NPS Form 10-900 (January 1992) Wisconsin Word Processing Format (Approved 1/92)

United States Department of Interior National Park Service

National Register of Historic Places Registration Form



OMB No. 10024-0018

1218

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900A). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Joys Shipwreck other names/site number

2. Location

street & number	500 feet west of Sunset Park, in the waters of Sturgeon Bay		N/A	not for publication
city or town	Sturgeon Bay		Х	vicinity
state Wisconsin	code WI county Door	code	029	zip code 54235

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this \underline{X} nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property \underline{X} meets _ does not meet the National Register criteria. I recommend that this property be considered significant _ nationally \underline{X} statewide _locally. (_ See continuation sheet for additional comments.)

Signature of certifying official/Title

State Historic Preservation Officer-WI

State or Federal agency and bureau

In my opinion, the property _ meets _ does not meet the National Register criteria. (_ See continuation sheet for additional comments.)

Signature of commenting official/Title

<u>) 179, 3067</u> Date

State or Federal agency and bureau

Date

Joys Shipwreck		Door County	Wisconsin
Name of Property		County and State	
4. National Park Servic	e Certification	<u> </u>	
I hereby certify that the property is: See continuation sheet. determined eligible for the National Register. See continuation sheet. determined not eligible for the National Register. See continuation sheet. See continuation sheet. see continuation sheet. removed from the National Register. other, (explain:)		H. Blall	<u>]/. 2/. 07</u> Date of Action
5 Classification			
5. Classification			
Ownership of Property (check as many boxes as as apply)	Category of Property (Check only one box)	Number of Resources v (Do not include previous in the count)	
private	building(s)	contributing no	oncontributing
public-local	district	÷	ouildings
X public-State	structure	1	sites
public-Federal	X site		structures
	object		objects
		1 0	total
Name of related multiple pro (Enter "N/A" if property not p listing. Great Lakes Shipwreck	part of a multiple property	Number of contributing is previously listed in th 0	
		0	
6. Function or Use		· · · · · · · · · · · · · · · · · · ·	
Historic Functions		Current Functions	
TRANSPORTATION/ Wate	r-Related	VACANT/ NOT IN USE	
7. Description		· · · · · · · · · · · · · · · · · · ·	
Architectural Classification	D	Materials	·>
OTHER: Steam barge		(Enter categories from instruct Foundation N/A	ions)
	<u> </u>	walls N/A	
		roof N/A	
		other N/A	

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

Wisconsin

Joys Shipwreck
Name of Property

Door County

County and State

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for the National Register listing.)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- _B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- $\underline{x} D$ Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A owned by a religious institution or used for religious purposes.
- _B removed from its original location.
- _ C a birthplace or grave.
- _D a cemetery.
- _ E a reconstructed building, object, or structure.
- _ F a commemorative property.
- _G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

ARCHAEOLOGY / HISTORIC, NON-ABORIGINAL MARITIME HISTORY

COMMERCE

Period of Significance

1884-1898

Significant Dates

1884

Significant Person (Complete if Criterion B is marked)

N/A

Cultural Affiliation

Euro-American

Architect/Builder

Fitzgerald, John

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

Door County

County and State

Wisconsin

9. Major Bibliographic References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

-	 Previous Documentation on File (National Park Service): preliminary determination of individual listing (36 CFR 67) has been requested previously listed in the National Register previously determined eligible by the National Register designated a National Historic landmark recorded by Historic American Buildings Survey # recorded by Historic American Engineering Record # 			X State Other Feder	•	vation Office		
10.	Geogra	phical Data						
Acre	eage of Pr	operty <u>less t</u>	han one acre					
UTN	A Referen	ices (Place addition	nal UTM references on a contin	uation she	eet.)			
1	16	0469257	4966259	3				
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2				Λ		-	-	
Z	Zone	Easting	Northing	4	Zone See Cor	Easting ntinuation Sh	Northing eet	

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet)

11. Form Prepared By						
name/title organization street & number	Dina Bazzill, Tamara Thomsen and Wisconsin Historical Society 816 State Street	Keith Mever	den	date telephone	3/12/07 252-412-7960/	
city or town	Madison	state	WI	zip code	608-221-5909 53706	

Joys Shipwreck	Door County	Wisconsin
Name of Property	County and State	

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps	A USGS map (7.5 or 15 minute series) indicating the property's location.
	A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs Representative black and white photographs of the property.

