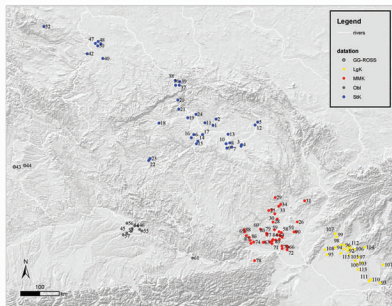


ARCHAEOZOLOGICAL FINDS FROM THE NEOLITHIC RONDEL DITCH

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Rondels in the Czech Republic (SBK - blue colour; MMK/MOG - red colour) Vchynice site is marked by number 21). Map source: Earth Satellite Corporation *ESRI*.

Objectives

Is the osteological material from the rondel ditch in Vchynice somehow exceptional in a way that suggests a special function (ritual space) for the rondel or its surrounding area?

Introduction

The total number of rondels known in the Czech Republic accounts more than 30. They display a number of differences concerning form and size. The majority of which are from SBK (Stroke Pottery culture) sites in Bohemia, less from MMK (Moravian Painted Ware culture) sites in Moravia. The largest concentration of rondels has been documented in the lowlands, with altitudes lower than 350 m above sea level and in the basins of the Elbe in Bohemia and the Dyje in Moravia and their tributaries. The presumptive function of rondels could have been economic, social, military or sacral.

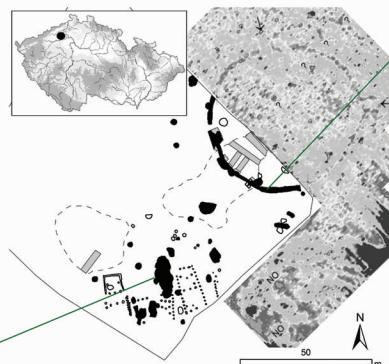


A part of the rondel ditch in Vchynice. Photo by M. Půlpán.

The Late Neolithic rondel in **Vchynice** was part of the settlement area situated in northwestern Bohemia investigated in the years 2008–2009 under leadership of Marek Půlpán (UAPPSZ Most). The rondel ditch contained evidence of settlement from the LBK period (Linear Pottery culture) and from both chronological stages of the Stroked Pottery culture (5100/5000–4500/4400 cal BC) – the Early and Late STK. The osteological material from the rondel ditch was among other compared to the assemblage from the clay pit (feature 35, the largest settlement feature at Vchynice) from STK – early/late group. It is also assumed that the clay pit was filled over a longer period of time. Also potsherds from f. 35 shared similar characteristics with those from the rondel ditch.



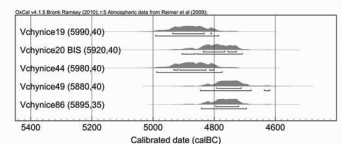
Clay pit (feature 35) in Vchynice. Photo by M. Půlpán.



Site location and the overall site plan with features containing STK pottery highlighted, completed with results of the geophysical survey by R. Křivánek.

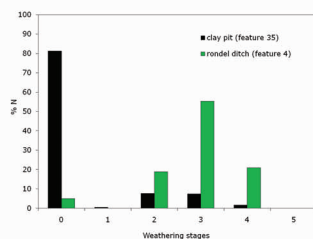
Methods

A total of 2,231 animal bones and teeth excavated in Vchynice were subjected to species and anatomical determination. The age of animals, butchering traces and impact of the biostratigraphic factors (e.g. weathering, permineralization, burning or root etching) were also registered. In the studied rondel ditch were contained 667 fragments of mammalian bones and teeth.



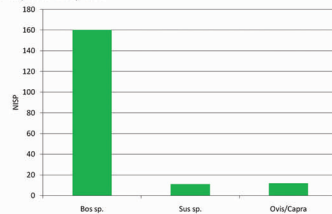
Calibrated radiocarbon dating from animal bones found in rondel ditch at Vchynice. Designed by T. Goslar (Poznań Radiocarbon Laboratory).

Results

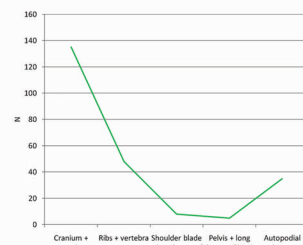


Share of animal bones and teeth (% N) damaged by weathering, found in the rondel ditch and clay pit (feature 35) at Vchynice. Undamaged finds (category 0), the most heavily damaged finds (category 5). The weathering stages defined by Behrens-meyer (1978) were used.

In the osteological material from the both contexts the bovid bones and burnt bones were similarly represented, but there were different proportion of small ungulates (sheep, goats and pigs) and game animals bones (at least in the rondel).



Determined animal species detected in the rondel ditch at Vchynice. NISP (number of identified specimens).



Animal bones and teeth (N) divided into anatomical groups, found in the rondel ditch at Vchynice.

Conclusions

The analysis of animal remains from the rondel ditch and from the other relatively current settlement features in Vchynice confirmed only **domestic animals** - cattle, pigs and sheep/goats, but with the different proportions. **The bovid bones were strongly represented** in the rondel ditch, while the remains of smaller ruminants were rather rare. Moreover, the bones of hunted animals were missing.

The **fragments of skulls, teeth and autopodial bones** (including the burnt ones) **prevailed** in rondel just like the other objects from STK. Therefore we can not talk about **any rondel exceptionality relating to its ritual functions**. The frequency of bone damaged by weathering differed significantly. The obvious majority (99.4 %) of the rondel ditch was represented by the bone findings damaged by weathering, in clay pit it was significantly lower (18.8 %). This could be explained by a **long history of material accumulation in the rondel ditch**.

The biostratigraphic factors markedly influenced the taxonomic identification. The bones of small ungulates and wild mammals decay more easily, therefore they are difficult to identify. We **can not deduce the ritual killing of cattle at a supposed sacred space** from the absolute dominant prevalence skeletal remains of bovids.

References

- Behrens-meyer, A. K. 1978. Taphonomic and ecologic informatik from bone weathering. *Paleobiology* 4, 150–162.
- Řídký, J., Kovačiková, L., Půlpán, M. 2013. The chronology of Late Neolithic features and an assemblage of animal skeletal remains from a settlement area with a rondel in Vchynice (northwestern Bohemia). *Archeologické rozhledy* LXV, 227–284.
- Řídký, J., Května, P., Půlpán, M., Kovačiková, L., Stolz, D., Brejcha, R., Šreinová, B., Šrein, V. 2012. Analysis and interpretation of finds from the Neolithic rondel ditch in Vchynice (Northern Bohemia). *Archeologické rozhledy* LXIV, 628–694.
- Řídký, J. 2011. Rondely a struktura sídelních areálů v mladoneolitickém období. Rondels and the Structure of Settlement Areas in the Late Neolithic Period. *Dissertationes archaeologicae Brunenses/Pragensesque*. Praha: Filozofická fakulta Univerzity Karlovy v Praze – Archeologický ústav AV ČR.

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