



# ARHEOLOŠKO ISTRAŽIVANJE LOKALITETA BURNUM – AMFITEATAR



## Archaeological excavations of the Burnum - amphitheater site

**A**rheološko istraživanje lokaliteta Burnum – Amfiteatar za 2022. godinu realizirano je prema važećem Rješenju Uprave za zaštitu kulturne baštine, Konzervatorski odjel u Šibeniku, a financirano sredstvima znanstveno-stručnog projekta „Burnum“, kojeg zajednički realiziraju Sveučilište u Zadru i JU „Nacionalni park Krka“. Arheološka iskopavanja trajala su kontinuirano od 28. lipnja do 11. kolovoza 2022., nastavljena su od 18. do 21. listopada kada su zbog loših vremenskih prilika prekinuta. Uz vođenje popisane terenske dokumentacije i preliminarnu obradu nalaza, istraživanja je vodio prof. dr. sc. Miroslav Glavičić. Stručnu ekipu činili su Dijana Čorić, dipl. arheologinja i doktorandica na PDS-u Arheologija istočnog Jadrana i Rudolf Pirak-Šepak, student arheologije, koji su aktivno participirali u izvođenju svih terenskih poslova i preliminarnoj obradi nalaza. Logističku pomoć pri provedbi arheoloških istraživanja pružio je prof. Joško Zaninović, voditelj Arheološke zbirke Burnum u Puljanima, a Anamarija Šokčević Purušić, dipl. arheologinja, dokumentirala je izdvojene posebne nalaze i inventarizirala ih u elektroničkoj bazi te izradila 3D model Sonde 58.



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**A**rchaeological excavations of the Burnum - Amphitheater site for the year 2022 were carried out according to the valid Decision of the Administration for the Protection of Cultural Heritage, Conservation Department in Šibenik, and financed with the funds of the scientific and professional project *Burnum*, which is jointly implemented by the University of Zadar and Krka National Park. Archaeological excavations lasted from June 28 to August 11, 2022, and continued from October 18 to 21, when they were interrupted due to inclement weather. Prof. dr. Miroslav Glavičić led the excavations, alongside managing prescribed field documentation and preliminary treatment of finds. The professional team consisted of Dijana Čorić, archaeologist and doctoral student at the postgraduate doctoral study *Archaeology of the Eastern Adriatic* and Rudolf Pirak-Šepak, archaeology student, who actively participated in the performance of all field work and preliminary treatment of the finds. Logistical assistance during the archaeological excavations was provided by prof. Joško Zaninović, head of the Burnum Archaeological Collection in Puljani, and Anamarija Šokčević Purušić, archaeologist, who



Kao logični slijed dosadašnjih istraživačkih radnji na amfiteatru i u njegovoj blizini arheološka istraživanja nastavljena su iskopavanjem Sonde 58, koja je dijelom već bila istražena tijekom 2020. godine, sa svrhom prikupljanja relevantnih podataka o kulturnim slojevima nastalim tijekom nivelacije terena i pripremi radova za gradnju amfiteatra i vojnog vježbališta. Sonda 58 (dimenzije 5 x 6 m) locirana je u sjevernom dijelu vježbališta, otprilike u visini desnog bočnog zida lijevka na južnom ulazu u amfiteatar, a između vanjskog (sjevernog) zida s kontraforima i unutarnjeg (južnog) zida objekta. Istraživanje je nastavljeno iskopavanjem slojeva SJ 2 i SJ 3, koji su nastali nasipavanjem raznovrsnog materijala tijekom radova

documented isolated special finds, inventoried them in an electronic database and created a 3D model of Probe 58.

As a logical sequence of previous research activities at the amphitheater and in its vicinity, archaeological research continued with the excavation of Probe 58, which had already been partly explored during 2020, with the purpose of collecting relevant data on the cultural layers created during the leveling of the terrain and preparatory works for the construction of the amphitheater and military training ground. Probe 58 (dimensions 5 x 6 m) is located in the northern part of the training ground, approximately at the height of the right side wall of the funnel at the southern entrance to the am-

na nivelaciji šireg prostora amfiteatra i sadržavaju veću količinu keramičkog materijala (pretežito uloma kuhinjskog posuđa, amfora i nešto fine keramike), brojne metalne nalaze, sporadično koštane predmete i ulomke stakla te životinjske kosti. Tijekom terenskog rada obavljena je preliminarna stručna obrada i selekcija nalaza, pronađeni keramički materijal, ulomci stakla i životinjske kosti su očišćeni i oprani na lokalitetu te potom u kutijama prebačeni u depo Arheološke zbirke u Puljanima. Predmeti za koje je procijenjeno da su važniji za interpretaciju izdvojeni su kao posebni nalazi, koji su pojedinačno dokumentirani na terenu i poslije inventarizirani u elektroničkoj bazi (ukupno 139 kataloških jedinica). Svi metalni i drugi nalazi ade-

phitheater, and between the outer (northern) wall with buttresses and the inner (southern) wall of the structure. The research continued with the excavation of layers SU 2 and SU 3, which were created by filling of various materials during the work on leveling the wider area of the amphitheater and contain a large amount of ceramic material (predominantly fragments of kitchenware, amphorae and some fine pottery), numerous metal finds, sporadic bone artifacts and fragments of glass and animal bones. During the fieldwork, a preliminary professional treatment and selection of finds was carried out: recovered pottery sherds, glass fragments and animal bones were cleaned and washed on the site and then transferred in boxes to the depot of the Archaeological Collection in Puljani. Artifacts that were estimated to be more important for interpretation were singled out as special finds, which were individually documented during the excavations and later inventoried in the electronic database (a total of 139 catalog items). All metal and other finds were adequately taken care of in the restoration workshop and stored in the museum collection.

