



One of the new whaleboats that will be carried aboard the whaleship CHARLES W. MORGAN at the conclusion of her current round of restoration comes together at the Workshop on the Water at the Independence Seaport Museum. The museum is in Philadelphia, Pennsylvania, which seems fitting, since the namesake owner of the 1841 ship was born and raised in that city.

COURTESY WORKSHOP ON THE WATER

## Whaleboats for the CHARLES W. MORGAN

by Tom Jackson

**P**roof that form follows function—and that a particular kind of beauty follows both—can be found in almost any wooden workboat. The 19th-century American whaleboat is a prime example, as boatbuilding volunteers and apprentices have been learning this year in two cities.

With experienced supervisors, these urban boatbuilders have been constructing 28'-long whaleboats at the Workshop on the Water, run by the

Independence Seaport Museum in Philadelphia, Pennsylvania, and at Rocking the Boat, the Bronx, New York, program that has been so successful in inspiring young men and women. In consultation with shipwrights from Mystic Seaport, Connecticut, the boats are authentically built to a 19th-century design by the Beetle Company of New Bedford, Massachusetts, which built hundreds upon hundreds of them.

These two boats, authentically detailed

and outfitted, will join others on exhibit and in use at Mystic Seaport in connection with the largest ship in its collections, the CHARLES W. MORGAN, the last American whaleship, which was built in New Bedford in 1841 and is now undergoing a thorough restoration (see article, page 64).

The ship restoration involves enormous live oak timbers and long, broad hull and ceiling planks of longleaf pine and white oak, but whaleboats occupy



the opposite end of the boatbuilding spectrum. They are lightly but strongly built, using ½"-thick Atlantic white cedar planking over steam-bent white oak frames.

In whaling days, such boats had to be easy to lower from davits and fast under sail or oar in the dangerous hunt for whales (see WB No. 171). Whaleboats in the 19th century had to be repaired and replaced regularly, and so do those at Mystic Seaport. Slung in davits as part of the ship's outfit and used in displays of boat handling for the museum's visiting public, they, too, wear out, creating periodic need for replacements. With the shipyard focused on such a major project, the museum sought collaboration from boatbuilding programs to round out its whaleboat fleet in time for the ship's relaunching in 2013.

Bruce Mackenzie, director of Workshop on the Water, said that the Philadelphia boat was started in June 2011. Newt Kirkland and Jeff Huffenberger, leading a cadre of volunteers, had her framing—which follows planking in these boats—nearly completed as of this writing in March, with interior fitout soon to follow. "We have a large volunteer pool that has worked alongside every step of the way," Mackenzie said. "We've been using a video provided by Mystic as a guide, but we have come up with some of our own methods as well. For instance, I did away with the bending jig they recommended and used a compression-strap bending jig that cut the 50-percent breakage rate down to zero." Following the semi-production methods innovated by Beetle, the builders prebent the white oak stems. They also prebent the ¾" × 1⅞" frames on edge. These boats use a blend of batten-seam and lapstrake planking. Batten-seam planking on the bottom allowed them to slice through the water stealthily as they approached their prey, and it also meant the seams didn't leak when a dry boat was plunged into the water. Lapstrake fits for the garboard-to-first-broadstrake seam and on the two top strakes gave the boats longitudinal strength for the bashing they took during use. The frames are notched to fit around the ⅝" × 1⅜" battens that back the length of most of the plank seams and receive clenched-nail fastenings.

Adam Green, the director at Rocking the Boat (see WB No. 204), said that apprentices there had been working with staff boatbuilding instructor Geoff McKonly since July 2011, using molds and patterns passed on by their Philadelphia counterparts. They're getting advice, and moral support, from both the Philadelphia builders and Mystic Seaport. The Mystic shipwrights



**Working with apprentices at Rocking the Boat in Bronx, New York, Geoff McKonly uses a pry bar to persuade a steamed and kerfed stem to conform to a bending jig. The apprentices will not only build a whaleboat but also sail it from New York to Mystic, Connecticut.**

COURTESY OF ROCKING THE BOAT

have also provided planking stock and have given the New York apprentices tours of the ship restoration project. Peter Kellogg, a Workshop on the Water benefactor, is supporting both whaleboat constructions. As of late February, molds were set up at Rocking the Boat, some 80 frames had been bent, and planking was scheduled to start soon.

Lowell's Boat Shop in Amesbury, Massachusetts (see Currents, WB No. 213), is also hoping to raise enough money by September for a whaleboat construction of its own, according to Graham McKay, the lead boatwright.

"Programmatically," Green said, "it is a project of the Boatbuilding Job Skills Program—and is indeed the largest-scale project boatbuilding apprentices have ever taken on. There are 8 to 12 juniors and seniors in high school who have already been through a year or more of the student program and have been accepted into this more specialized program," and many have committed to see it through to the end. Green says the challenge has sharpened their technical skills markedly. "Needless to say, this has been a fantastic project—and one that the apprentices have really rallied around. The whaleboat construction has been a wonderful thing for Rocking the Boat, not just helping to re-create a piece of history, but very

directly acting as a perfect medium to help the young people we serve develop the self-confidence to set ambitious goals and the skills necessary to achieve them." They'll have an adventure, too: the boat will sail on its own keel from New York to Mystic.

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*Workshop on the Water, Independence Seaport Museum, Penn's Landing, 211 South Columbus Blvd. & Walnut St., Philadelphia, PA 19106; 215-413-8638; [www.phillyseaport.org/boatshop.shtml](http://www.phillyseaport.org/boatshop.shtml). Rocking the Boat, 812 Edgewater Rd., Bronx, NY 10474; 718-466-5799; [www.rockingtheboat.org](http://www.rockingtheboat.org). Lowell's Boat Shop, 459 Main St., Amesbury, MA 01913; 978-834-0050; [www.lowellsboatshop.com](http://www.lowellsboatshop.com).*

## Around the yards

■ **Wooden Boatworks in Greenport, New York, is replanking STORM, a 1946 Bill Luders-designed yawl. The 49' boat, built at Luders Marine Construction, is being double-planked in Honduras mahogany over Alaska yellow cedar. This 2012 round of restoration follows a string of extensive off-season refits that has included designing and building a new yawl rig, replacing her decks and restoring her trunk cabin,**