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BYZANTINE SHIPWRECKS EXPLORED BY THE CENTRE FOR UNDERWATER ARCHAEOLOGY IN THE BLACK SEA



This article presents the Byzantine shipwrecks discovered by the Centre for Underwater Archaeology of Kiev National University along the shelf of the Crimean Peninsula, in the Black Sea.

Key words: Byzantine shipwreck, underwater archaeology, the Black Sea, Crimea.

The Black Sea played a critical role in maritime trade, bringing peoples and cultures together. Since the Bronze Age both small boats and large ships, loaded with cargos and people furrowed the Sea. The height of ancient maritime trade was reached during the Greek Colonization in the 7th–3rd centuries BC and continued during the Byzantine Epoch. After the fall of the Eastern Roman Empire, its successor Byzantium maintained its status as a thallocracy. From the 5th until the beginning of the 7th century AD the Byzantine fleet dominated the entire Mediterranean.

In this century the Slavs began launching maritime campaigns from the northern shores of the Black Sea, reaching Mediterranean, Adriatic, Aegean waters. Comparatively, on the western edge of the Mediterranean the Arabs began launching invasions on both land and sea. Beginning in this period, Byzantine seafaring took on an increasingly military character, and from the 7th to 11th centuries several significant naval battles were fought between the Byzantines and the Slavs.

The Slavs' fleet was so dreadful for the people of Tsarigrad (Constantinople) that the Black Sea was at times referred to as the "Russ Sea". In the 11th century the Crusades were launched, and fleets from the Maritime Republics of the Italian peninsula became the main trade and naval forces in the Black Sea waters.

When the Byzantines lost control over the Bosphorus in the 13th century, the Black Sea appeared to be open for merchants from Western Europe, most of all for the Venetians, Pisans and Genoese.

By virtue of experienced and adventurous Italian negotiators and seafarers, maritime trade in the Black Sea during the 13th to the 17th century turned from local to international in scope. Venetian and Genoese galleys called at the ports of Caffa, Tana, and later Sudak. In this way regular navigation in the region was established.

In summary, from the 5th to the 15th century military and merchant ships periodically crossed the Black Sea from Constantinople and Synop to Cherson, Sudak and other Crimean ports. Along the Crimean coasts, local boats brought goods to the ports of smaller towns. The sea traffic was quite intense, and within this prolific business losses inevitably occurred.

For instance, as it follows from a historical source, in AD 766 the Emperor Constantin V Copronim lost almost his entire fleet of 2,600 ships because of storm near the Varna shores [6, c. 97]. "Two thousand six hundred sunken chelandia – this is a highly attractive figure for any underwater explorer", writes M. Lazarov, a Bulgarian author of the book "Lost Flotilla" [6, c. 97].

But even if it was assumed that in a navigable season at least one ship could be lost in the Black Sea, then more than two thousand vessels could rest on the sea floor, and only a few of them have been discovered and are being studied by scientists.

As illustration of this, a joint American research team discovered four ships of the 4th–6th centuries AD near the Turkish city of Synop. The primary investigation was conducted by the means of ROVs and side scan sonar [15].

The outstanding excavations at Yenikapi, Turkey revealed to the world a medieval port of Constantinople situated on the European part of Bosphorus, where scientists unearthed not only warehouses and piers with a large amount of archaeological material, but also thirty two vessels from the 5th to the 11th centuries of various sizes and functions [13].

At present, at least six shipwrecks of the Byzantine period are known to lie off the shores of Crimea in depths accessible by scientific and archaeological divers.

From the first days of its foundation to the present, underwater archaeologists from the Centre for Underwater Archaeology of the National Taras Shevchenko University of Kiev have been conducting extensive surveys in the south-eastern Crimea in order to localize and map the locations of possible shipwrecks and other underwater archaeological sites.

Various shipwreck sites as well as the remains of ancient settlements along the southern coast of the Crimea have been inspected. Underwater exploration was carried out in the waters of the harbour of Chersonesos, on the shelf between Gurzuf and Alushta, in the Bay of Sudak, between the Capes of Meganom and Ai-Foka, in the harbour of the ancient settlement of Kimmerik in the territory of the Opuk nature reserve, in the waters of the Kerch Peninsula and at the opposing tip of the Crimean Peninsula – the Cape of Tarhankut.