Additional Items (Check with the SHPO or FPO for any additional items)

	Property Owner			
Complete this item at the request of SHPO or FPO.)				
Bureau of Facilities and Land	S			
Wisconsin Department of Natural Resources		date	3/12/07	
P.O. Box 7921		telephone	608-267-2764	
Madison	state	WI	zip code	53707
	Bureau of Facilities and Land Wisconsin Department of Nat P.O. Box 7921	Bureau of Facilities and Lands Wisconsin Department of Natural Resources P.O. Box 7921	Bureau of Facilities and Lands Wisconsin Department of Natural Resources P.O. Box 7921	Bureau of Facilities and LandsWisconsin Department of Natural ResourcesdateP.O. Box 7921telephone

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects, (1024-0018), Washington, DC 20503

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United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

	Joys Shipwreck
Section <u>7</u> Page <u>1</u>	Sturgeon Bay, Door County, Wisconsin

Summary

Located approximately 500 feet west of Sunset Park in the waters of Sturgeon Bay, rests the wreckage of the steam barge *Joys*, a vessel once hailed as a "greyhound among lumber carriers" for her record-breaking speed. The *Joys* was constructed in 1884 by the Milwaukee Ship Yard Company. She hauled lumber, iron, and stone through the Sturgeon Bay Ship Canal between Menominee and the ports of Milwaukee, Chicago, Manistee, and Michigan City. The *Joys* ' career ended when a fire burned her to the waterline on December 23, 1898. The *Joys* provides historians and archaeologists the unique opportunity to study construction techniques of Great Lakes steam barges. The *Joys* site has yielded significant information on steam barge construction and has the potential to yield further information.

Site Description and Investigation

The *Joys*, a Great Lakes steam barge, rests on a silty and sandy bottom under approximately ten feet of water. The vessel is located in the waters of Sturgeon Bay approximately 500 feet west Sunset Park, just north of the Bay Shipbuilding Company. The wreck is parallel to shore in a north-south orientation, with the bow facing north. The *Joys* archaeological investigation was designed as a Phase II archaeological survey to record the vessel's remains without removing artifacts or disturbing the site. Archaeological work began on 7 September 2005 and took two weeks to complete.

The *Joys* site includes an articulated hull below the waterline, artifacts such as iron fastenings and molding, and evidence of an engine bed and propeller. The most obvious attribute of the wreck was heavy black charring on most timbers inside and outside the wreck. In most places, the scantlings are narrowed and the ceiling is almost completely burned away. Despite the extensive charring, most of the vessel is extant below the waterline from bow to stern.

The hull's dimensions are 145 feet in length overall, 130.6 feet in length between perpendiculars, and 27.7 feet in beam. It should be noted that measurement taken of vessels in the archaeological record are approximate because wooden vessels change shape over time and tend to take the shape of the surface on which they settle (Rodgers and Green 2003). The hull's main structural features include:

Stempost Assembly

The stem represents the forward-most part of the vessel and is attached to the keel by scarphing (Desmond 1919:11). On the *Joys*, this component is detached and lies approximately fifteen feet north of the bow area. The stem and forefoot structure measured 14.4 feet in length by 1.9 feet sided. The measured dimension of the disarticulated stem post is 0.6 feet molded.

Keel/Keelson Assembly

The purpose of the keel/keelson assembly is to unite the keel, floors, and deadwood into one strong structural support unit (Desmond 1919:15). This helps prevent the effects of hogging and sagging, a common malady of

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wooden vessels with a high length-to-beam ratio. For this reason the keel/keelson assembly is often referred to as a ships' "backbone". The purpose of a heavy backbone in steamers, such as the *Joys*, is to provide longitudinal hull strength, support the boiler and engine bed, and protect the vessel from hogging and sagging. The *Joys*' heavy composite backbone consists of five large timbers, all through-fastened to the keel: one center keelson, two sister keelsons fastened to the floors to add additional support, and two rider keelsons fastened atop the keelson. The dimensions of each component are:

- Keel 0.96 feet sided by 0.6 feet molded
- Keelson 0.84 feet sided by 0.88 feet molded
- Rider Keelsons 0.84 feet sided by 0.98 feet molded
- Sister Keelsons 0.6 feet sided by 1.16 feet molded

The majority of the *Joys*' backbone is well-preserved and intact, but there is some visible damage and deterioration – most likely from the vessel's burning rather than the vessel's time submerged. The second rider keelson is missing from 36.5 feet aft of the stem, and the first rider keelson is missing from 87.9 feet aft of the stem. The thrust bearing is fastened atop the keelson 110 feet from the stem. The keelson is not visible aft of the thrust bearing, and it is unclear whether the keelson is broken or simply buried beneath zebra mussels, vegetation, sand, and silt – all of which are quite thick in the vessel's stern. Bilge keelsons, one on both the port and starboard sides, provided additional longitudinal support for the vessel. The bilge keelsons are no longer extant, but their former presence was indicated by their fasteners that remain extant (the bilge keelsons are indicated on the site plan by dotted lines).

Frames

The *Joys* was built with cant frames in the bow, double frames throughout, and quadruple frames in the stern for engine support. Five pairs of cant frames, measuring 0.3 feet to 0.4 feet in sided dimension, were located in the bow to accommodate the vessel's bow curvature. As in most nineteenth-century wooden steam barges, the frames extended from port to starboard, perpendicular to and sandwiched between the keel and keelson. Each frame consisted of a pair of futtocks measuring 0.3 to 0.4 feet sided, and were fastened to the keelson assembly every 1.8 feet with an average space of 1.0 foot between frames. Near the stern, quadruple floors supported the engine bed. The original dimensions of the floor and frame timbers were difficult to obtain due to charring and deterioration.

