

# PODMORSKA ARHEOLOŠKA NALAZIŠTA U AKVATORIJU OTOKA HVARA, BRAČ I ŠOLTE - REZULTATI REKOGNOSCIJANJA (2012. - 2015.)

Termin rekognosciranje u arheološkom smislu označuje sistematski pregled čiji je cilj otkrivanje i zaštitu (podvodne) kulturne baštine. Nalazi antičkih brodoloma s amforama, ostaci srednjovjekovnih i novovjekovnih brodova s topovima i olupine tzv. modernih brodova iz razdoblja I. i II. svjetskog rata čine značajnu dio našeg kulturnog identiteta. Zahvaljujući tome, uvijek smo bili prepoznatljivi kao zemlja čija je povijest bitno i neraskidivo vezana uz more i našu tisućletnu pomorsku tradiciju. Upravo je iz tog razloga jedna od najvažnijih zadaca arheologa i konzervatora zaštita i očuvanje podvodne kulturne baštine. U nastojanju da otkrijemo tajne koje krije naše more, štimo njezino bogatstvo i raznolikost kako bismo je sačuvali za buduće generacije. Značaj i vrijednost podvodne kulturne baštine prepoznao je i Vlada Republike Hrvatske koja je 2008. godine osnovala Središnju koordinaciju za nadzor i zaštitu prava i interesa Republike Hrvatske na moru. Stručnjaci Odjela za podvodnu arheologiju Hrvatskog restauratorskog zavoda i Konzervatorskog odjela Split time su dobili dragocjen logistički potporu Obalne straže RH, Hrvatske ratne mornarice, Pomorske policije Split i Lučke kapetanije Split. Osim državnih institucija, svojim informacijama veliki doprinosi u otkrivanju novih lokaliteta i nalaza dalj su sportski ronionci i ribari.

Zahvaljujući sredstvima Ministarstva kulture RH i takvom društvenom ozračju tijekom četverogodišnjeg perioda rekognosciranja podmora otoka Hvara, Brača i Šolte koji je od 2012. do 2015. godine proveo Odjel za podvodnu arheologiju Hrvatskog restauratorskog zavoda pretraženo je dvadeset devet lokacija u podmoru. Na njima je otkriveno šest novih, do tada nepoznatih podmorskikh nalazišta i veliki broj pojedinačnih arheoloških nalaza. U podmoru otoka Brača otkrivena je olupina nepoznatog putničkog parobroda iz prijelaznog perioda 19./20. st., a u podmoru otoka Šolte, u blizini Marinčića rata nalazište antičkog brodoloma s ostacima, na Jadranu rjetkih, amfora tipa Dressel 10 i Dressel 20 hispanskog porijekla iz perioda 1./2. stoljeća. U kategoriji pronađenih pojedinačnih nalaza, osim keramičkih posuda raznih tipova i starosti, brojnoso se izdvajaju i nalazi kamenih i olovnih prečki antičkih sidara te nekoliko bizantskih i novovjekovnih sidara koje zorno svjedoče o plovebnim putevima, sidrištima i neprekinutom kontinuitetu plovećih u priborju otoka srednje Dalmacije. Ova novootkrivena nalazišta i nalazi upotpunjivaju dosadašnju saznanja, pružaju nove informacije o podvodnoj kulturnoj baštini ovih otoka, a ujedno i zorno ukazuju na potrebu za nastavkom sustavnog pregleda našeg podmora.

## Podmorje hvarskog arhipelaga

Podmorje hvarskog arhipelaga rekognoscirano je u suradnji s Marinkom Petrićem, višim kustosom Muzeja hvarske baštine, koji niz godina prikuplja i arhivira informacije ronilaca i ribara o lokacijama na kojima su zamjećeni arheološki nalazi. Detaljnijim pregledom podmora tako su na pozicijama u akvatoriju Paklenih otoka, otoka Šcedra i južne obale otoka Hvara otkrivena nova nalazišta s ostacima tereta triju antičkih brodoloma.