The leveling layer of the karst terrain (SU 3) contains a large amount of ceramic material, especially fragments of kitchenware, mostly bowls and pots probably of local production (black and dark brown, coarse fabric with visible grains of calcite), better quality vessels (jugs, bowls, etc.) in reddish, yellowish or grayish color, parts of amphora and several lids. Fine pottery sherds are sporadic, but there are some special finds such as the fragments of the so-called Sarius cups decorated with relief motifs and bearing the master potter's name *CLEMENS*, the bottom of the bowl with a stamp in the shape of a small foot (*in planta pedis*) (Fig. 7), pieces of the rim and the bottom of the plate (*Conspicuum 20.4*) with relief animal decorations. Small fragments of terra sigillata were also documented as well as fragments of oil lamps with a female figural representation. Finds of luxury glassware fragments are not rare, for example a fragment of a glass bowl made in the mosaic technique of opaque amber and white glass with the so-called *millefiori* pattern or a fragment of the belly of a glass bowl made in the mosaic technique from opaque cobalt blue and white glass with the so-



Položaj Sonde 58 u sjevernom krilu vojnog vježbališta (foto: F. Levarda)  
Location of Probe 58 in the northern wing of the military training ground (photo: F. Levarda)





Burnum - Amfiteatar  
Sonda 58 - 58 A  
26. 7. 2022.

Sonda 58 s proširenjem 58A u zapadnom dijelu (stanje 26. 07. 2022.) (foto: M. Glavičić)  
Probe 58 with extension 58A in the western part (situation on 26. 07. 2022) (photo: M. Glavičić)

kvatno su zbrinuti u restauratorskoj radionici i pohranjeni u muzejskoj zbirci.

Sloj nivelacije krškog terena (SJ 3) sadrži veću količinu keramičkog materijala, osobito ulomaka kuhinjskog posuđa, pretežito zdjela i lonaca, vjerojatno lokalne produkcije (crne i tamnosmeđe boje, grube fakture s vidljivim zrcima kalcita), kvalitetnijeg posuđa (vrčevi, zdjelice i dr.) crvenkaste, žučkaste ili sivkaste boje, dijelova amfora i nekoliko poklopaca. Nalazi ulomaka fine kera-

called *millefiori* pattern. Beads made of glass paste were also found, and an agate gem with a depiction of a roe-buck (deer) stands out as an extraordinary find, which may have fallen out of the bezel of an iron ring found in the same place.

In layer SU 3, a large number of iron objects were found, most often nails, wedges, links and hooks, and special finds include a pyramidal top of a pilum, spatula with a fan-shaped extension at the ends, several tools, hinge, nails from military



Ulomak dna zdjelice s pečatom u obliku malog stopala (lijevo), ulomak poluloptaste zdjelice s reljefnim ljuskastim ornamentom (desno) (foto: M. Glavičić)  
Fragment of the bottom of a bowl with a stamp in the shape of a small foot (left), fragment of a hemispherical bowl with a scaly relief ornament (right) (photo: M. Glavičić)

mike su sporadični, međutim kao posebni nalazi izdvojeni su ulomci tzv. *Sarius* šalice ukrašene reljefnim motivima i s imenom majstora *CLEMENS*, dno zdjelice s pečatom u obliku malog stopala (*in planta pedis*), ulomci oboda i dna tanjura (*Conspetus 20.4*) s reljefnim animalnim ukrasima. Dokumentirani su i drugi sitni ulomci *terae sigillatae* te fragmenti lucerna sa ženskim figuralnim prikazom i drugi. Nalazi fragmenata luksuznog staklenog posuđa nisu rijetki, npr. pronađen je ulomak staklene zdjelice izrađene u mozaičnoj tehnici od neprozirnog stakla jantarne i bijele boje s tzv. uzorkom *millefiori* i ulomak trbuha staklene zdjelice izrađene u mozaičnoj tehnici od neprozirnog stakla kobaltno plave i bijele boje s tzv. uzorkom *millefiori*. Pronađene su i perle izrađene od staklene paste, a kao izvanredan nalaz posebno se ističe gema od ahata s prikazom srndaća (jelena), koja je moguće ispala iz utora željeznog prstena pronađenog na istom mjestu.