Ceiling and Outer Hull Planking

The ceiling planking covered the inside of the frames, forming the surface of the hold. Much of the *Joys*' ceiling was covered in a thick layer of silt, vegetation, and zebra mussels. Small test strips were excavated to reveal that the ceiling planks were 0.6 feet sided by 0.16 feet molded and longitudinally oriented - a common characteristic of nineteenth-century schooners and steam barges. Much of the ceiling has been burned away, and all remaining ceiling planks were charred. The ceiling planking is fastened to the frames with iron bolts. Two pins fasten each ceiling plank to each frame futtock; with a double frame construction, this resulted in four ceiling fasteners at each frame. Most of the ceiling fasteners were iron bolts fastened with clinch rings.

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Outer hull plank dimensions were similar to the ceiling - 0.6 feet sided by 0.16 feet molded. Though it could not generally be seen, outer hull planks were nailed in the same pattern as ceiling planks with countersunk nails. Several sections of outer hull planking are detached and situated either directly inside or outside the hull. These outside sections are between five to seven planks in width and are attached to double frames that are cleanly cut. The two largest side hull pieces lie inside the hull thirteen feet aft of the bow on the port side. These sections are both thirteen feet wide at their widest point, making it probable that these two sections fit together and were at one time attached. The evenness of the frame tops on both the intact hull and the detached sections, as well as their locations in relation to the hull, indicate that the detached pieces were intentionally removed. Since the site is approximately ten feet deep and located in a well-used recreational boating area, it is reasonable to assume that the detached portions of the hull were cut down to prevent boats from grounding or snagging on the wreck.

Engine Bed

While no engine parts or intact bed structure was recorded, archaeologists did record large sections of iron plating and a large deposit of bricks in the stern area seventy-five feet aft of the bow. Five large pieces of ferrous material were recorded on the starboard side, and two pieces were recorded on the port side. The location of this iron plating, as well as the corresponding presence of quadruple frames, suggests these pieces were the engine or boiler beds. The brick deposit measured approximately 5 feet by 5.5 feet in area, and individual bricks measured 0.3 by 0.6 by 0.2 feet in dimension. None of the examined bricks had any distinguishing marks.

Propeller Assembly

Upon initial examination of the wreck, archaeologists uncovered a shaft log and sole piece aft of the stern post. The presence of these components confirmed that the wreck was once a steamer. The shaft log measured 4.8 feet in length by 0.8 feet sided. The sole piece extended out from the keel and measured 9.0 feet in length and 0.8 feet sided. No other evidence of the propeller or rudder was found on the site, probably due to salvage activities.

Artifact Scatter

Besides a random scattering of loose fasteners in various shapes and sizes, the *Joys* contained a small sampling of other artifacts, including white paste porcelain fragments and decorative metal fragments. These artifacts were recorded in situ and not recovered.

No artifacts were discovered that positively identify the vessel, but seven key factors indicate the vessel is indeed the *Joys*. These include vessel type, the charred condition of the wreck, site location, length and beam, searches in shipwreck lists and databases, vessel parts and machinery noted as missing during the archaeological investigation in September 2005, and most significant, salvage holes located on the ship's hull below the waterline. None of this circumstantial evidence alone confirms the identity of the vessel, but analysis reveals the following.

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The wreck is, quite clearly, a steam barge. Comparison of the archaeological remains with the only other welldocumented steam barges, including *Cleveland, Francis Hinton, Adventure*, and *H.D. Coffinberry*, confirms this interpretation. Internal steam barge construction is quite similar to typical nineteenth century schooner construction with the exception that steam barges contained the necessary equipment and structural modifications, including boilers, engines, bilge keelsons, and triple or quadruple frames aft, to allow the vessels to be steam-propelled. Internal schooner construction is also characterized by heavy keelson assembly, doubleframes, and longitudinally planked ceiling timbers. All of these features are present. The site's most readily apparent attribute is that the hull is extensively burned. Most of the timbers, both inside and outside the hull, exhibited a charred black surface. In most places, the scantlings are narrowed due to burning and the ceiling is almost completely burned away. This is consistent with the *Joys*' historical record.

Presently, the wreck site is located in Sturgeon Bay approximately 500 feet offshore from Sunset Park and north of the Bay Shipbuilding Company. An 1899 article in the *Door County Advocate*, published four months after the *Joys* burned and sank, stated: "The wreck of the steamer Joys [sic] has been utilized as a breakwater by the Pankratz Lumber Company for the protection of their boomage located on the north side of their dock" (*Door County Advocate* 1899c). In the 1890s, the area around the present day park was occupied by both the Pankratz Lumber Company and the Sturgeon Bay Dry Dock Company. These two companies are clearly marked on a map issued by the U.S. War Department on 27 May 1925. Today, the location of the wreck coincides with the historical location given for the *Joys* in the *Door County Advocate*.

