# Maritime Archaeologist at Helm of Modern Journey to Ancient Egyptian Land

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(PhysOrg.com) -- Ancient Egyptians may be best known for building pyramids, but internationally renowned maritime archaeologist Cheryl Ward wants the world to know that they were pretty good sailors, too.

She ought to know. Ward, an associate professor of anthropology at The Florida State University, and an international team of archaeologists, shipwrights and sailors recently built a full-scale replica of a 3,800-year-old ship and sailed it on the Red Sea to re-create a voyage to a place the ancient Egyptians called God's Land, or Punt. Their expedition was financed and filmed as part of a French documentary that will air internationally and on an upcoming episode of "Nova."

"This project has demonstrated the extraordinary capability of the Egyptians at sea," Ward said. "Many people, including my fellow archaeologists, think of the Egyptians as tied to the Nile River and lacking in the ability to go to sea. For 25 years, my research has been dedicated to showing the scope of their ability and now, to proving their independently invented approach to ship construction worked magnificently at sea."

The project grew out of the 2006 discovery of the oldest remains of seafaring ships in the world in manmade caves at Wadi Gawasis, on the edge of the Egyptian desert. The Egyptians used the site to assemble and disassemble ships built of cedar planks and to store the planks, stone anchors and coils of rope until the next expedition -- one that obviously never came. Civil unrest and political instability after the Middle

Kingdom period (2040-1640 BC) likely put a halt to further exploration, and the caves were long forgotten, Ward said.

Ward, who serves as principal investigator for maritime archaeology at Wadi Gawasis, determined that the wooden planks found in the caves were nearly 4,000 years old. Based on the shipworms that had tunneled into the planks, she hypothesized that the ships had weathered a long voyage of up to six months, likely to the fabled southern Red Sea trading center of Punt.

Scholars had long known that Egyptians traveled to Punt, but they debated its exact location and whether the Egyptians reached Punt by land or by sea. Some had thought the ancient Egyptians did not have the naval technology to travel long distances by sea, but the findings at Wadi Gawasis confirmed that Egyptians sailed a 2,000-mile round trip voyage to Punt, located in what is today Ethiopia or Yemen, Ward said.

After the discovery at Wadi Gawasis, Valerie Abita of the French production company Sombrero and Co. asked Ward to participate in a documentary about a modern re-creation of the voyage Egyptian female pharaoh Hatsheput sponsored to Punt. Ward designed and supervised the reconstruction of a Punt ship with the assistance of a naval architect, a consulting shipbuilder and an on-site Egyptian archaeologist.

The process involved several trips to Egypt to conduct more research, select a shipyard to build the vessel and choose materials. (It turns out that Douglas fir, the most common Christmas tree in America, is most like the ancient cedar the Egyptians used in terms of strength and density.) Along the way, Ward enlisted the FSU Master Craftsman Program to build small-scale models of the ship to help her to refine details of the plank shape and layout.

By October 2008, the 66-foot-long by 16-foot-wide ship, which Ward

dubbed the Min of the Desert, was completed using the techniques of the ancient Egyptians -- no frames, no nails and planks that were designed to fit together like the pieces of a puzzle. After immersing the ship in the Nile to permit the timbers to swell closed around the wood fastenings, mounting the rigging and testing the steering system, they transported the complete ship by truck to the Red Sea -- rather than carry it piece by piece across the desert as the ancient Egyptians would have done.

In late December, the 24-person international crew set sail on the Red Sea with Florida State Assistant Professor of English David Vann, an accomplished sailor and acclaimed author, serving as captain. Political limitations as well as an abundance of modern-day pirates along the southern end of the route kept the crew from leaving Egyptian waters, and the voyage ended after seven days and about 150 miles into what would have been a 1,000-mile trip to Punt. But the weeklong voyage provided a new appreciation for the skills and ingenuity of the ancient Egyptians, Ward said, noting that the crew was surprised at how fast the ship was able to travel -- approximately 6 knots, or 7 mph.

“The ship’s speed means that journeys would be made in much less time than Egyptologists had calculated, making the whole voyage simpler and more feasible for the ancients,” she said, adding that it probably took about a month to sail to Punt and two months to return. “The technology we used had not been applied to shipbuilding for more than 3,500 years, and it still works as well today as it did then.”

Not that it was easy.

“When it was time to raise the sail and point our bow south toward the land of Punt, we had only our crew and human energy to rely on,” Ward said. “Whether standing and rowing over the rail, hauling on a line to hoist the sail without the help of pulleys or keeping track of our progress along the shore, we all felt connected to those ancient sailors on their

epic voyages."

Provided by Florida State University