The oldest Byzantine archaeological material was found in the waters near the Cape of Plaka. The cape of Plaka is situated on the southern coast of the Crimean peninsula, where the harbour of Partenit/Lampad was established. This harbour, mentioned in ancient texts [7, c. 89, 108-109], was the extremity of an important maritime trade route in the Black sea connecting the Crimea to Sinop.

The Shipwrecks at Cape Plaka

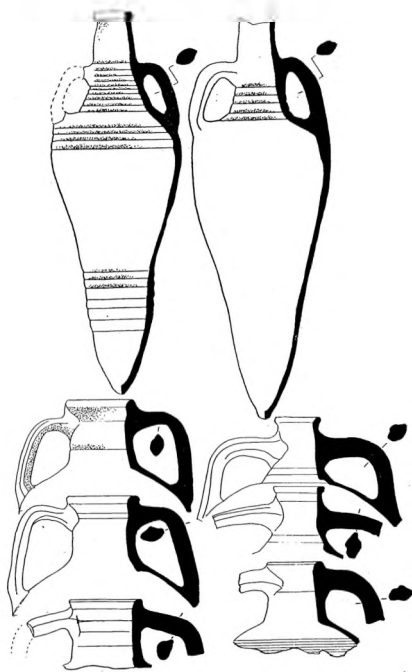


Fig. 1. Amphoras from Cape Plaka.

Cape Plaka is a monument of nature. Situated on the south coast of Crimea, it is a low cape to the east of Ayu-Dag. It is a unique, fungi-form rock resembling an owl in profile, featuring abrupt slopes run through by numerous cracks. Near the cape lie a group of small islands of the same origin, called the "Bird's Rocks". In ancient times a fortification and a light-house called the *Lampados*, mentioned by ancient geographers [1, c. 69], was situated on the cape. The medieval settlement and trading post of Partenit was located nearby to the west.

In 1993 the remains of wreck sites at Cape Plaka were discovered. A concentration of large fragments of medieval amphoras, two of which were complete, was found between the rocks. A fragment of a lead sheathing was also recovered.

The first shipwreck (Fig. 1) was discovered on the eastern side of the Cape, at a depth of 10 m. It carried a cargo of amphoras, mainly of two types: LRA1 and carrot amphoras of the Sinopean type. All LRA fragments found at Plaka belong to amphoras with cylindrical bodies. The clay is light yellow, light red or cream-colored. Some fragments from the Plaka shipwreck contain the remnants of resin linings. All examples of "carrots" are quite homogenous in type; they have a tapered body with two loop handles. The handles are attached to the middle of the neck and are oval in section. A high

rounded neck with a heavy knobbed or beak shaped rim flares to the horizontal ribbing of the body. The conical bases are of two types – one tapering and one rounded and hollow inside. The vessels are made of pale-pinkish clay, and the outer surface is covered by a brown patina with organic impregnations as a result of long-lasting interaction with its seawater environment.

Chemical analyses for both types were made at the Ceramological Laboratory in Lyon (France) by Dr. Y. Waksman. The shipwreck has been dated to the 7th century AD according to ceramic evidence [14].

The second shipwreck (Fig. 2) at Plaka Cape was discovered to the west of Cape Plaka, lying on the sea bed at a slope ranging from six to ten meters. It consisted of sixty amphora-jars, in fragments, of the 9th to 11th centuries AD. Some of the upper parts retained traces of cork stoppers. The assemblage was comprised of two types of pottery. The first, considered to be of Taman production, is quite common in the Black Sea and was transported all over the region [8, c. 52-59; 9, c. 161-162]. They possibly contained naphtha and served as containers for its transportation [5]. The second type of amphora found on site is a local vessel, called the Prichernomorskii type.