The hull's overall length is approximately 145 feet. At first glance, this appears to indicate that the *Joys* is the wrong identification for the vessel because the length listed in the *Joys* 'enrollments is 131 feet. However, the length measurement system required by law at the time the *Joys* was constructed (1884) was established in 1865. It stated:

Length: The length at the tonnage deck is to be taken by tightly stretching a line on the upper surface of the deck, at such a parallel distance from the middle line of the ship as to clear the several hatchways and other obstacles that may present themselves; the line is then to be measured, marking the ends of the line on deck; these points are then to be squared in to the middle line of the ship, and the distances taken from them so squared in, to the inside of the plank at the bow and stern, deducting from this length what is due to the rake of the bow in the thickness of the deck, and what is due to the rake of the stern-timber in one-third of the round of the beam (I.R. Butts and Company 1865:37).

These rules were almost immediately simplified in *Rules Relative to the Construction of Lake Sail and Steam Vessels*, adopted in 1866 by the Board of Lake Underwriters. The 1866 version simplified the law and stated that length measurements were to be taken from the forward side of the stem to the after side of the stern post on deck (Matthews and Warren 1866:14). In essence, the legal length of the ship does not include the fantail overhang that would add approximately fifteen feet. The wreck's hull is approximately 130 feet by legal

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definition, but would actually be 145 feet overall. The only change made pertaining to length and tonnage measurements made after 1865 occurred on 5 August 1882, at which time an act was passed that allowed a deduction for crew space, storerooms, machinery, etc. (Hirthe and Hirthe 1986).

Additional historical and archaeological research provides further support for identification as the *Joys*. Sources pertaining to wrecks located within Sturgeon Bay include *Wild Gales and Tattered Sails*, by Paul Creviere, Jr., and the online Wisconsin Historical Shipwreck Database. No vessel matching the dimensions and charred condition of the wreck were discovered except for the *Joys*. In addition, the *Door County Advocate* stated that the salvers intended to remove the boiler, propeller wheel, shaft, rudder, shoe, and other valuable vessel parts if the *Joys* could not be rebuilt. None of these items are present. Since the salvers determined that the vessel's structure, including the keelson, frames, and planking, were too badly burned to warrant rebuilding, it is logical to assume that they stripped the machinery and equipment to help pay for the cost of raising the vessel and towing it to the shipyard.

The single most important piece of evidence that identifies the wreck as the *Joys* is evidence of salvage located on the vessel's hull. As mentioned above, the *Door County Advocate* reported that the *Joys* was salvaged by the Leathem and Smith Towing and Wrecking Company in April 1899 (*Door County Advocate* 1899a; 1907a). This involved cutting holes in the vessel's planking below the waterline, into which metal rings, called "thimbles", were inserted to support iron cables. The cables were connected to a barge sunk over the hull and enough water was pumped out to raise the *Joys* from the bottom (*Door County Advocate* 1899). The archaeological survey revealed evidence of salvage, including the presence of an iron cleave, or "thimble", and a half-circle hole cut into the detached port side outer hull planking, into which the thimble would have been inserted.

Sturgeon Bay, Wisconsin, has a rich history deeply steeped in maritime tradition. The opening of the Sturgeon Bay Ship Canal in 1880 assured that Sturgeon Bay residents would have extensive contact with all types of Great Lakes vessels. More vessel traffic meant more shipwrecks and intentional abandonments, ensuring that Sturgeon Bay would play host to wide variety of nineteenth-century Great Lakes vessel types; one of these is the ill-fated vessels was the *Joys*.

Although the *Joys* proved to be one of the most successful steam barges on record, it succumbed to the nemesis of many wooden Great Lakes steam vessels, fire (Rodgers 2003:12; Dappert 2005:60-62). After fourteen years of faithful service in both the lumber and stone industries, the *Joys* was reduced to a breakwater for the Pankranz Lumber Company. The destruction of the *Joys* was unfortunate for its owners, but became an archaeological boon for shipwreck researchers, allowing them a look into one of the Lakes' most undocumented vessel types. The wreck's vessel type, location, condition and dimensions, as well as the absence of other historical candidates, the absence of the propeller wheel, shaft, rudder, and keel shoe, and evidence of salvage combine to implicate the *Joys* as the identity of the wreck.