## Pakleni otoci

U uvali Okorija (otok Sv. Klement) u podmorusku paklenih otoka pronađeni su ostaci tereta antičkog broda. Nalazište se nalazi na maloj dubini i položaju koji je otvoren valovima iz smjera juga, zbog čega je gotovo sav keramički materijal usitnjen u male fragmente. Većina ostataka trbuha i oboda s ručkama amfora inkrustirana je u stijene ili je ukopana u pješčane pročiće između njih. Uspрkos tome, na ovom nalazištu je pronađen jedan izuzetan, u našem podmoru jedinstven i rijedak tip nalaza. Aječ je o djelomično sačuvanom keramičkom askusu - posudi za izlijevanje tekućina. Posuda ima formu stiliziranog ptičjeg tijela na kojem je vrat o izvijenim obodom izleva i ručkom trakastog profila. Iako dno i donji dio posude nisu ostali sačuvani, stručna analiza ukazuje da je prema tipološkim karakteristikama najbliža Hayes tipu 123.5 rimskog posuda datiranom u vremenski horizont 2.-3. stoljeća.

# UNDERWATER ARCHAEOLOGICAL SITES IN THE MARITIME ZONE OF THE ISLANDS OF HVAR, BRAČ AND ŠOLTA – RECONNAISSANCE RESULTS (2012 - 2015)

The term reconnaissance in archaeology denotes a systematic survey with an aim of discovering and protecting (underwater) cultural heritage. Finds of ancient shipwrecks with amphorae, remains of medieval and postmedieval ships with cannons and wrecks of "modern ships" from the World Wars I and II make an important part of our cultural identity. Therefore we have always been recognizable as a country whose history had been inseparably bound with the sea and our millennial maritime tradition. It is understandable that one of the most important tasks of archaeologists and conservators is protection and preservation of underwater cultural heritage. In an attempt of unveiling secrets hidden in our sea, we protect its opulence and diversity in order to preserve it for future generations. Importance and values of underwater cultural heritage have been recognized by the Government of the Republic of Croatia that founded the Central Coordinating Committee for Supervision and Protection of the Maritime Rights and Interests of the Republic of Croatia in 2008. In that way the experts from the Department of Underwater Archaeology of the Croatian Conservation Institute and Conservation Department in Split got valuable logistic support from the Coast Guard of the Republic of Croatia, Croatian Navy, Maritime Police in Split and Port Authorities in Split. Except for state institutions, sport divers and fishermen have also contributed significantly to discovering new sites as they offered invaluable information.

Owing to funding by the Ministry of Culture of the Republic of Croatia and positive social atmosphere twenty nine underwater locations have been investigated during the four-year underwater reconnaissance of the maritime zones of the islands of Hvar, Brač and Šolta from 2012 to 2015 by the Department of Underwater Archaeology of the Croatian Conservation Institute. Six new underwater sites that have not been known before were discovered in these surveys, as well as a number of individual archaeological finds. In the waters of the island of Brač a shipwreck of an unknown steamboat from the transition from the 19th to 20th century was found. In the maritime zone of the island of Šolta, close to Marinčić cape an ancient shipwreck was located with the remains of Dressel 10 and Dressel 20 amphorae of Hispanian origin from the 1st/2nd century, that are rarely found in the Adriatic. As for the individual finds, there were ceramic vessels of different types and datings, but also a number of stone and lead anchor stocks and several Byzantine and postmedieval anchors that tell a story of maritime routes, anchorages and uninterrupted continuity of sailing in the littoral of the central Dalmatian islands. These newly found sites and finds complement our previous knowledge, offer new information on the underwater cultural heritage of these islands and at the same time emphasize the need to continue systematic survey of our seabed.

## Submarine area of the Hvar archipelago

Submarine area of the Hvar archipelago was surveyed in cooperation with Marinko Petrić, senior curator of the Hvar Heritage Museum, who has been collecting and archiving informations obtained from the divers and fishermen about locations where possible archaeological finds had been noticed. Detailed survey of the seabed revealed three new sites with the remains of cargo of three ancient shipwrecks at positions in the maritime zones of Pakleni islands, island of Šcedro and southern coast of the island of Hvar.

## Pakleni islands

Remains of an ancient ship cargo were found in Okorija cove (St. Clement island), in the submarine area of Pakleni islands. The site is located at a shallow depth and position open to waves coming from the south, resulting in heavily fragmented pottery. Most of sherds of amphora bellies or rims with handles are incrusted into rocks or buried in sand crevices between them. Nevertheless this site yielded and exceptional artifact, very rare among our underwater finds. It is a partially preserved ceramic askos - vessel for pouring liquids. The vessel has a form of stylized bird body, with a neck with wide, flatly everted rim of the spout and a strap handle. Although base and lower part were not preserved, professional analysis suggests that its typological characteristics correspond most closely to Hayes type 123.5 of Roman pottery dated to the 2nd-3rd centuries.



