperor 1910-1947. The ten vessels can be divided into three general classes: primarily passenger, combination passenger and package freight, and bulk carrier. These groupings have not been narrowly defined by the Isle Royale assemblage, but also represent the three basic classes of commercial vessels which have been used on the Great Lakes. Military, government, privately, or individually owned historic and prehistoric vessels are additional classes which may be represented in the total shipwreck population around Isle Royale and in the Great Lakes. These latter groups, however, are presently beyond the scope of this initial nomination. Should

these vessel types be located within the Park and considered eligible for nomination, additions to this thematic group may be submitted.

Cumberland (1871-1877) was a wooden, side-paddlewheel steamer used in the Great Lakes passenger trade between 1871 and 1877. The vessel is significant because: 1) it is a representative example of this type of vessel which flourished on the Lakes between 1835 and 1895; 2) the vessel is the oldest wreck and the only paddlewheeler in the Isle Royale shipwreck assemblage; 3) it is likely to yield significant information not otherwise obtainable on the details of wooden side-paddlewheel construction in the early 1870's; and 4) it is the only known remaining example of this type of vessel within the 300 to 500 net tons range currently available for study in the Lake Superior shipwreck population (Heden 1966:69-80).

Algoma (1883-1885) was a passenger vessel built for use on the Great Lakes. This vessel is significant because: 1) the vessel is representative of the steel screw steamer passenger vessel of the period; 2) it was the epitome of Scottish shipbuilding at the time of her launching; 3) it was used in a specific trade activity which flourished for a relatively short period of time on the Lakes; 4) at the time of her loss Algoma became the second worst disaster in terms of loss of life in the history of Lake Superior shipping; and 5) of the nine known steamers sunk on Lake Superior which are within the net tonnage range of Algoma this vessel is the only known steel passenger vessel in the Lake Superior shipwreck population available for study (Heden 1966:69-80).

George M. Cox (1901-1933) was a steel screw passenger vessel used in the excursion run between Chicago and cities along the Lake Michigan shoreline until her sale and loss on her modern voyage on Lake Superior. The vessel is significant: 1) when viewed as part of the continuum of passenger vessel design and construction represented within both the Isle Royale assemblage and the total shipwreck population in Lake Superior; 2) because it was used in an economic and trade activity which flourished for a limited time on the Great Lakes and of which Cox is a representative example of

the later class of steel passenger vessels; 3) because of the events surrounding her loss and the largest mass rescue recorded in Lake Superior history; and 4) because Cox is the only known remaining example of a steel passenger vessel of her size and class available for study in Lake Superior (Heden 1966:69-80).

Monarch (1890-1906) was a wooden passenger/package freighter used on the Lakes between 1890 and 1906. The vessel is significant because: 1) it is representative of the wooden and iron reinforced steam vessels designed and built for extended season use employing a construction technique which flouished for only a relatively short period of time; 2) study of this vessel is likely to yield significant data on the details of transitional wooden and iron shipbuilding techniques; 3) the events surrounding the rescue of her crew and passengers are an important part of northshore regional and local Isle Royale history; 4) within the Isle Royale shipwreck assemblage the vessel is the only wooden and iron reinforced passenger/package freighter represented; and 5) it is the only example of this size and class of vessel still available for study in the Lake Superior shipwreck population (Heden 1966:69-80).

America (1898-1928) was a steel passenger and package freighterwhich plied Lake Michigan from 1898 to 1901 and Lake Superior from 1902 to 1928. The vessel is significant because: 1) it provided an important social, economic and communications link for Northshore and island inhabitants; 2) the people and events associated with the vessel were important in the history and development of Isle Royale; 3) she was used in an economic and trade activity which flourished on the Lakes for only a relatively short period of time; and 4) she is representative of an intermediate vessel type which gradually took over the passenger/package freight trade from wooden and composite vessels. This steam vessel has further significance because of the seven known steamers sunk in Lake Superior within the 300 to 500 net tons range of America this vessel is the only steel passenger/package freighter in the population and is the only remaining example of her class and size available for study in Lake Superior (Heden 1966:69-80).

Kamloops (1924-1927) was a steel package freight propeller built specifically to pass through the Welland Canal. This steam vessel is significant because: 1) it is a representative example of the intermediate class of classic "canallers" and was designed soley for the upbound package freight and downbound bulk freight trade on the Great Lakes; 2) due to its extremely high degree of integrity, in a nearly pristine condition with the full array of early 20th century material goods still in situ after more than 50 years underwater, Kamloops is likely to yield significant information on both steel package freighter construction and contribute to our understanding of life aboard a Great Lakes "tramp"; 3) the story of the loss and discovery of Kamloops, often referred to as the "Ghost Ship of Isle Royale," contributes an important chapter in the local and regional history of Isle Royale and the northshore; and 4) it is the only known steel package freighter in the Isle Royale assemblage and the only one of her size and class represented in the entire Lake Superior shipwreck population (Heden 1966:69-80).