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Summary Paragraph

The steam barge *Joys* rests in 10 feet of water, 500 feet west of Sunset Park in the waters of Sturgeon Bay. Constructed in 1884 and sunk in 1898, barges like the *Joys* fueled development of the cities of Milwaukee, Chicago, Manistee and Michigan City by hauling in lumber, iron, and stone from Menominee. Generally, little historical documentation exists on steam barge construction and operation. Much of our understanding of this vessel type lies on the lakebed and comes from archaeological data recovered from wreck sites like the *Joys*. The *Joys* meets the registration requirements for Criteria D at the state level as described in the Multiple Property Documentation *Great Lakes Shipwrecks of Wisconsin* (Cooper and Kriesa 1989). The *Joys* wreck site was documented in 2005. Although little cultural artifacts remain, the *Joys*' broken and opened hull has produced important archaeological data on steam barge construction and use, and possessed a vast potential to yield additional important archaeological information.

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Section <u>8</u> Page <u>1</u>

Joys Shipwreck Sturgeon Bay, Door County, Wisconsin

Vessel History

The Joys was launched in 1884 from the Milwaukee Ship Yard Company in Milwaukee, Wisconsin. The Milwaukee Ship Yard Company was organized by Captain John Fitzgerald, the youngest of six brothers who were all Great Lakes captains. In 1874, Captain John Fitzgerald bought the Allan, McClelland & Company holdings and constructed the Milwaukee Ship Yard Company on the former shipyard's location, with John Fitzgerald named as president of the new company. The company's one other officer was Andrew M. Joys, who served as both secretary and treasurer (Cutler and Hirthe 1983:119).

One of the Company's first orders of business was the addition of a dry dock to the shipyard. To accomplish this, Fitzgerald purchased an adjoining property that extended the shipyard's waterfront by 340 feet. The course of the shipyard's slip was changed to accommodate larger vessels, the Allan, McClelland & Company floating dry dock was raised and refitted, and construction began on an entirely new dry dock. (Cutler and Hirthe 1983:119). According to Richard J. Wright:

When the program was completed, the company's 200 feet of new steam-powered floating dry docks could handle the largest freighters on the Lakes. A ninety-foot reconditioned floating dry dock could take smaller vessels, and a permanent dry dock vessels for major repairs [sic.]. The new dry dock was 311 feet long, 70 feet wide at the bottom, and had 15 feet of water over the sill (Cutler and Hirthe 1983:119-123).

After six years of successful operation, the Milwaukee Ship Yard Company won contracts to construct several wooden steam barges. Between 1881 and 1883, the company built the *C.H. Stark, Marshall F. Butters, Louis Pahlow*, and *George C. Markham* (Cutler and Hirthe 1983:123-124). In 1884, Fitzgerald and company built the *Joys*, a steam barge specifically designed for the lumber trade. This vessel was named after the company's secretary and treasurer, Andrew M. Joys (Cutler and Hirthe 1983:127).

The Joys was first enrolled on 1 October 1884 as a "propeller with one deck and two masts, plain head, and round stern" (Ship Information and Data Record: Joys, The C. Patrick Labadie Collection, Alpena Public Library). John Fitzgerald, president of the Milwaukee Ship Yard Company, was the principal shipwright. The Milwaukee Ship Yard Company, Conrad Starke, and James Sheriffs were entered as the Joys' original owners, each with 1/3 share of the vessel (Ship Information and Data Record: Joys, The C. Patrick Labadie Collection, Alpena Public Library). James Sheriffs owned Sheriffs Vulcan Iron Works Company which repaired marine machinery and manufactured propellers, marine engines, steam steering engines, dredging machinery, and deck hoisting engines. The Milwaukee Ship Yard Company had a convenient partnership with Sheriffs' company, as marine machinery from Sheriffs' company was often placed in vessels constructed by the Milwaukee Ship Yard Company, and Sheriffs received partial ownership of these vessels as payment. Joys' fire box boiler was built

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by R. David Marine Boiler Works, and the high pressure engine was built by Sheriffs' Company (Ship Information and Data Record: *Port of Milwaukee*, The C. Patrick Labadie Collection, Alpena Public Library). The vessel's dimensions were entered as 131 feet long, 28.2 feet in beam, 9.9 foot draft, 268.07 gross tons, and 221.55 net tons (Ship Information and Data Record: *Joys*, The C. Patrick Labadie Collection, Alpena Public Library).

Information regarding the ship is scant from 1884-1892. In 1885, the list of owners expanded to include several Milwaukee residents beyond the original co-owners. A new enrollment listed Conrad Starke and James Sheriffs each owning a 4/12th share, the Milwaukee Ship Yard Company with 1/12th, and John Joys, A.M. Joys, and C.W. Norris, each with 1/12th share. L. Olsen was entered as master (Ship Information and Data Record: *Joys*, The C. Patrick Labadie Collection, Alpena Public Library). Despite a dearth of operational history throughout these years, the *Joys* was certainly employed hauling cargo. A list in the *Cleveland Leader* states that the vessel was finally laid up at Milwaukee for the winter of 1885 (*Cleveland Leader* 1885). It is unlikely, however, that the *Joys* was anything more than mildly successful during the 1885 and 1886 seasons, as these were recession years (Rector 1953:215).