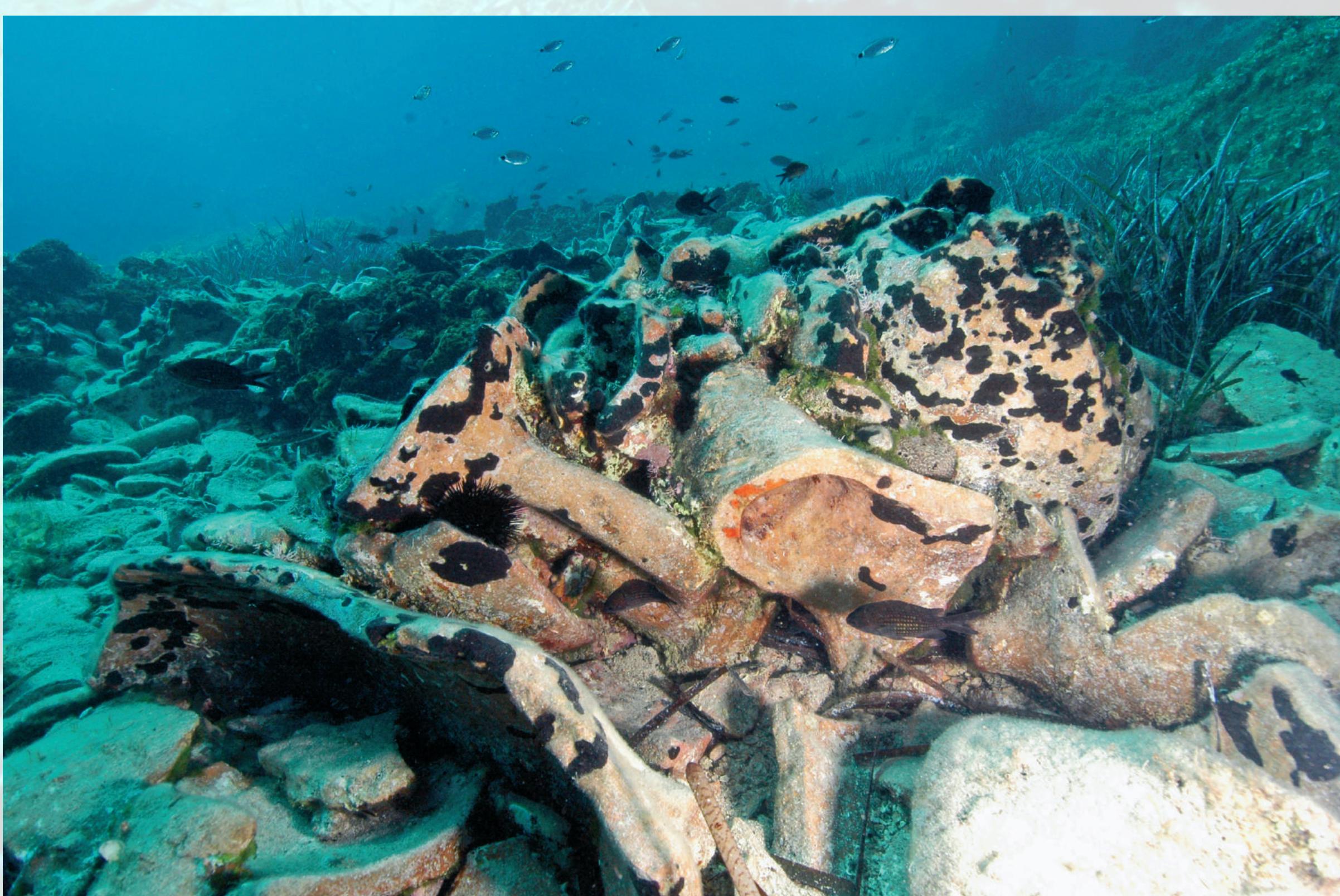
Keramička posuda iz 2./3. stoljeća, nalazište u uvali Okorija, otok Sv. Klement. Foto: P. Dugonjić, arhiva HRZ-a, 2013. g.  
Ceramic vessel from the 2nd/3rd century, findspot Okorija cove, St. Clement island. Photo by P. Dugonjić, HRZ archives, 2013.



