

ENCYCLOPAEDIA OF UNDERWATER ARCHAEOLOGY

Barbarian seas

Late Rome to Islam



Periplus



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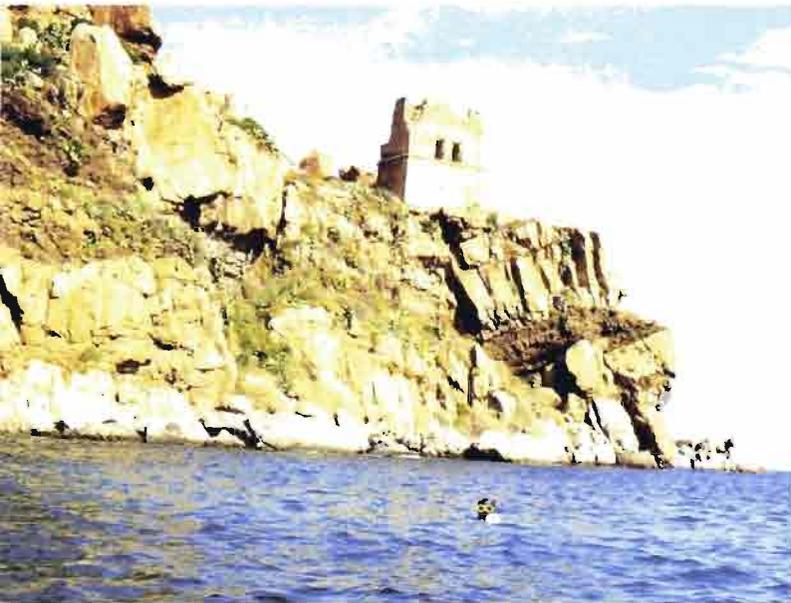
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The Byzantine shipwreck of Cefalù

Gianfranco Purpura

A Byzantine wreck, rather long and narrow in shape and of eastern origin, foundered off Cefalù in Sicily around the first half of the 6th century AD and sank in a few metres of water near the shore. The wreck probably came to rest on a projecting reef, where the heavily ballasted vessel was most likely silted up, thereby forming a kind of barrier against the waves. The ship's superstructure will have been destroyed, and the cargo, blown by the wind, scattered around the area. Since the ship foundered in shallow water



The shoreline at Cefalù, site of the wreck of a 6th-century Byzantine warship. Photo: Alessandro Purpura

and near an inhabited area, salvage of the numerous and valuable objects on board was probably attempted.

However, where they ended up broken into pieces, buried in sand and mud, it would have no longer been possible to identify them or save them. In fact, Late Antique divers were unable to carry out underwater excavations, even of modest scope. Interestingly, on a Roman wreck transporting fish sauce and studied by Edoardo Riccardi off Sicily, significant underwater salvage work had been attempted in antiquity. The salvagers had even sawed through a floor timber in order to recover wood from the wreck but the more valuable objects scattered around the site under a few metres of water and concealed by a layer of sand were not recovered. The intact cargo and personal

belongings on the early 1st-century AD Comacchio wreck, silted up on land near the coast, demonstrate the often surprising potential of shallow sites.

Towards the middle of the 6th century, Sicily was in the hands of the Ostrogoths of Totila, who had invaded the region, and Justinian was attempting to reclaim North Africa and Italy for the Empire: these were territories over which, for some considerable time, no Roman emperor had been in any position to claim the least authority.

Since then, the great tumulus of the ballast stones on the shipwreck, surrounded by sand, have been an irresistible attraction not only for fish, but also for men, who, while fishing, spotted the presence of at least seven contemporary Byzantine iron anchors clustered around this mound. Protruding from the wreckage are what look like the trunks of



A North African amphora neck found on the site of the Cefalù shipwreck. Photo: Alessandro Purpura

trees with their bark still on, located in a regular pattern all along the tumulus (first identified by Alessandro Purpura in 1980).

The idea that this was a shipwreck was confirmed when it was observed that the tree-trunks had been worked (only at intersections), at the level of a beam that must have been a wale, between the remains of the upper deck beams and the floor timbers. Similar partly finished timbers were recorded on the 7th-century Byzantine wreck at Yassi Ada in Turkey, where specific external timbers were left undressed to reduce labour costs.

The uncovering of the fore of the ship – a cleat with traces of wear left by the mooring rope and parts of the planking – that can be seen today (still buried near the site mound), confirms the existence of the disintegrated elements of a shipwreck that had slowly broken apart and drifted away from its final mooring, marked by an anchor located about 100m away.

An additional circumstance contributed to the concealment of this vast archaeological site over the course of time. In the 18th century, Emanuele Filiberto, Viceroy of Sicily, planned to use the mound formed by the Byzantine vessel as a foundation for the construction of a mole, over which rubble would be thrown. This potentially destructive project was, fortunately, almost immediately abandoned. Nevertheless, the limited work undertaken was sufficient to conceal the traces of what seems to have been a warship originating in the Black Sea, that had been involved in an obscure naval victory at the time of Justinian's reconquest of Sicily during the war against the Goths (AD 547–551).