Ownership did not change again until 1887. Conrad Starke and James Sheriffs each retained 4/12th shares, and two new owners, William Starke of Milwaukee and Robert Winkler of Manistee, each gained 2/12th shares. A.E. Johnson took L. Olsen's place as master (Ship Information and Data Record: *Joys*, The C. Patrick Labadie Collection, Alpena Public Library). The *Duluth Daily News* mentioned the *Joys* twice in 1887. On April 7th it stated that:

On Saturday evening the steamer *Joys* left Milwaukee for Kewaunee, where she is to take on a cargo of cedar ties for Chicago at the rate of 7 cents apiece. The same figure is being paid to other vessels engaged in the trade (*Duluth Daily News* 1887a).

One month later the paper noted: "The steamer *Joys* sprung a leak at Manistee last Saturday night and Sunday morning had six feet of water in her. The tug *Williams* pumped her out" (*Duluth Daily News* 1887b). By 1889, William Starke had sold his share of the vessel and Conrad Starke, James Sheriffs, and Robert Winkler each owned 1/3 of the vessel. A.E. Johnson remained as master (Ship Information and Data Record: *Joys*, The C. Patrick Labadie Collection, Alpena Public Library). Most importantly, the *Joys* was mentioned in Sturgeon Bay, Wisconsin's newspaper, the *Door County Advocate*, for the first time. On December 21, 1889 the paper noted:

The steambarge *Joys* passed through here [Sturgeon Bay Ship Canal] again Tuesday afternoon with lumber from Menominee to Chicago. This is certainly forcing the season, to say the least...Lumber freights between Menominee and Chicago have advanced to \$2.50 and \$2.75, and the owners of the steambarges Joys [sic] and Mary Mills [sic] are making a good thing out of it by continuing their boats in commission (*Door County Advocate* 1889).

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The *Joys* appears to have navigated the Lakes without incident until 1890. That year, both the vessel's enrollments and its physical structure experienced changes. For unknown reasons, Conrad Starke sold his share of the vessel to James Sheriffs, James transferred his 2/3 share to Christine Sheriffs (most likely his wife), and Robert Winkler maintained his 1/3 share. The *Joys*' master of three seasons, A.E. Johnson, was replaced by Louis Guthrie (Ship Information and Data Record: *Joys*, The C. Patrick Labadie Collection, Alpena Public Library). Two months following the change in ownership, the *Joys* collided with the schooner *Boyce* near Chicago. As a result, both the pilothouse and spar were lost and needed replacement (*Cleveland Plain Dealer* 1890).

In 1892, Christine Sheriff became the vessels' sole owner, and Thos. P. Dunn became the ships master (Ship Information and Data Record: *Joys*, The C. Patrick Labadie Collection, Alpena Public Library). The *Joys* was regularly hauling loads of lumber, but also transported a few cargoes of iron ore and stone. Between 1892 and 1898, the *Door County Advocate* regularly documented the *Joys*' transits through the Sturgeon Bay Ship Canal between Milwaukee, Chicago, Manistee, Michigan City, and Menominee. This route proved to be economically successful for the *Joys*, and it was the first vessel to pass through the canal each season from 1892-1898. The *Door County Advocate* praised the *Joys*' economic success in both 1892 and 1893. The 17 December 1892 edition of the *Door County Advocate* noted:

The propeller Joys [sic] made fifty round trips between Menominee and Milwaukee from June 1^{st} to November 28th. This is an average of one trip in a trifle over three days and a half and includes the loading and discharging of about 350,000 feet of lumber. This is a remarkable exhibit and it is a question whether better work has ever been done on the lakes, no matter where (*Door County Advocate*, 1892).

In 1893, the *Joys* was described as a "greyhound among the lumber carriers" because it made three round trips between Menominee and Milwaukee in one week. During these trips the vessel delivered 1,000,000 board feet of lumber, which was the best showing on record (*Door County Advocate* 1892). The years 1894 and 1895 seemed to have passed without incident, except for a small collision with the scow *Lady Ellen (Door County Advocate* 1894).

During the last three years of the *Joys*' career, the vessel began showing signs of age and underwent several improvements and repairs. In 1896, the foremast was replaced and the crank pin on the engine "ran hot," necessitating repairs in Chicago (*Door County Advocate* 1896a, 1896b). The following year the hull was significantly damaged during a storm and was taken to Sturgeon Bay for "bottom searching and other repairs below the water line, as a result of having the oakum pounded out of the seams for'ard. Also the sail was completely carried away and the gaff broken" (*Door County Advocate* 1897a). At the end of the month, the *Joys* found itself in trouble again when the engine failed en route to to Michigan City from Manistee. The engine failure was repaired at Sheriffs Manufacturing, where it received a new cylinderhead, cylinder, piston, and connecting rod (*Door County Advocate* 1897b).