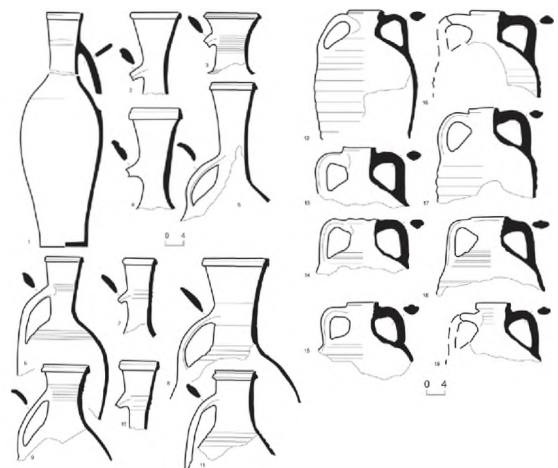


Fig. 2. Vessels from Cape Plaka.

The third shipwreck was located on the eastern edge of the Cape. Amphoras, plain and coarse ware, black slip pottery of the Classical and Hellenistic periods represent the archaeological material present, which has been presented in several articles [1, c. 66-67].

Shipwrecks near the Adalary Rocks

Between Alushta and Gurzuf, on the south coast of Crimea is the world renowned youth camp "Artek". Directly in front of the camp, the Adalary Rocks islets rise from the sea to heights of 35 and 48 m. They were explored by the CUA team and a joint Ukrainian – Polish expedition in 1995 and 2006. Potentially several shipwrecks of ancient and medieval origin were found. Amphoras, pithoi, and table and kitchen pottery, together with anchors and mill stones of medieval origin were discovered. Most of the material lies on the eastern side of the rocks [3, c. 99-103].

Shipwrecks in the Bay of Sudak: Cape Meganom

The Sudak region is well known due its historical importance during antiquity and the medieval period. Medieval Sudak rose to become one of the major trading and craft centres in the 8th century AD, and dominated the entire region from the Genoese colonization until the end of the 15th century. During that time and even more so from the beginning of the 14th century, the international trade of the entire Black Sea region was conducted via Sudak. Over the centuries it has been known by many names: Sygdeya to the Greeks, Surozh to the Russians, Sugdak or Soltak to the Eastern traders, and Soldaya by the Genoese.

Cape Meganom lies to the east of the Sudak fortress. It is a mountainous "peninsula on the peninsula" by far the most outstanding cape in all Crimea, possessing several smaller capes of its own as well as valleys and a marvellous variety of coastal landscapes.

An archived document of the 15th century, "A Petition by Francesco Lomellini to Doge Giano di Campofregoso and the Council of Elders of Genoa" notes the loss of two Venetian galleys sunk near Cape Meganom [4, c. 44-45]. In 2001–2002 and from 2005-present time CUA has been carrying out surveys of the seafloor in search of the aforementioned ships. While they have not yet been found, three sites with medieval pottery have been discovered.

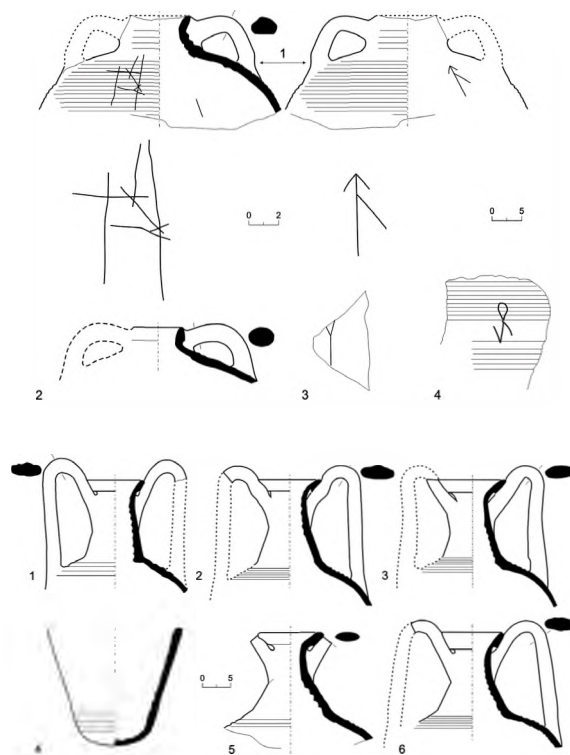


Fig. 3. Amphoras from Meganom.

