

Non-European shipwrecks of the western Indian Ocean

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The western Indian Ocean (WIO) along the East African coast, popularly known as the Swahili coast, stretches between lat 15°48'0"N and 14°53'5"N and long 74°20'1"E and 73°40'3"E. The Swahili coast extends 3000 km from Somalia to the north through Kenya and Tanzania to Mozambique in the south. It also includes island states of Comoro, Seychelles, Madagascar, Reunion and Mauritius. The characteristics of the coastal areas of continental countries and Madagascar are similar: alternating beaches, rocky outcrops, coral reefs, large estuarine areas, wetlands, lagoons and inter-tidal flats. The coastline consists of reefs, lagoons, beaches, rivers, creeks and low-lying coastal plains. For hundreds of years, by using different types of water crafts, maritime traders have sailed the Indian Ocean, governed by adequate knowledge of regular and predictable monsoon winds blowing between the Indian subcontinent and Africa. The east African coast occupies a significant place in the maritime activity and trade contacts with the external world in the Indian Ocean.

Keywords: Anchor, copper ingots, Mombasa, *Mtepe*, Swahili.

Introduction

ANCIENT records reveal the prevalence of thriving maritime activity along the east African coast^{1–5}. The Swahili coast was an important player in the transoceanic western Indian Ocean (WIO) maritime trade. For instance, records allude to vibrant mangrove export trade from Ngomeni, Malindi, Kenya to the Middle and Far East during the 13th century CE. Historical coastal settlements of Kismayo, Lamu, Zanzibar, Kilwa and Sofala were important port towns, as they were strategically situated along busy sea lanes. During the early centuries CE trade took place at inland ports which were connected by river routes. Since seagoing ships could not sail up the narrow rivers, traditional boats such as sewn and nailed plank boats or extended logboats might have been in use for inland transportation. The author of the *Periplus Maris Erythraei* mentions the role of traditional boats in hinterland and maritime trade^{6,7}.

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Traditional ships in the Swahili coast

Various types of traditional boats have existed along the Swahili coast, including sewn plank boats popularly known as the *Mtepe*, logboats and plank boats. Greco-Roman visitors mention African sewn boats as early as 4th century CE (refs 6, 8–10). Archaeological evidence for early boats in the Swahili coast is, however, not consistent. There are boat models depicted on the walls of ancient settlements. Surveys and excavations at ancient towns of Kilepwe along Mida creek off the ancient city of Gede and Mtwapa in Kenya, Kilwa and Ras Mkumbu in Tanzania have yielded boat illustrations and graffiti^{3,5,11,12}. These boat graffiti probably depict the *mtepe* type of boat that plied the Indian Ocean in the last centuries before CE. Further, these are the boats referred to by the Portuguese and are believed to have been in use in the Swahili coast until the early centuries of the Common Era. They also depict the maritime trade in the WIO before the arrival of the Portuguese and complement documentary sources of vessels used along this coast as mentioned in the *Periplus*^{6,7,12,13}.

Non-European shipwrecks of western Indian Ocean

There has not been a systematic underwater survey off the Swahili coast, including its islands, for shipwrecks. Although the coast is dotted with historic period settlements, however, the archaeological investigations have not produced the much desired information on the coastal communities. The dangers of shipping in the ancient times are known and many western shipwrecks are reported lost in these waters^{14,15}. There has not been serious maritime study of this coast. Patience¹⁵, who did many commercial salvage operations on the Swahili coast has documented over 100 shipwrecks, all of them of European origin.

Some of the underwater surveys undertaken off the Swahili coast have brought to light a few shipwreck sites. In Lamu, surveys have recovered anchors, wooden features and Chinese porcelain on the seabed along the Pate Bay (Figures 1 and 2) including a pot with dragon emblems, typical of Chinese motifs of the 14th century CE (refs 16–18). Dragon motifs are the emblems of the

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Chinese Ming Dynasty emperors. During the Ming dynasty, the Chinese are known to have launched maritime missions to African countries^{3,19}. During one of these voyages to East Africa one of the Chinese junks sank near Pate Island.

Maritime surveys in Malindi have documented several sites that are yet to be confirmed as shipwrecks. These include a 14th–15th century CE wooden shipwreck containing Chinese and Indian pottery off Leopard Bay reef^{15,18}. An object rising about 100 feet (30.48 m) from the sea floor has been called ‘Mambrui lump’. This

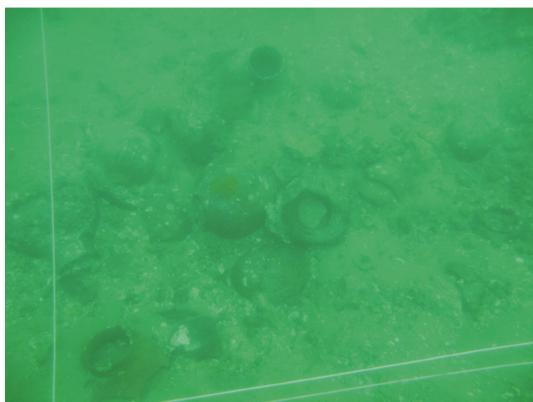


Figure 1. Shipwreck sites in Lamu with anchor and pottery scatter¹⁸.