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During the 1897 and 1898 seasons, the *Joys* primarily carried stone cargoes. This was largely a result of declines in the lumber industry, as well as the simultaneous ascendancy of the stone industry in Sturgeon Bay. In 1897, the vessel was contracted to carry 1,500 cords of stone from the Washington Ice Company quarry to the Muskegon Government piers that were being extended 200 feet and required two 100-foot cribs (*Door County Advocate* 1897c). The *Joys* could carry between 65 and 70 cords per trip, but the quarry could not always keep up with the demand. In 1898, the vessel carried some cargoes of lumber, but was again contracted to deliver cargoes of stone, this time from the Termansen & Jensen Quarry, located on Bull Head Point in Sturgeon Bay, Wisconsin, to Grand Haven, Michigan (Van Harpen 2004:3). By September, however, it appears that the vessel was back in the Menominee lumber trade (*Door County Advocate* 1898d). Another change for the vessel in 1898 was that Christine Sheriff transferred a ¼ share to John A. Connelly of Chicago, who was also listed as master (*Door County Advocate* 1898a).

Unfortunately for the Sheriffs and Captain Connelly, the *Joys*' career ended on 23 December 1898. A fire broke out at approximately one a.m. while awaiting favorable weather in the Sturgeon Bay Ship Canal (Creviere 1997:176). According to the *Door County Advocate*, the fire, "originated from the smoke stack in the vicinity of the breeching, consuming the after cabin first" (*Door County Advocate* 1898f). The *Door County Democrat*, however, stated the fire started in the hold (*Door County Democrat* 1898).

Captain Connelly was the first to spot the fire. He told the *Door County Advocate* that he saw the illumination of flames from his room in the Texas deck (the top of the wheelhouse), threw on his clothes, and sounded the alarm to awaken the rest of the crew. The fire apparently spread so quickly that many of the crew nearly lost their lives. Some crew members, including the mate and steward, had rooms close to the fire and were forced to jump from the ship onto the ice wearing nothing but their shirts. None of the crew, except for Captain Connelly, was able to save any of their possessions. Connelly supposedly saved the ship's papers, but later lost the books and most of the accounts in the excitement. The crew attempted to stop the fire from spreading by using the mooring line to head the vessel into the wind. Before they could accomplish this, however, the mooring lines burned and the current carried the *Joys* towards the canal office and government warehouse. When it looked like these buildings might ignite, the crew of the local Life-Saving Station helped attach a kedge anchor and chain to the waterline and sank (*Door County Advocate* 1898f). A week later, the vessel was surrendered to the insurance company as a total loss (Ship Information and Data Record: *Joys*, The C. Patrick Labadie Collection, Alpena Public Library). The *Joys* was valued at \$15,000 and carried \$14,000 worth of fire insurance (*Door County Advocate* 1898g).

Though history can seldom be used to accuse someone of a crime, historical hindsight suggests the burning of the *Joys* may involve insurance fraud. Several details regarding the fire are at odds. First, the vessel owners appeared to be having a hard time turning a profit at the time of loss. The lumber industry had peaked in 1892, and since that time lumber production rapidly declined, rendering a large portion of the steam barge fleet idle (Rector 1953:215). The excess transportation capacity certainly gave the *Joys*' owners a reason to decommission the vessel. In February 1898, a vessel owner from Michigan published a letter in the *Door*

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County Advocate in which he expressed his concerns:

The lumber carriers for several years past have been running at ruinously low rates on account of the strong competition of the vessel owners themselves. I think this could be very easily overcome, providing enough of the owners would get together to form a lumber carrying association to fix a minimum rate of freight, whereby it would show a reasonable return on the investment... (Door County Advocate 1898a).

Three months later the *Door County Advocate* mentioned again that the lumber trade was stagnating (*Door County Advocate* 1898b), and again in June, the *Advocate* noted signs of trouble in the lumber industry:

The small freighters are better off this season than the big fellows. The former can secure cargoes of lumber and wood where the others would find it both impracticable and unprofitable to do so under existing conditions (*Door County Advocate* 1898c).

The difficulty the Joys was having obtaining cargoes was also discussed:

The *Joys* being unable to obtain a stone cargo, or rather there being no present demand for this material at Grand Haven, Captain John A. Connolly on Monday took a ride across to Marinette on one of the passenger steamers and he was successful in corralling a load of lumber at that port. The crew of the Joys [sic] had mean time [sic] dressed the hull and upper works in a handsome coat of green and white paint, which very greatly adds to the appearance of the craft (*Door County Advocate* 1898c).

In all, it seems to have been a time of financial hardship for the *Joys*' owners. The lumber industry was suffering and the *Joys* was finding it difficult to obtain cargoes.

Other suspicious aspects of the fire are evident in the statements given by Captain Connelly to the *Door County Advocate*. First, Connelly allegedly was the first to notice the fire even though his quarters were forward and farthest away. He also claims that, as soon as he saw the fire, he immediately threw on his clothes and ran to give the alarm. Secondly, the fire spread so fast that most of the crew lost everything including money, jewelry, and clothing. Connelly, however, claimed that he had time to grab the ship's papers, books, and accounts, which were also located forward and farthest from the fire, but later were mysteriously lost. Finally, the captain claimed that he had no idea whether or not the *Joys* carried any fire insurance, claiming that James Sheriffs, "looked after the chartering, insurance, and other details incidental to her management" (*Door County Advocate* 1898e). It seems odd that Connelly, who owned a fourth of the ship, did not know if *Joys* carried fire insurance.