The first site: a shipwreck (Fig. 3). An archaeological material spread was discovered during the first survey of the western coast of the Meganom Peninsula in 2000. The material lies beneath the sand 100 m from shore at an average depth of 8 m, between stones at the bottom of small slope along the seafloor. Fragments of amphoras were concentrated in a rather small zone and belonged to the same time period, the 10th–11th centuries, as an anchor found there [2].

By now three shipwrecks containing similar goods are known from the Serce-Limani wreck in Mediterranean Sea, where amphoras of the 11th century were an essential part of the cargo [10] and two shipwrecks dated to the 10th to 11th centuries near the Cape of Tekmezar in the Sea of Marmara, where they comprised the main cargo of the vessels [11].

The second site is located on the eastern side of Cape Meganom. Fragments of amphoras and an anchor were indicated at a depth of eight to ten meters among stones in an area about 300 m².

The third site is located on the western side of Cape Bogaz. The archaeological material, comprising fragments of amphoras was located at a depth of eight meters and lying among stones. The material spread was about 200 m².

The analysis of retrieved underwater archaeological material and the data gathered during the expeditions allowed us to assume that several, approximately two or three, medieval anchorage sites have been located at the Capes of Meganom and Bogaz. Most likely the archaeological material entered the sea while the ships were at anchor to allow the crew to rest to refill on water (there was a fresh water spring on shore in the vicinity) and to shelter themselves against the western and eastern gales. The residual eight amphora fragments comprise a wide chronological period ranging from the 6th to the 13th century [3, c. 154-155].

Shipwrecks in the Bay of Sudak: Novy Svet

The first shipwreck (Fig. 4) site was discovered during the underwater archaeological exploration off the shelf area in the western part of the Bay of Sudak, near the small resort town of Novy Svet. Four coins of the Byzantine Emperor Isaak the Second Angel (1185–1195) found on site indicate that the date of the wreck site may be the late 12th century AD. Two types of amphoras were found there:

The first type is known as the Günsenin type I. It is characterized by a ribbed, spherical, oval body and thick handles, which are attached under the rim at the neck of the vessel. There are two variations of the neck – some are very short, while others are of medium height. The clay that was used for this type is either pale-brown or pale-red in colour. Most of the graffiti scratched into the clay take the form of Greek letters. Amphoras of this

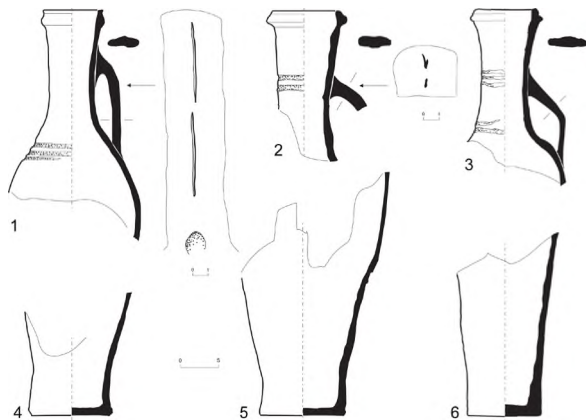


Fig. 5. Amphora-jars from Novy Svet.

type are dated between the second half of the 10th century and the first half of the 11th century AD [12]. The coins found on site, however, give a later date – the beginning of the 12th century. The second type is known as the Günsenin type II and is characterized by a pear-shaped body with a rounded bottom. On the body, there are two distinctive ridged zones, contrasting with the otherwise smooth surface. One of the zones is located at the lower join of the handle, the other is placed close to the bottom. Large handles are attached at the neck directly under the rim, then align with or even rise above the collar. Furthermore, two of the recovered amphoras were marked by a pair of stamps. The stamp on the

shoulder has an open ended oval border formed by a wide and shallow line, and another smaller circular stamp was placed on the vessel's neck. Graffiti consisting of Greek letters and geometric signs have also been found. Amphoras that were uncovered from the sand were still sealed with their original pine cork stoppers. This type of vessel was widely distributed throughout the Mediterranean and the Black Sea basin. Most researchers date this type from the second half of the 10th century to the beginning of the 12th century.