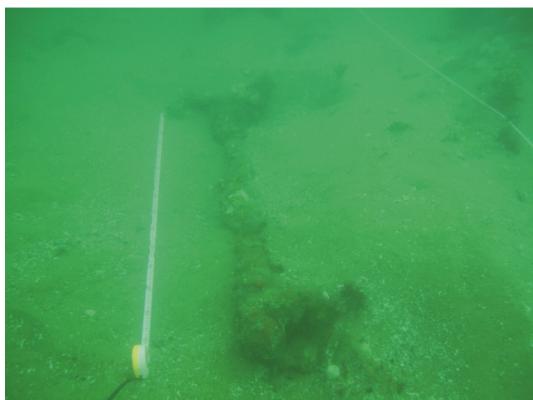


Figure 2. Shipwreck sites in Kenya with anchor and pottery scatter¹⁸.

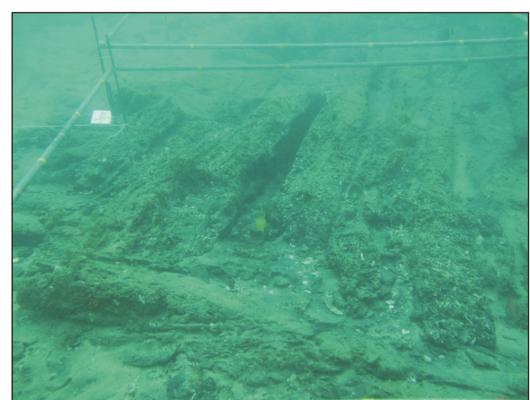


Figure 3. The Ngomeni shipwreck site²¹.

feature has been sighted by several sailors who have noticed unusual structures in the seabed of Ungwana Bay²⁰. Further, a 15th century CE shipwreck in Ngomeni, 30 km north of Malindi town has produced huge amounts of Islamic and Far Eastern wares dating to 13–15th century CE (ref. 21). However, presence of copper ingots with a visible trident seal similar to the Fugger family crest has raised doubts as to whether this was an Arabic or Portuguese vessel (Figure 3). The Fugger was a prominent merchant and banking family from Germany. Together with others such as the Welser family, the Fuggers are known to have supplied merchandise that formed part of the commercial artery of the Portuguese crown²².

Maritime surveys in Mombasa have documented an array of shipwreck sites (Figure 4). A collaborative geo-physical survey of Mombasa Island revealed numerous underwater sites, some of which may be shipwrecks^{23–26}. Further, underwater surveys in 2008 at the channel

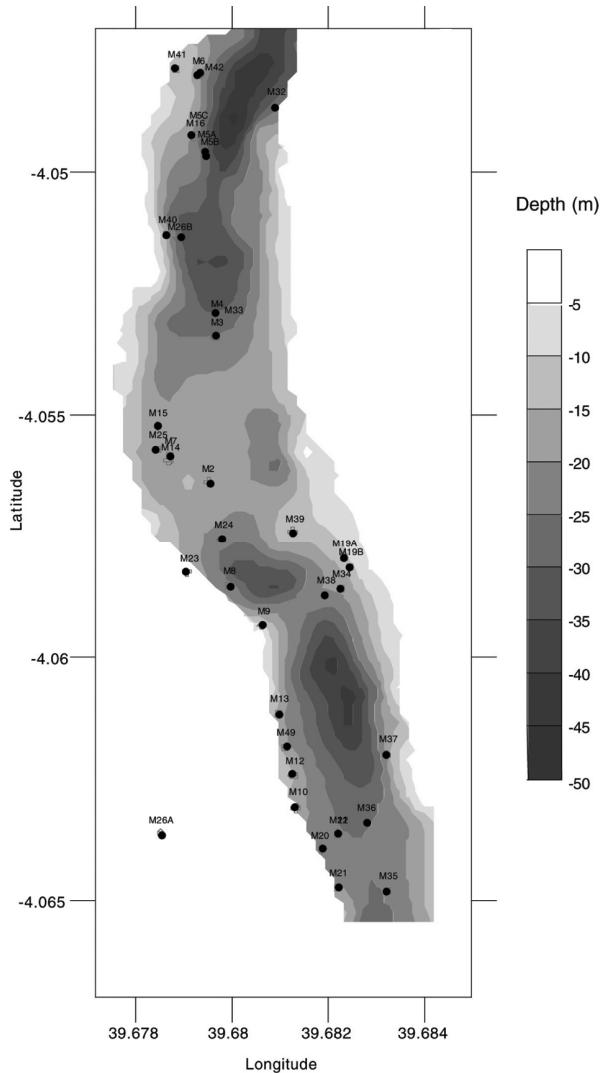


Figure 4. Underwater sites around Mombasa Island and a shipwreck embedded in concretion found near the site where stone anchors were found^{26,35}.

entrance to the ancient port of Mombasa recovered three stone anchors²⁷. Among these, one is an Indo-Arabian type while the other two are composite types²⁸. The shape and size of the three stone anchors resembles anchors found along the Indian, Sri Lankan and Oman coasts and the Mediterranean region^{29–35}. The presence of these stone anchors suggests possible ancient non-western shipwrecks in the waters of Mombasa.

Conclusion

Evidence that depicts earlier non-western vessels such as ships, dhows and canoes are known from various ancient Swahili settlements along the east African coast. These range widely in date from charcoal drawings of the 15th century CE, *Mtepe* found in Fort Jesus, to the 15–16th centuries CE Swahili coastal towns of Kilwa, Ras Mkumbu in Tanzania; Mida and Kilepwe in Kenya. These engravings provide best evidence until such a time as actual shipwrecks are discovered.

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