Part of a stone pulpit with the remains of inlay formed part of the ship's ballast. Photo: Alessandro Purpura



This section of a ship's mast was found half buried near the mound of ballast stones at Cefalù. The proximity of 17th-century remains complicates its attribution. Photo: Alessandro Purpura

The confirmation of the shipwreck's mid-6th century date is provided by various ceramic objects, intact and homogenous, surrounding the site, including an oil-lamp that showed clear signs of use. The variety and limited quantity of the different types of amphorae present tend to indicate a military vessel, rather than a commercial one. Greek and Latin

criptions written on the amphorae are mainly proper names, and include 'Iereus', 'Aimes' and 'vinu(m) Silvani'. The presence of high-quality fine-ware pottery, such as a large African red-slip bowl, confirms the impression of wealth created by the objects on board.

In addition to the numerous wooden objects found at the site, were amphorae, iron tools of every kind – adzes, sledgehammers, pickaxes and pitchforks, pieces of sulphur, a small copper ingot and a sounding-lead. Objects originally stored in the ship's poop – such as cooking pots, frying pans, and fireproof bricks blackened by flames – were found to the eastern edge of the site. A *foculus*, an onboard portable stove used for cooking and providing hot water, seems to derive from the area of the site mound. To judge from the underwater finds, partly buried *in situ* and partly recovered and now exhibited in the Antiquarium of Imera, the cove saw frequent use as an anchorage from at least the 4th century.

A sword underlines the probable military character of the shipwreck, confirmed by stone cannon-balls and by a mysterious stone object that may have formed part of an ancient catapult. Even more difficult to interpret is an iron pipe, set into a massive wooden beam in a U-shaped cavity. This could be a 15th-century cannon, but objects from that period are absent along this part of the coast. A flame-thrower from a Byzantine dromon has never



The author examining the remains of a strongbox.

Photo: Alessandro Purpura

yet been found. This piece of equipment, fed by bellows, could expel inextinguishable Greek Fire (a sulphur-based mixture) from the prow. Interestingly, fragments of sulphur are present on the site.

Greek Fire was apparently used in the Battle of Crete against the Arab fleet towards the middle of the 7th century AD, but seems to have been preceded by an earlier prototype. Nevertheless, in the absence of any irrefutable evidence, a hypothesis of this object's significance cannot be formulated in relation to the Cefalù shipwreck: an actual discovery has not yet been made, even if one can envisage such an eventuality. Any suggestion that the piping structure on the shipwreck is an early 15th-century cannon is unfounded, although the



Form Byzantine iron anchor from the Cefalù shipwreck.

Photo: Alessandro Purpura

theory that such artillery may have been modelled on more ancient armaments seems justified.

A possible future avenue for research into the history of the Byzantine site at Cefalù involves the composition of the ballast, made up not only of amorphous stones (pink granite, micaceous rock, white marble), but also from high-quality architectural elements, perhaps remains stripped from dilapidated buildings. The architectural finds include part of a small column, a capital, the cornice of an *ambo* (pulpit) inlaid with coloured stones now removed, fragments of flagstones, a marble threshold from Proconnesos and a fragment of the drape from a statue's garment. It might be supposed that the large ship, measuring over 30m long and very finely built, was heavily ballasted with an equal amount of construction material that had been abandoned near the dry-docks of the unknown last port of departure following a disastrous event there, such as an earthquake. Shortly after the despatch of the fleet of 300 dromons during the Justinian reconquest of Sicily, under the command of the former functionary Liberio in 547, Constantinople and the adjacent zones were, indeed, shaken by significant earthquakes (in October 541, August 542, April 546 and in February 548).



The absence of concretions on part of the strongbox fragment indicates an earlier salvage attempt.

Photo: Alessandro Purpura



A portable stove from the Cefalù shipwreck. Photo: Alessandro Purpura



A Byzantine dromon engulfing an enemy ship with Greek Fire discharged through a flame-thrower positioned in the bows. Prado, Madrid, Spain.

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the flame-thrower [*siphon*], girdled with bronze in the usual fashion, through which the prepared fire mixture is shot at the enemy. Topping a flamethrower of this sort there should be a false walk of planks, also fenced about with planks, on which the fighting personnel will take its stand.”

In addition to the flame-thrower fixed on to the bows, personnel on some warships used additional hand-held flame-throwers. Up to 20 mechanical crossbows might be mounted along a ship to fire forged bolts known as ‘bluebottles’. Another integral feature of the dromon’s armament was the catapult used to sling clay pots of Greek Fire at enemy sails.

The Mainz galleys

Other than an extremely important, 35m-long shipwreck recorded off Cefalù in northern Sicily by Gianfranco Purpura of the University of Palermo, marine archaeology has shed no light on the 700-year tradition of dromon ship construction. The closest examples excavated are a cluster of ships discovered in the winter of 1981–2 along the River Rhine at Mainz, Germany, during the construction of the Hilton Hotel. These are now wonderfully displayed in the purpose-built Museum of Ancient Seafaring at Mainz.

The frontier town of Roman Mainz was developed under the elder Drusus as the legionary fortress of Mogontiacum, later capital of Germania Superior. Rescue excavations directed by G. Rupprecht along the foreshore of the River Main, directly under the shadow of the Late Roman city wall, exposed a Roman river port consisting of two basins surrounded by wooden jetties. Excavations along the foreshore uncovered six Late Roman warships. This flotilla had been