Henry Chisholm (1880-1898) was a wooden bulk freight propeller used on the Lakes in the 1880s and 1890s. The vessel is significant because: 1) it is representative of an intermediate period of wooden bulk freighter construction which was initiated in 1869 with the launching of R. J. Hackett and then began to decline following the introduction of iron-hulled vessels in 1882; 2) the vessel was built at the prestigious Thomas Quales' Sons shipyards in Cleveland, considered to be the finest wooden shipbuilders on the Lakes, and study of this vessel is likely to yield significant data on the details of wooden bulk freighter construction; 3) it is the oldest example of a bulk freighter within the Isle Royale shipwreck assemblage and is the only wooden bulk carrier in the sample; and 4) it is the only known remaining example of a wooden bulk carrier in her size, class and net tonnage range available for study in Lake Superior (Heden 1966:69-80).

Glenlyon (1893-1924) was a steel hulled package/bulk freighter used on the Lakes from the 1890s to the 1920s. The vessel is significant because: 1) it is representative of an early class of steel-hulled bulk freighter construction on the Great Lakes and is

an example of a transitional vessel size which moved very quickly from the first 300-foot steel freighters in 1886 to 400-foot vessel construction by 1895, a period of only 9 years; 2) study of this vessel is likely to yield significant information on the details of U.S. bulk freighter construction of the period; 3) within the Isle Royale bulk freighter shipwreck assemblage the 328-foot Glenlyon is intermediate both in terms of size and age, which is not otherwise represented, and together with the other bulk freighters at Isle Royale demonstrates the early development of Great Lakes bulk freighters; and 4) within the total shipwreck population in Lake Superior Glenlyon is the only known example of this size and class of vessel (1,500 to 2,000 NT in the 300-foot range) currently available for study (Heden 1966:69-80).

The 532-foot Chester A. Congdon (1907-1918) and the 525-foot Emperor (1910-1947) were steel bulk carriers, the latter designed specifically for the iron ore trade and the former used in the grain trade on the Lakes. The vessels are significant because: 1) they are representative of the continuum of bulk freighter development and construction on the Great Lakes after the turn of the century; 2) they are examples of a transitional vessel size which moved very quickly from the first 500-footers in 1900 to the first 600-foot vessels by 1906. The construction techniques developed on the 500-footers are particularly significant since they set the standard for a class of vessel, the 600-footer, which remained the largest vessel on the lakes for the next 20 years (Barry 1974). Comparative study of these vessels is likely to yield significant information on the details of Canadian versus American shipbuilding techniques of the period, and together with the other bulk carriers within the Isle Royale assemblage clearly demonstrate the development of Great Lakes bulk carriers through the turn of the century. The overall number of wrecked bulk carriers has decreased steadily during the first half of this century due to improved safety standards in the shipping industry. Heden documents loss of 106 steamers in Lake Superior, of these there are 8 known which are within the 4,000-5,000 net tonnage range of Congdon and Emperor (Heden 1966:69-80). All of the vessels within the Lake Superior sample are steel bulk carriers, however of the eight only two are in the 500-foot size range, Congdon (532') and Emperor (525'). The other six vessels are in the sample range from 420' long to 451' long and are

representative of earlier construction techniques. Congdon and Emperor are significant because they are the only two known 500-foot bulk carriers in Lake Superior which are currently available for study.

Chester A. Congdon is additionally significant because at the time of her loss she was reported to be the biggest monetary loss from a single shipwreck up to that time and Lake Superior's first million dollar wreck (Duluth News Tribune, November 10, 1918). The vessel was also the greatest loss in net register tonnage up to 1918.

Emperor is also significant because she was the largest Canadian built vessel at the time of her launching and the first Canadian vessel of 10,000 ton carrying capacity. It represents the epitome of Canadian steel bulk freighter construction in 1910. The feelings and associations that surround the loss of Emperor, which claimed 12 lives, play a significant role in the recent history of Port Arthur (now Thunder Bay), Ontario. Survivors of the wreck as well as loved ones of the deceased still reside in the area.