One other point warrants consideration: the *Joys* was destroyed by fire on the last trip of the season right before undergoing an extensive and expensive scheduled rebuild at the Sturgeon Bay dry dock (*Door County Advocate* 1898e). It could be theorized that Connelly and Sheriffs wanted to burn the *Joys* before they needed to finance

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an expensive rebuild. Alternatively, the fire may have also been the result of the owners' lack of income - financial hardship could have forced the owners to skimp on routine maintenance expenses, leaving the ship vulnerable to accidental fire.

No matter what the cause of the fire, something still had to be done with the burned hull. Brief inspections of the burned hull showed that additional damage to the vessel was sustained because the weight of the machinery and boiler aft countered that of the cables and anchors forward and broke the hull amidships, causing the foremast to break and fall (*Door County Advocate* 1898g). Leather and Smith, a local quarrying company, purchased the vessel for its engine and boiler (Creviere 1997:263.)

The Leathern and Smith Towing and Wrecking Company began the job of salvaging the remains in April 1899. The wrecking tug *Wright* successfully recovered the *Joys*' boiler with the help of a scow and steam derrick. The boiler was placed in the tug *Smith*, and later was purchased by the Charlevoix Lumber Company and placed in their tug (*Door County Advocate* 1899a; 1907a).

Raising the hull proved a more difficult task and involved passing two iron cables through holes cut in the hull planking, one cable forward and one aft, near the bottom. Then a lighter was sunk over the hull, the cables fastened to it, and the water pumped out of the lighter. Once the vessel was raised off the bottom, it was secured to the tug and towed to the shipyard. According to the *Door County Advocate*, "The hull will be raised on the dock and if worth it will be rebuilt, if not, the propeller wheel, shaft, rudder, shoe, etc. will be removed and the hull disposed of in some manner" (*Door County Advocate* 1899b). By May, salvagers determined that the keelson, frames, and planking were too badly burned to warrant rebuilding, and several tons of iron were stripped from the bottom of the hull and it was towed to Dunlap Reef and beached (*Door County Advocate* 1899c). Later, the *Joys* was unceremoniously towed from Dunlap Reef and dropped off on the north side of the Pankratz Lumber Company's boomage, where it was scuttled and utilized as a breakwater (*Door County Advocate* 1899d). There, the ship once hailed as the "greyhound of the Lakes" found its final resting place (*Door County Advocate* 1907b; 1909; 1910).

Archaeological Significance

The wreck of the steam barge *Joys* lies in ten feet of water in Sturgeon Bay, approximately 500 feet from Sunset Park. The wreck is embedded in a silty bottom in ten feet of water, and is largely intact below the waterline. Sections of the hull sides lie within, and adjacent to, the lower hull. Much of the hull exhibits a large amount of fire damage, and evidence of salvage. The *Joys* is representative of a little-documented Great Lakes vessel type, the steam barge.

The Joys meets the registration requirements for Criterion D at the state level, as established in the Multiple Property Documentation Great Lakes Shipwrecks of Wisconsin (Cooper and Kriesa 1989). The Joys is a rare example of a vessel type that was vital to the Lake Michigan region's economic and transportation

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infrastructure. Steam barges like the *Joys* were an important link between northern Lake Michigan lumber towns and the southern Lake Michigan cities, providing the lumber that was vital to build the Upper Midwest. No record of their construction exists today, making archaeological examples particularly significant. The techniques employed in their construction and the economic rational behind their design and operation are not fully understood today. Information gathered at the *Joys* site has increased our understanding of steam barge construction and use on the Great Lakes, and the *Joys* site retains the potential to yield even greater insight into this rare vessel type.

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1898b Door County Advocate. 28 May.

1898c Door County Advocate. 25 June.

1898d Door County Advocate. 24 September.

1898e Door County Advocate. 24 November.

1898f Door County Advocate. 24 December.

1898g Door County Advocate. 31 December.

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1899b Door County Advocate. 29 April.

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Boundary Description

The area included in the site is a circle with a 200 foot diameter centered on the UTM coordinates 0469257 Easting, 4966259 Northing, Zone 16.

Boundary Justification

The boundary was drawn to encompass the extent of the shipwreck and associated debris field.

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Joys Shipwreck Sturgeon Bay, Door County, Wisconsin

Photo #1 of 1 Joys Shipwreck Door County, Wisconsin Photographer Unknown Ca. 1900 Original Image at the Historical Collections of the Great Lakes, Bowling Green State University. Duplicate negative at the Wisconsin Historical Society Steam barge Joys – historic image

