

# BIOKOVO – LOKVA





**T**umul na Lokvi nalazi se na 1467 m n. v. u predjelu Biokovske vršne zaravni specifične po geomorfološkom fenomenu, poligonalnom kršu (Tamás 2009: 2–22). Uz sam lokalitet nalazi se planinarska kuća „Slobodan Ravlić“ kojom upravlja HPD „Biokovo“ iz Makarske. Oko 80 metara južno od tumula postojale su dvije lokve od kojih je jedna nedavno obnovljena i vraćena u funkciju. Približno 500 metara jugozapadno nalazi se jama ledenica Čavlenovača iz koje su biokovski ledari i ledarice sve do nedavno vadili led za potrebe gostionica, mesnica i makarskih hotela (Jalžić 1999: 53–57).

Nakon dojave planinara i speleologa iz HPD-a „Biokovo“, koji su pri uređenju potpornog zida planinarske kuće uočili oštećene grobove, uslijedio je pregled terena i dokumentiranje zatečenog stanja. Zbog mogućnosti daljnjeg propadanja tumula, odmah se odredila strategija arheološkog istraživanja, koje je financirano namjenskim sredstvima institucijskog istraživačkog projekta Sveučilišta u Zadru – *DisKont*.

Arheološkim istraživanjem utvrđeno je kako se plašt tumula sastojao od nasutog kamenja s kružno postavljenim kamenim obrubom. Odmah na

**T**he tumulus on Lokva is located at 1467 masl, in the area of the Biokovo peak plateau specific for the geomorphological phenomenon, polygonal karst (Tamás 2009: 2–22). Next to the site is the Slobodan Ravlić mountain hut, managed by the HPD [Croatian Mountaineering Association] Biokovo from Makarska. About 80 meters south of the tumulus, there were two puddles, one of which was recently restored resuming its function. Approximately 500 meters to the southwest is

the Čavlenovača ice pit, from which, until recently, the Biokovo icemen and women extracted ice for the needs of inns, butchers and hotels in Makarska (Jalžić 1999: 53–57).

After a report by mountaineers and speleologists from HPD Biokovo, who noticed damaged graves while reinforcing the retaining wall of the mountain hut, an inspection of the terrain followed and documentation of the existing condition. Due to the possibility of further deterioration of the tumulus, an archaeological research strategy was immediately defined, which was financed with the designated funds of the institutional research project of the University of Zadar - *DisKont*.



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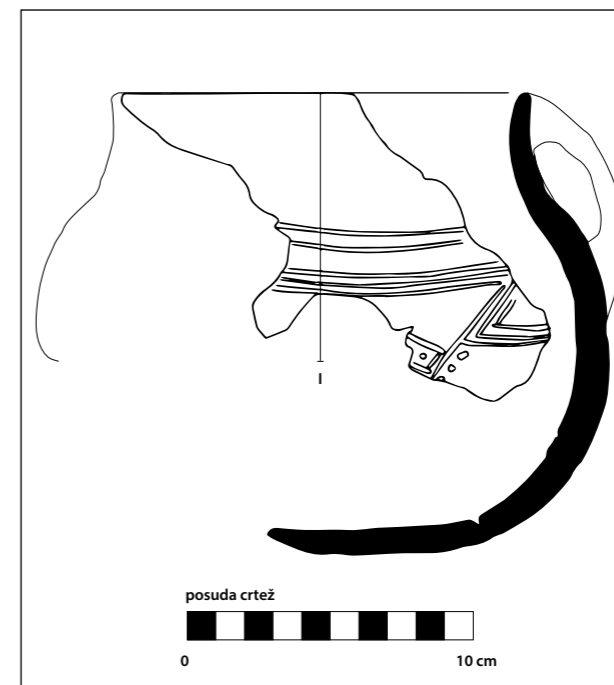
... Dolazak na teren (foto: Ž. Miletić)  
... Arrival on the field (photo: Ž. Miletić)

površini nasipa uočene su ploče poklopnice dvaju ukopa, koji su definirani kao grob 1 i grob 2. Arhitekturu groba 1 čini nekoliko većih kamenih ploča i blokova koji su okomito postavljeni na grobnu jamu, tvoreći grobni sanduk. Orijentacija groba je Z-I s blagim odklonom prema sjeveru, a pokojnik je bio položen u ispruženom položaju. Uz uzglavnicu pronađeni su ostatci jame obložene pravilno poslaganim kamenjem, koja je služila za postavljanje nadgrobno spomenika, moguće drvenog križa. Konstrukciju groba 2 čine velike kamene poklopnice te nekoliko većih nepravilnih kamenih blokova postavljenih uokolo grobne jame. Pokojnik je također bio položen u ispruženom položaju. Antropološka analiza kosturnih ostataka (Novak, Carić 2022: 1–10) potvrdila je kako je u prvom grobu bio pokopan muškarac između 25 i 35 godina starosti. Koštana patologija upućuje na Schmorlove defekte na prsnim i slabinskim kralješcima, koji nastaju zbog prolapsa intervertebralnog diska u tijelo kralješka, a prisutnost tih defekata obično se povezuje s jakim mehaničkim opterećenjima kralježnice. Uz Schmorlov defekt prisutna je i ankiloza dvaju

prsnih kralježaka te degenerativni osteoartritis – kroničan, progresivan proces koji karakterizira trošenje zglobne hrskavice koja se stanjuje do te mjere da na nekim područjima zgloba može potpuno nestati. Razvoju osteoartritisa pridonio je mehanički stres i fizička aktivnost. Dentalna patologija upućuje na kalcificirane zubne naslage na zubima gornje i donje čeljusti, blagu do umjerenu istrošenost griznih ploha zuba, te linearnu hipoplaziju zubne cakline na zubima donje čeljusti. Riječ je o subadultnom poremećaju koji nastaje zbog akutnih, vremenski ograničenih stresova i najčešće se povezuje s gladovanjem, nedostatkom A, C i D vitamina i prisutnošću anemije. Kosturni ostatci pokojnika iz groba 2 nešto su slabije očuvani. Prema antropološkoj analizi vjerojatno je