Članovi stručnog tima: I. Mihajlović, T. Plančić, J. Bezak, J. Macura, D. Glavan i D. Bačić, Šcedro. Foto: J. Macura, arhiva HRZ-a, 2014. g.  
Members of the professional team: I. Mihajlović, T. Plančić, J. Bezak, J. Macura, D. Glavan and D. Bačić, Šcedro. Photo by J. Macura, HRZ archives, 2014.



Dokumentiranje antičkog nalazišta iz 1. stoljeća pr. n. e. / 1. stoljeća, Ravn Dolci - južna obala o. Hvara. Foto: J. Macura, arhiva HRZ-a, 2014. g.  
Documenting an ancient site from the 1st century BC/ 1st century, Ravn Dolci – southern coast of the island of Hvar. Photo by J. Macura, HRZ archives, 2014.



Uломci amfora iz 1. stoljeća pr. n. e. / 1. stoljeća, Ravn Dolci - južna obala o. Hvara. Foto: J. Macura, arhiva HRZ-a, 2014. g.  
Fragments of amphorae from the 1st century BC / 1st century, Ravn Dolci – southern coast of the island of Hvar. Photo by J. Macura, HRZ archives, 2014.



Ostaci antičkog brodoloma iz 2. stoljeća pr. n. e. / 1. stoljeća, nalazište Kećine na o. Šcedru. Foto: J. Macura, arhiva HRZ-a, 2014. g.  
Remains of ancient shipwreck from the 2nd century BC / 1st century, site of Kećine on the island of Šcedro. Photo by J. Macura, HRZ archives, 2014.



Ostaci amfora, nalazište Kećine na o. Šćedru. Foto: J. Macura, arhiva HRZ-a, 2014. g.  
6. Amphora sherds, site of Kećine on the island of Šćedro. Photo by J. Macura, HRZ archives, 2014.

Keramička posuda iz 2-3. stoljeća, nalazište u uvali Okorja, o. Sv Klement. Foto: J. Bezak, arhiva HRZ-a, 2013. g.  
Ceramic vessel from the 2nd-3rd century, findspot Okorja cove, Sv Klement island. Photo by J. Bezak, HRZ archives, 2013.

## Otok Šćedro

Iako je iz povijesnih izvora poznato da je otok Šćedro zbog svog položaja, razvedene obale s brojnim uvalama i izvora pitke vode bio važna stanicna na antičkim i srednjovjekovnim plovnim putovima, podmorje otoka Šćedra tek je djelomično istraženo. Sustavno je istražen 1983. godine samo brodolom s teretom amfora iz 1. stoljeća pr.n.e. u uvali Veli Porat, a 2009. godine ubicirani su ostaci devastiranog brodoloma s teretom amfora tipa Lamboglia 2 kod uvale Tufera. Obziru da se prema podacima Muzeja hvarske baštine 14. od ukupno 18 evidentiranih lokacija nalazi na sjevernoj strani otoka, pretraživanje je provedeno od pozicije kod rta Gornje Kurilo u smjeru istoka gdje se nalazi najveći broj arheološki suspektnih pozicija. Tijekom rekognosciranja pretražena je priobalna linija podmorsja u dužini 2000 m do uvale Smokov dolac. Pretraživanjem podmora u tom sektoru otkriven je na poziciji „Kećine“, nedaleko od uvale Stari stani, do tada nepoznati antički brodolom. Ostaci brodoloma, brojni ulomci amfora tipa Lamboglia 2 datiranih u razdoblje od 2. stoljeća pr. n.e. do sredine 1. stoljeća dokumentirani su na dubinama od 17 do 30 m, na kamenitom dnu koje završava manjim stjenovitim zidom koji pada na pješčanu zaravan na dubini od 35 m. Tijekom pregleda dna i skopa probnih sondi zamjećeni su tragovi devastacije i ilegalnog vadenja materijala koji su potvrđeni da je na otoku Šćedru pronađeno još jedno od brojnih nalazišta opljačkanih tijekom 70-ih godina, što su naknadno potvrđili i lokalni ronioni.

