

From the Magdalenian to the Early Mesolithic

palaeoenvironmental changes and human activities at Kohlhau-Abri, southwestern Germany

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The site

Kohlhau-Abri is a rockshelter site located near the Lone Valley in Southwestern Germany. Excavations ran by the State Office of Baden-Württemberg between 2015 and 2018 uncovered a stratigraphic sequence ranging from the Late Glacial to the Holocene (Kind, 2020). The lithic artefacts represent different techno-complexes spanning the Magdalenian, Mesolithic and Neolithic.

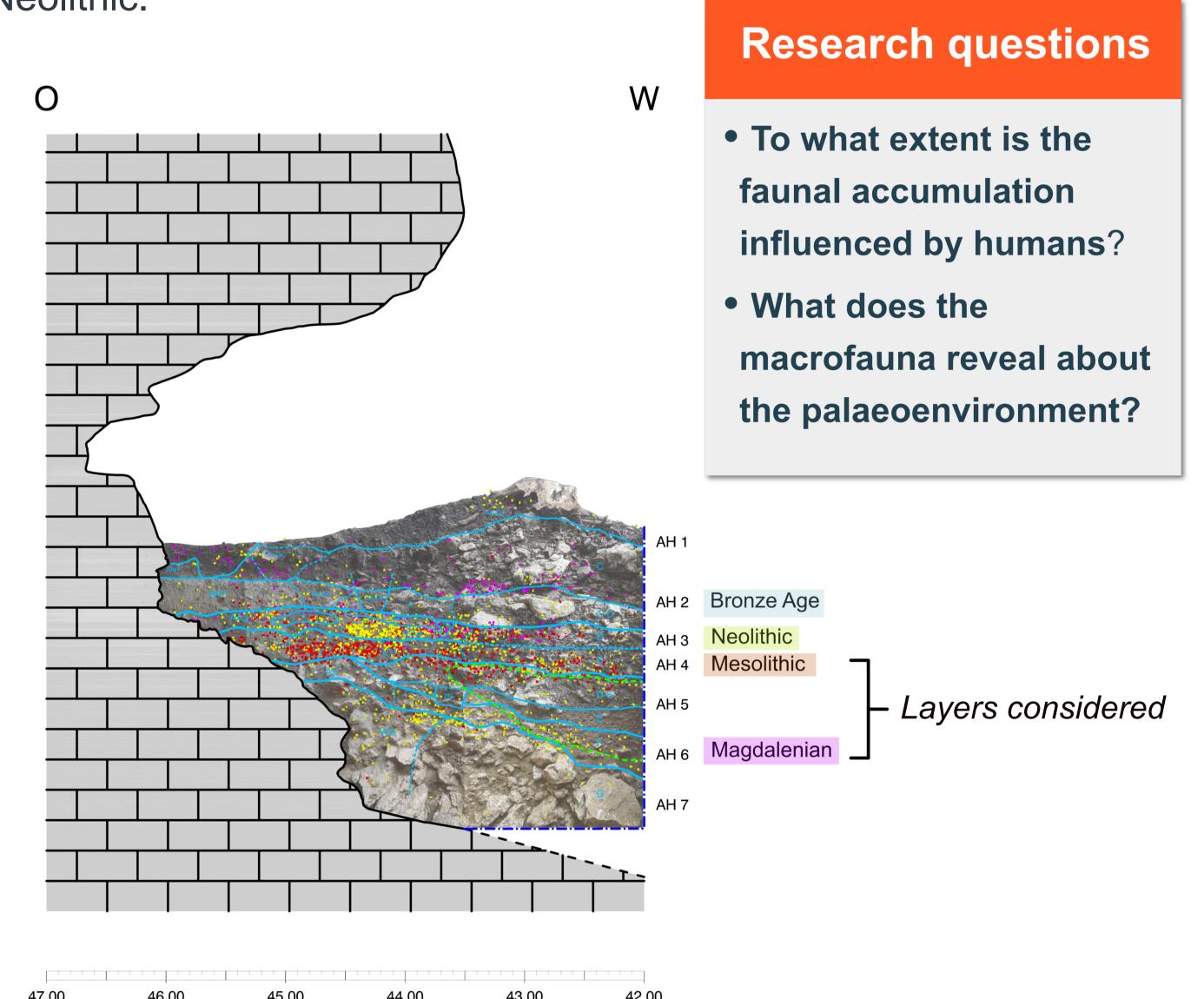


Fig.1 Northern profile with delineation of the archaeological layers and their techno-complexes