In addition, an shipwreck of an earlier period is possibly located below the Bay of Novy Svet. "Amphora-Jars" (Fig. 5) together with vessels of Prishernomorskyi type (Fig. 6), a production of local workshops, were found. This pottery is dated to the 9th to the early 11th centuries AD.

Another important shipwreck of the late medieval period is so located here as well – a shipwreck from the 13th century AD, of Italian origin with a cargo of Late Byzantine amphoras and glazed pottery. At present, this

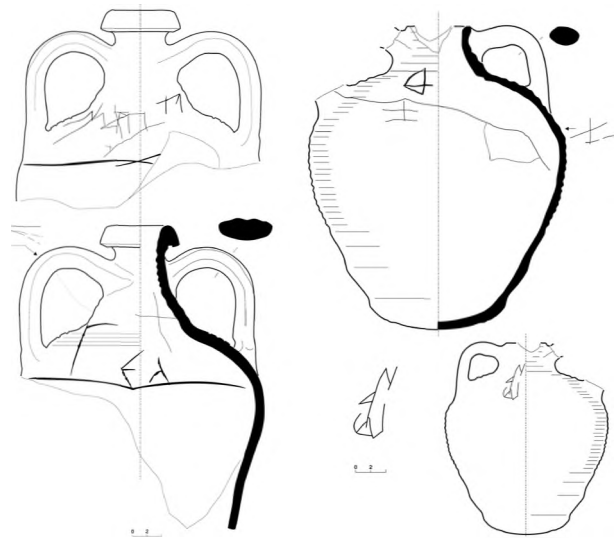


Fig. 4. Amphoras from Novy Svet.

the stamp on the shoulder has an open ended oval border formed by a wide and shallow line, and another smaller circular stamp was placed on the vessel's neck. Graffiti consisting of Greek letters and geometric signs have also been found. Amphoras that were uncovered from the sand were still sealed with their original pine cork stoppers. This type of vessel was widely distributed throughout the Mediterranean and the Black Sea basin. Most researchers date this type from the second half of the 10th century to the beginning of the 12th century.

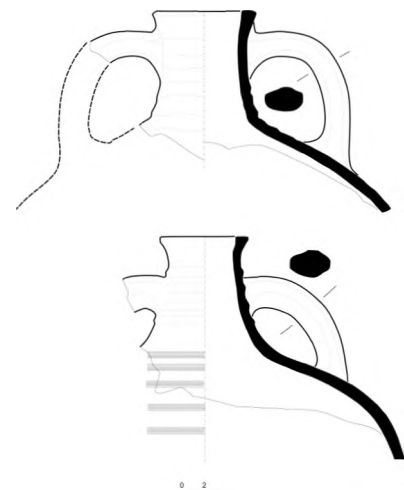


Fig. 6. Prishernomorskyi type amphoras from Novy Svet.

rich archaeological site represents the primary focus of investigation and study for CUA. Publications about some of the archaeological material can be found in this book.

Note: The Centre for Underwater Archaeology (CUA) was founded in 1991, and belongs to the Taras Shevchenko National University of Kiev. Its primary activities focus on nautical archaeological research throughout the Black Sea region and Ukrainian underwater archaeology in particular. The submerged, multicultural heritage of the Black Sea region is fascinating and vast: it cries out for the aid of all interested researchers in the quest to reveal its mysteries. From its foundation to the present day, the Centre has continued to facilitate this pursuit, cultivating a prosperous history of extending collaborative research opportunities to concurring institutions such as the Institute of Nautical Archaeology (INA) in affiliation with the Nautical Archaeology Program at Texas A&M University.

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ВИЗАНТИЙСКИЕ КОРАБЛЕКРУШЕНИЯ, ИССЛЕДОВАННЫЕ ЦЕНТРОМ ПОДВОДНОЙ АРХЕОЛОГИИ В ЧЕРНОМ МОРЕ

Статья представляет византийские кораблекрушения, которые были обследованы Центром подводной археологии в водах шельфа Крымского полуострова в Черном море.

Ключевые слова: византийские кораблекрушения, подводная археология, Черное море, Крым.

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