## Otok Hvar – južna obala

U akvatoriju otoka Hvara rekognosciran je dio južne obale otoka istočno od naselja Gromin Dolac, gdje su ribari prijavili pronalazak većeg broja ulomaka amfora. Nakon konzultacija s lokalnim roniocem iz Zavale koji je pobliže locirao poziciju i potvrdio da se na položaju Ravn dolci nalazi veći broj ulomaka područje je pregledano. Dodatni razlog za odabir ove zone podmora bilo je i saznanje da podmorsko priobalno polje južne obale Hvara, od Zavale pa sve do uvala Perna kod Sućurja, gdje se nalazi registrirano nalazište antičkog brodoloma iz 1. stoljeća pr. n. e., do tada nikada nije rekognoscirano. Zahvaljujući preciznim podacima lokacija s ulomcima amfora brzo je pronađena te je na dubini od 4 do 10 m otkrivena velika koncentracija ulomaka amfora. S obzirom na količinu ulomaka koja se rasprostire na površini približnih dimenzija 25 x 6 m i nalazi se u neposrednoj blizini obale, nalazište se sa sigurnošću može interpretirati kao ostatak antičkog brodoloma. Na žalost, zbog male dubine, stjenovitog dna i pozicije koja je izložena prema jugu sačuvani keramički nalazi nisu uočeni. Detaljnijim pregledom polja ulomaka uočeno je nekoliko fragmenata vrata s ručkama amfora tipa Dressel 6 A i obođa amfora tipa Lamboglia 2 na osnovu kojih je moguće brodolomu daturati u vrijeme od kraja 1. stoljeća pr. n. e. do sredine 1. stoljeća.

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## The island of Šćedro

According to historical sources this island was an important station on ancient and medieval maritime routes owing to its position: indented coastline with a number of coves and sources of drinking water. However, submarine zone has been explored only partially. Only a shipwreck with a cargo of amphorae in Veli Porat cove dating from the 1st century BC was explored systematically in 1983. Remains of devastated shipwreck with a cargo of Lamboglia 2 amphorae were pinpointed next to Tufera cove in 2009. Since 14 out of 18 registered locations according to information of the Hvar Heritage Museum are located on the northern part of the island, the survey was conducted from the position near cape Gornje Kurilo eastwards where the biggest number of potential archaeological sites might be. During the survey waters in coastline length of 2000m were examined, to Smokov dolac cove. This survey resulted in a discovery of previously unknown shipwreck at the position Kećine, close to Stari stani cove. Shipwreck remains and plentiful fragments of Lamboglia 2 amphorae dating to the period from the 2nd century BC to mid-1st century were documented at depths from 17 to 30 m, on a stony bottom that ends in a small rocky wall falling on a sandy plateau at a depth of 35m. During the seabed survey and opening trial probes, traces of devastation and illegal plundering were noticed indicating that another site devastated in the 1970s was found on the island of Šćedro, as later confirmed by the local divers.

