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MOLLUSC SHELLS FROM AN ARCHAEOLOGICAL EXCAVATION AT RIŅŅUKALNS IN 2011

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Riņņukalns, a 5000-year-old habitation site at the outlet of the River Salaca from Lake Burtnieks, is an example of a ‘shell midden’, a type of site well known in Western Europe, consisting largely of intact and fragmented shell (Šturms 1927). Riņņukalns has a thick sequence of alternating mussel shell and fish bone layers, with a total thickness of 80 cm. It is the only known site of this kind in the East Baltic.
The site was excavated already in the second half of the 19th century (C. G. Sievers, R. Wirchow, L. Rütimeyer and others), with further trial excavation in 1943–1944 (E. Šturms). Archaeologists from the Institute of Latvian History returned to the site in 2011 in order to broaden the picture of the Stone Age in the East Baltic, with the participation of specialists in various fields and with the use of the latest scientific techniques.
In the course of the 2011 excavation, mollusc shells were collected in 14 sieved and 5 hand-collected samples. Species identification was performed using various mollusc field guides (Kerney et al. 1983, Glöer, Meier-Brook 1998, Rudzīte 1999, Rudzīte et al. 2010) and the reference collection of the Museum of Zoology, University of Latvia.
Five land snail taxa were identified:
Succinea sp. (Linnaeus, 1758),
Cochlicopa nitens (M. von Gallenstein, 1848),
Pupilla muscorum (Linnaeus, 1758),
Vallonia costata (O. F. Müller, 1774),
Vallonia pulchella (O. F. Müller, 1774);
five freshwater snail taxa:
Viviparus contectus (Millet, 1813),
Bithynia tentaculata (Linnaeus, 1758),
Valvata piscinalis (O. F. Müller, 1774),
Gyraulus sp. Charpentier, 1837,
Planorbarius corneus (Linnaeus, 1758);
and four mussel taxa:
Anodonta sp. Lamark, 1799,
Unio tumidus Philipsson, 1788,
Unio pictorum (Linnaeus, 1758),

Pisidium sp. C. Pfeiffer, 1821.
The species represented in the greatest quantity is *Unio tumidus* Philipsson, 1788, along with numerous shell fragments determined as *Unio* sp.
The land snail taxa include four species of damp or dry calcareous habitats, the only damp-loving species being *Succinea* sp. It is concluded that a calcareous soil formed on the mussel shell layers at Riņņukalns, providing a suitable habitat for calciphile land snail species. It should be noted that typical forest species are absent, even though the majority of Latvia's land snails are forest species. This could be explained by the former location of the site: in the Stone Age it was a small island or peninsula surrounded by water.
The freshwater snail shells may have been brought by floodwaters, or they could have ended up in the excavated layers if the water level was formerly higher. The *Unio* mussels were collected for food, and the shells crushed and added to pottery fabric.

References

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