Summary

As a group the ten vessels at Isle Royale are significant because they are representative of the development of the three major classes of commercial use vessels on the Great Lakes between 1871 and 1924. Study of their technological and architectural features can fill in numerous blind spots already existing in the understanding of recent ship's architecture and are likely to yield significant data on Great Lakes vessel construction. For example, preliminary examination of the Cumberland/Chisholm site during the National Park Service 1982 field season revealed some unusual construction details and has raised questions regarding transitional longitudinal strengthening techniques used in early wooden hulled vessels (Murphy, Lenihan, Carrell, 1982). Although several of the vessels in the Isle Royale assemblage were ostensibly constructed of steel, the confusion of contemporary writers in distinguishing between iron, iron and/or steel elements, and what is generally accepted as steel today, is evident in their accounts. Clarification of this issue can contribute to a better understanding of industrial capabilities of

the period. Changes in dockside loading and unloading technology are reflected in the arrangement of hatches, derricks and friction rollers on these vessels. Therefore, alterations and modifications to the vessels, both physically and ultimately in actual use, along with the employment of innovative construction methods and the incorporation of metal elements is tied directly to the industrial development and evolution of Naval architecture, changing patterns of economic growth, and population expansion in the Great Lakes region. Continued study of these vessels and how they fit into the story of the Great Lakes is likely to yield significant information beyond ship's architecture and shed light on the economic events and demographic changes in the Great Lakes region to which they are tied.

In some cases these vessels represent the only remaining examples within their size and class which are available for study within the known Lake Superior shipwreck population. Research undertaken by the Canal Park Marine Museum in Duluth, Julius Wolff (1979), Thom Holden (personal communication), Karl Heden (1966), Homer Wells (1938), Richard Wright (1973), A. Winklemann (n.d.) and others has resulted in the documentation of approximately 350 total loss shipwrecks in Lake Superior. While not all-inclusive, Heden (1966:68-69) is the only reference which provides some statisically comparative data on all of the vessels listed including length, class, tonnage, construction materials and steam or sail. Heden documents 106 steamers lost in Lake Superior up to 1966. Of this number 74 entries also provide the net tonnages of the vessels lost. Comparison of net tonnages and type of vessel, i.e., bulk, passenger, package, was used to determine the population of wrecked vessels in any given class and is the basis upon which uniqueness has been determined in this document.

These vessels are particularly suited for continued study because of their location within the protected waters of Isle Royale National Park. Unlike the vast majority of vessels in the Great Lakes long-term protection and interpretation is in their future rather than attrition by uncontrolled salvage and artifact removal.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

(see attached sheets)

10 GEOGRAPHICAL DATA (see attached sheets)

ACREAGE OF NOMINATED PROPERTY 625.4

UTM REFERENCES

	ZONE	EASTING	NORTHING
A			
B			
C			
D			

VERBAL BOUNDARY DESCRIPTION

This group nomination is designed around 8 discontiguous units of varying sizes ranging from 5.7 acres to 506.6 acres to accommodate the vessels and their present condition, i.e., nearly intact to widely scattered remains. All eight units are within the current boundary of Isle Royale National Park. Separate UTM, Lat/Long coordinates, acreages, and boundary descriptions are provided on the individual unit nomination forms. See also Boundary Justification - Description Section

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

Toni Carrell, Archeologist

ORGANIZATION — DATE

National Park Service, Submerged Cultural Resources Unit — 9/83

STREET & NUMBER — TELEPHONE

1220 South St. Francis — (505) 988-6750

CITY OR TOWN — STATE

Santa Fe — New Mexico 87501

12 CERTIFICATION OF NOMINATION

STATE HISTORIC PRESERVATION OFFICER RECOMMENDATION

YES____ NO____ NONE____

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certifying that the State Historic Preservation Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The evaluated level of significance is ✓ National ____State ____Local.

FEDERAL REPRESENTATIVE SIGNATURE Edwin C. Bearss

TITLE Chief Historian DATE May 1, 1984

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I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

See Continuation Sheet for Listing DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST: DATE

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(3-82)

OMB No. 1024-0018
Exp. 10-31-84

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date entered 6-14-84

Continuation sheet | Item number | Page

Multiple Resource Area
Thematic Group

dnr-11

Name Shipwrecks of Isle Royale National Park Thematic Resources
State Keweenaw County, MICHIGAN

Nomination/Type of Review			Date/Signature
1. Cumberland	Substantive Review	for Keeper	[illegible] 6/14/84
		Attest	
2. Algoma	Substantive Review	for Keeper	[illegible] 6/14/84
		Attest	
3. George M. Cox	Substantive Review	for Keeper	[illegible] 6/14/84
		Attest	
4. Monarch	Substantive Review	for Keeper	[illegible] 6/14/84
		Attest	
5. America	Substantive Review	for Keeper	[illegible] 6/14/84
		Attest	
6. Kamloops	Substantive Review	for Keeper	[illegible] 6/14/84
		Attest	
7. Henry Chisholm		for Keeper	[illegible] 6/14/84
		Attest	
8. Glenlyon		for Keeper	[illegible] 6/14/84
		Attest	
9. Chester A. Congdon		for Keeper	[illegible] 6/14/84
		Attest	
10. Emperor		for Keeper	[illegible] 6/14/84
		Attest	