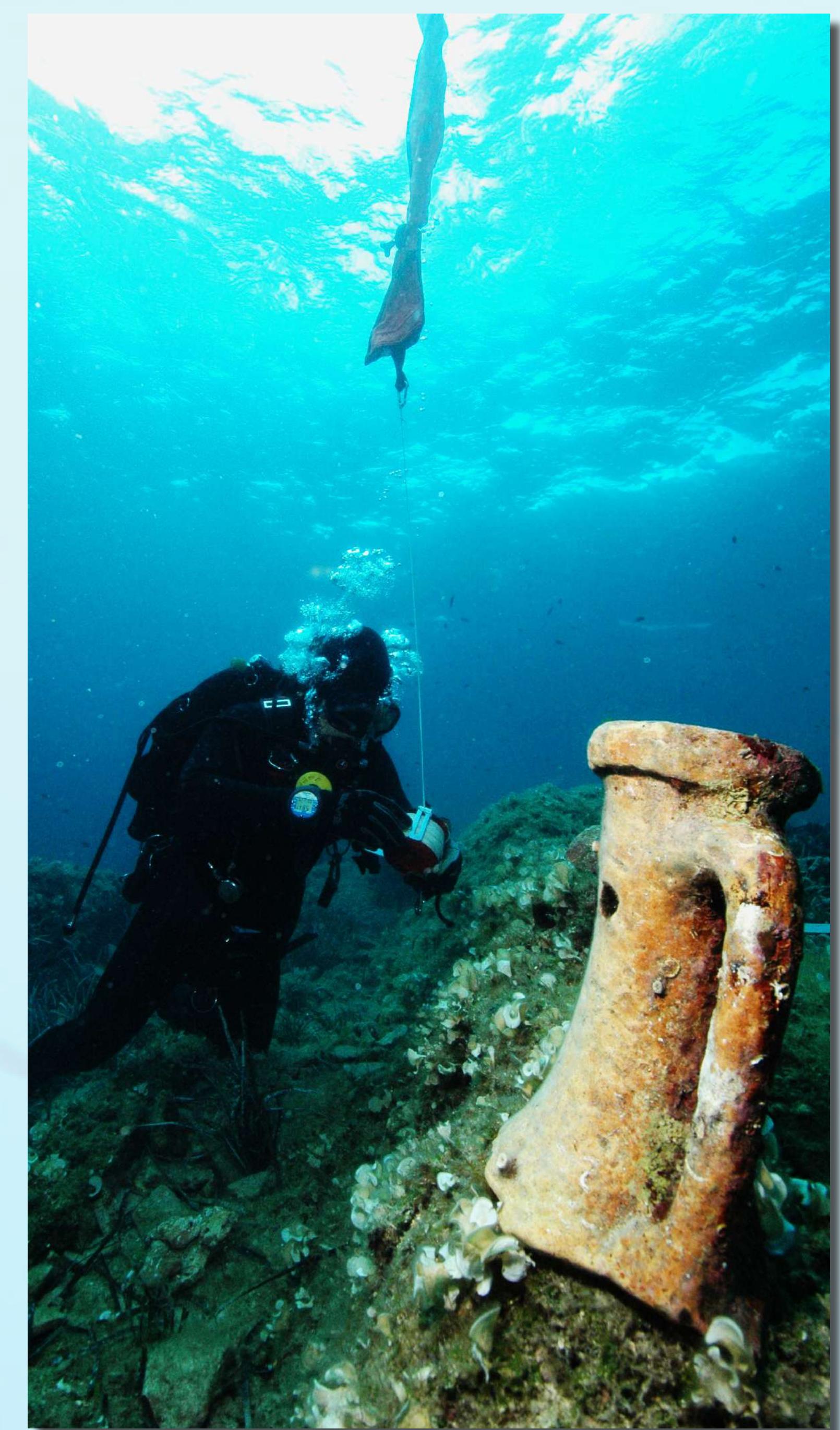
## The island of Hvar – southern coast

In the maritime zone of the island of Hvar a part of the southern coast was surveyed east of the settlement Gromin Dolac where the fishermen reported finding the biggest number of amphora sherds. After consulting local diver from Zavala who pinpointed the location and confirmed that a number of fragments were found on the position Ravn dolci, the area was surveyed. Additional reason for choosing this submarine zone was the fact that this area of southern coast of Hvar, from Zavala to Perna cove near Sucuraj where an ancient shipwreck from the 1st century was registered, had never been surveyed before. Thanks to precise information location with amphora sherd was soon recognized and dense concentration of amphora fragments was found at a depth from 4 to 10m. The site can definitely be interpreted as an ancient shipwreck on the basis of the amount of sherds spreading on an area with approximate dimensions of 25 x 6 m, located close to the coast. Unfortunately due to shallow depth, rocky bottom and position facing south, preserved ceramic finds were not noticed. Detailed survey of the field of fragments revealed several fragments of necks with handles of Dressel 6A amphorae and rims of Lamboglia 2 amphorae dating the shipwreck to the period from the end of the 1st century BC to mid-1st century.

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Foto mozaik antičkog nalazišta Ravn Dolci. Foto: J. Macura, arhiva HRZ-a, 2014. g.  
Photo mosaic of the ancient site of Ravn Dolci. Photo by J. Macura, HRZ archives, 2014.



Dio amfore tipa Dressel 6 A, Ravn Dolci - južna obala o. Hvara. Foto: J. Macura, arhiva HRZ-a, 2014. g.  
Fragment of Dressel 6 A amphora, Ravn Dolci - southern coast of the island of Hvar. Photo by J. Macura, HRZ archives, 2014.