Taphonomic remarks

Overall the bone remains from all layers are highly fragmented and exhibit extensive root damage. Bone surface damage hinders the identification of anthropogenic modifications such as cut- and percussion marks. These were recorded only on few bone remains

from AH4, but progressing analyses might reveal their presence in other layers as well.

Gnawing damage becomes more frequent in AH 5 and 6, suggesting a larger impact of carnivores on bone accumulation.

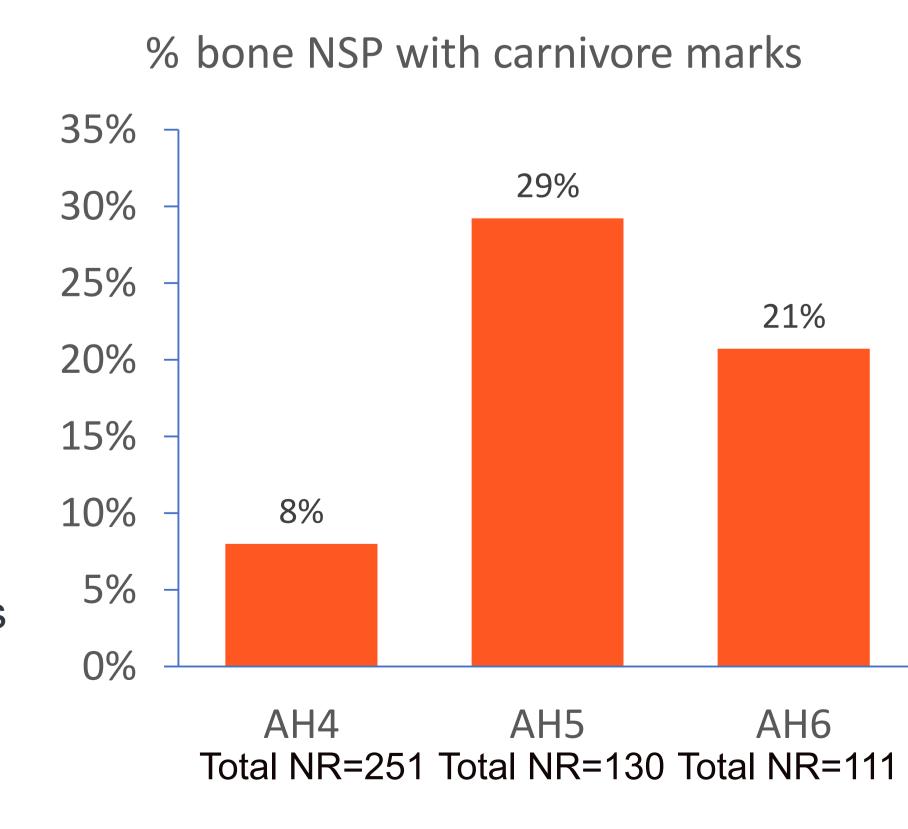


Fig. 3 Percentage of bone remains affected by carnivore damage in layers AH4 to AH6

The faunal remains

A preliminary comparison of the relative abundance of species in the Magdalenian through the Mesolithic levels reveals:

- the dominance of hare remains in all layers
- an abrupt change in faunal composition between AH5 and AH4 with the disappearance of cold and arid-adapted species such as reindeer and horse
- a substantial increase in taxonomic richness in AH4