Archaeological excavation revealed that the tumulus cover consisted of loose stones with a circular stone border. Immediately on the surface of the fill, cover slabs of two burials were observed, which are defined as grave 1 and grave 2. The construction of grave 1 consists of several larger stone slabs and blocks that are placed vertically on the burial pit, forming a burial cist. The orientation of the grave is W-E with a slight deviation towards the north, and the deceased was laid in an extended position. Next to the headstone, the remains of a pit lined with neatly arranged stones were found, which was used to place a grave marker, possibly a wooden cross. The

construction of grave 2 consists of large stone covers and several larger irregular stone blocks placed around the grave pit. The deceased was also laid in an extended position. Anthropological analysis of skeletal remains (Novak, Carić 2022: 1–10) confirmed that a man between 25 and 35 years of age was buried in the first grave. Bone pathology refers to Schmorl's defects on the thoracic and lumbar vertebrae, which are caused by the prolapse of the intervertebral disc into the vertebral body, and the presence of these de-



... Crtež posude iz groba 3 (izradio: L. Bogdanić)  
... Illustration of vessel from grave 3 (made by: L. Bogdanić)

fects is usually associated with strong mechanical loads on the spine. In addition to Schmorl's defect, there is also ankylosis of two thoracic vertebrae and degenerative osteoarthritis – a chronic, progressive process characterized by wear and tear of the articular cartilage, which thins to the extent that it can completely disappear in some areas of the joint. Mechanical stress and physical activity contributed to the development of osteoarthritis. Dental pathology refers to calcified dental deposits on the teeth of the upper and lower jaw, mild to moderate wear of the biting surfaces of the teeth, and linear hypoplasia of tooth enamel on the teeth of the lower jaw. It is a subadult disorder that occurs due to acute, time-limited stresses and is most often associated with starvation, lack of A, C and D vitamins and the



Arheološko iskopavanje, dokumentiranje i obrada nalaza (foto: Ž. Miletić)  
Archaeological excavation, documentation and processing of findings (photo: Ž. Miletić)





⋮ Dokumentacija nalazišta (foto: Ž. Miletić)  
 ⋮ Documentation of the site (photo: Ž. Miletić)



⋮ Istraživačka ekipa (foto: Ž. Miletić)  
 ⋮ Research team (photo: Ž. Miletić)

riječ o muškarcu adolescentske dobi, između 16 do 18 godina starosti, bez ikakve dentalne i koštane patologije. Rezultati radiokarbonskih analiza (Beta Analytic Testing Laboratory 614570 i 619015) odredili su starost prvog ukopa od 630 +/- 30 godina, dok su ostatci pronađeni u grobu 2 bili nešto mlađi, točnije 570 +/- 30 godina prije sadašnjosti.

Južno od groba 2, ispod kosturnih ostataka, otkriven je još jedan ukop definiran kao grob 3. Riječ je pokojniku položenom na bok u zgrčenom položaju s ostacima keramičke posude koja je po obliku i ukrasu specifična za ranobrončanu Cetinsku kulturnu grupu (Marović, Čović 1983: 191–213). Uokolo groba 3 u slojevima koji su se nalazili neposredno iznad živca na većoj površini tumula, pronađeni su ostatci još jedne keramičke posude, koja je vrlo vjerojatno, kao dio sepulkralnog kulta, ritualno razbijena. Radiokarbonska analiza kostiju iz groba 3, čiji se rezultati očekuju uskoro, trebala bi odrediti starost primarnog prapovijesnog ukopa, čija je kamena grobna konstrukcija sekundarno poslužila za naknadne ukope u 14. odnosno 15. stoljeću.

presence of anemia. The skeletal remains of the deceased from grave 2 are somewhat less well preserved. According to the anthropological analysis, it is probably an adolescent male, between 16 and 18 years of age, without any dental or bone pathology. The results of radiocarbon analyses (Beta Analytic Testing Laboratory 614570 and 619015) determined the age of the first burial to be 630 +/- 30 years before present, while the remains found in grave 2 were somewhat younger, more precisely 570 +/- 30 years before present.

Another burial marked as grave 3 was discovered under the skeletal remains to the south of grave 2. The deceased was laid on his side in a crouched position with the remains of a ceramic vessel, which is specific to the Early Bronze Age Cetina cultural group in terms of shape and decoration (Marović, Čović 1983: 191–213). Around grave 3, in the layers located immediately above the bedrock on the larger surface of the tumulus, remains of another ceramic vessel were found, which was most likely ritually broken in a sepulchral cult. The radiocarbon analysis of the bones from grave 3, the results of which are expected soon, should determine the age of the primary prehistoric burial, whose stone burial structure was used secondarily for subsequent burials in the 14th and 15th centuries.

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