U sloju SJ 3 pronađen je veći broj željeznih predmeta, najčešće čavala, klinova, alki i kuka, a kao posebni nalazi izdvojeni su piramidalni vrh piluma, spatula s lepezastim proširenjem na krajevima, više alatki, brtvela, brukvice s potplata vojničke obuće, projektil stožasta oblika, vrh piluma, fragment drška bodeža i noževi/britve. Osobito je važan nalaz željeznog vojničkog bodeža (*pugio*), koji je pronađen uz rub zapadnog profila sonde. Bodež je bio prelomljen na dva dijela (balčak i sječivo) koji se izravno ne spajaju lom na lom, međutim činjenica da su pronađeni jedan do drugoga i da je XRF analiza pokazala da je riječ o istom materijalu od kojeg su izrađeni, siguran su dokaz da se radi o dijelovima istog predmeta. Jedinstven je nalaz cjelovito sačuvanih konjskih žvala.

shoe soles, conical projectiles, pilum tip, piece of a dagger's handle and knives/razors. A particularly significant find was an iron soldier's dagger (*pugio*), which was found by the edge of the western profile of the probe. The dagger was broken in two parts (hilt and blade) which cannot be directly conjoined, however, the facts that they were found

next to each other and that the XRF analysis showed that they were made of the same material, are definite proofs that they are parts of the same object. Completely preserved horse bit is a unique find.

Bronze artifacts include standard finds of the Aucissa-type fibula, appliqués, belt plates (*cingulum*) with engraved decorations and silver plating, ring-key, horse harness pendants, medical probes (*spathomela* and *speculum*), buckle of *lorica segmentata*, fragment of shield fittings and others. Recovered coins are represented by asses minted during the reign of Tiberius with the image of Divine Augustus (RIC I, 72, 81 Tiberius), quadrantes minted during the reign of Augustus (RIC I, 420, 465 Augustus), as of Caligula (RIC I, 38 Gaius), as of Claudius (RIC I, 95 Claudius) and several corroded whole and halved asses and quadrantes that could not be identified. There was also a republican denarius minted in 58 BC (RRC 442/1b) and the so-called legionary denarius of Mark Antony (RRC 544/14).

Several fragments of a grinding stone and a stone ball for ejection from a ballista were singled out as interesting finds.

Objects made of bone are represented by half of a bone handle of a tool or knife, a fragment of a bone handle with perforation and a pair of antler tines that possibly did not have a utilitarian function. A very attractive find is a bone gaming dice. In layer SU 3, a large number of fragmented bones of domestic (pig, cattle, sheep) and wild animals



Bodež (pugio) (foto: M. Glavičić)  
Dagger (pugio) (photo: M. Glavičić)





AE, as, Tiberius, 21.-22. godina, RIC I, 44 (Tiberius) (foto: M. Glavičić)  
 AE, as, Tiberius, year 21-22, RIC I, 44 (Tiberius) (photo: M. Glavičić)

Brončane nalaze predstavljaju standardni nalazi fibula tipa *Aucissa*, applike, pojasne pločice (*cingulum*) s graviranim ukrasima i posrebrenjem, prsten-ključ, privjesci konjske orme, medicinske sonde (*spathomela* i *speculum*), kopča obručastog oklopa (*locrica segmentata*), ulomak okova štita i dr. Pronađene kovanice reprezentiraju asses kovani za Tiberija s prikazom Božanskog Augusta (RIC I, 72, 81 Tiberius), *quadrantes* kovani za Augusta (RIC I, 420, 465 Augustus), as Kaligule (RIC I, 38 Gaius), as Klaudija (RIC I, 95 Claudius) te nekoliko korodiranih cijelih i prepolovljenih asa i kvadransa koji se nisu mogli identificirati. Pronađen je također republikanski denar kovan 58. godine prije Krista (RRC 442/1b) i tzv. legionarski denar Marka Antonija (RRC 544/14).

Kao zanimljiv nalaz izdvojeno je više fragmenata brasnog kamena te kamena kugla za izbacivanje iz baliste.

Predmete izrađene od kosti predstavlja polovica koštane drške neke alatke ili noža, ulomak koštane drške s perforacijom i par parožaka koji možda nisu imali utilitarnu funkciju. Veoma je atraktivan nalaz koštane kockice za igru. U sloju SJ 3 dokumentiran je veći broj fragmentiranih kostiju do-



Ulomci lucerne s figurom žene (foto: M. Glavičić)  
 Fragments of an oil lamp depicting a female figure (photo: M. Glavičić)



Gema s prilazom srndaća (foto: M. Glavičić)  
 Gem with depiction of a roe-buck (photo: M. Glavičić)



Koštana kockica za igru (foto: M. Glavičić)  
 Bone gaming dice (photo: M. Glavičić)

maćih (svinja, govedo, ovca) i divljih životinja (jelen, srna, vepar) te više ljuštura školjke kamenice. Sve su to otpadci konzumirane hrane i pripadaju kuhinjskom otpadu bačenom na smetlište. U isti kontekst treba uključiti i rijetke depozite sivog pepela i gareži, u kojima su sporadično pronađeni ulomci keramike i životinjske kosti.

(deer, roe deer, boar) and several oyster shells were documented as wastes of consumed food and belong to the kitchen waste thrown to the garbage dump. In the same context, we should also include rare deposits of gray ash and soot, in which pottery sherds and animal bones were sporadically found.