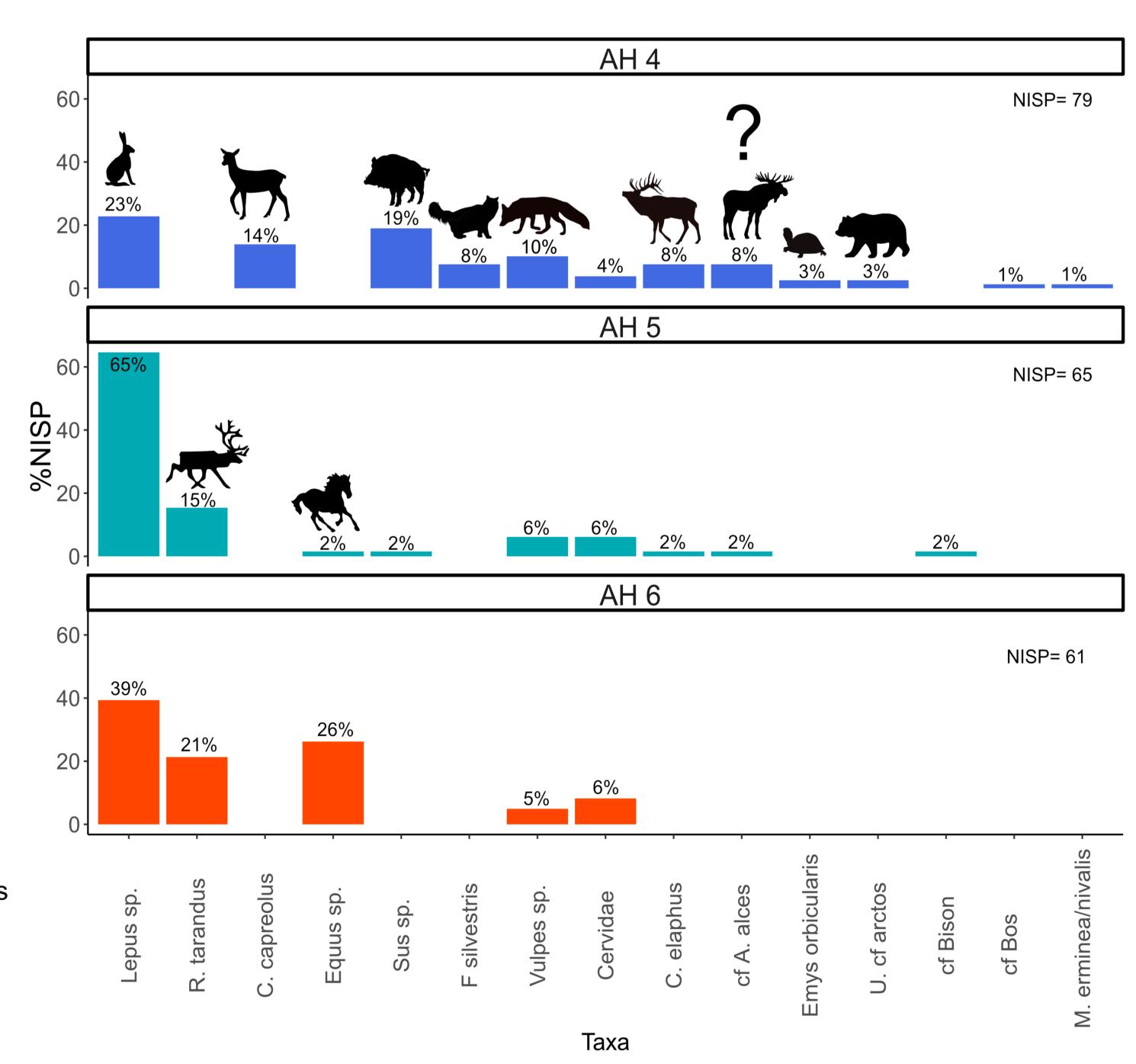


Fig. 2 Comparison of %NISP in layers AH4 to 6 highlighting the varying faunal composition

Preliminary Conclusions

- The macrofaunal remains from Kohlhau-Abri reflect consistent changes in environmental conditions that led to the disappearance of cold and arid-adapted taxa, such as reindeer and horse, and to the arrival of species better adapted to warmer, temperate climates, such as wild boar.
- The Late Glacial to Early Holocene transition records also an increase in taxa richness clearly influenced by the postglacial climate amelioration. This increase could also partly reflect a stronger influence of humans on the assemblage formation.
- Higher degrees of carnivore activity in AH5 and 6 may be correlated with a lower intensity of human occupation.