

# Settlements and Agricultural Practices in the 5th Mil. BC in Central Germany

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The 5th mil. BC is a time of diversification and transformation. Cultural, economic, and environmental changes are particularly evident when comparing the Early and Late Neolithic periods. However, agricultural practices, land use and settlement patterns indicate a much earlier onset and longer lasting development

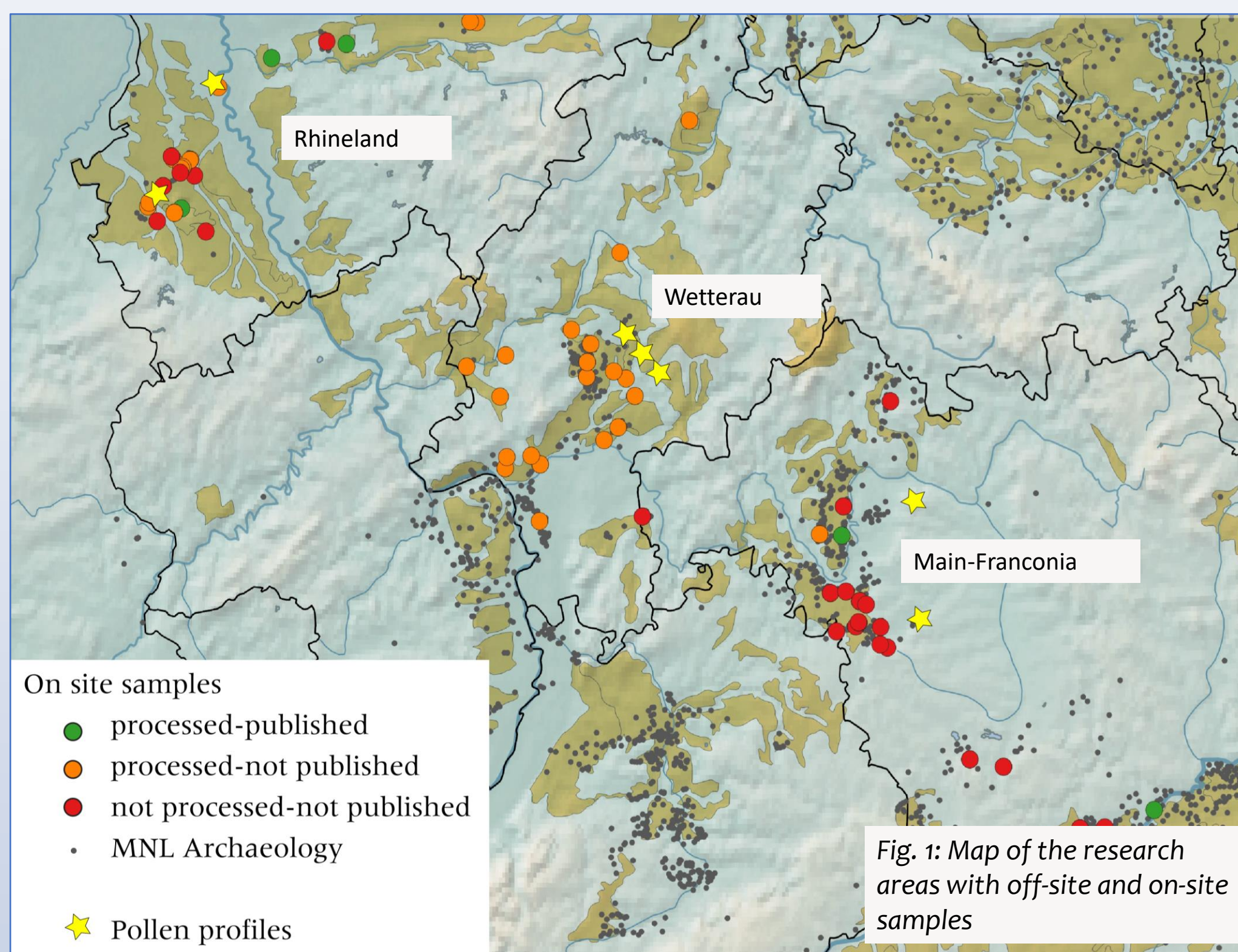
from the first half of the 5th mil. BC onwards. Within the framework of a project funded by the German Research Foundation (DFG), these changes, their sequence and causes will be investigated in a regional and diachronic comparison, focusing on the archaeologically well-studied loess areas of the Wetterau (Hesse), the

Rhineland (North Rhine-Westphalia) and Main-Franconia (Bavaria) (Fig. 1). In addition to archaeological, archaeozoological and dendrochronological investigations, archaeobotanical analyses will be carried out, both off-site (pollen and spores) and on-site (macro-remains).

## Economic and Environmental Development in the Rhineland, Wetterau and Main-Franconia regions

### Off-site

- ❖ When and why were territories outside of favourable areas being settled and used?
- ❖ What were the reasons? Which techniques were used (plowing, slash and burn)?
- ❖ Is there a change in the relationship between farming and animal husbandry? Was this triggered by climate change?
- ❖ Are there hints for changes in the land management (e.g. larger fields in greater distance from settlements)?

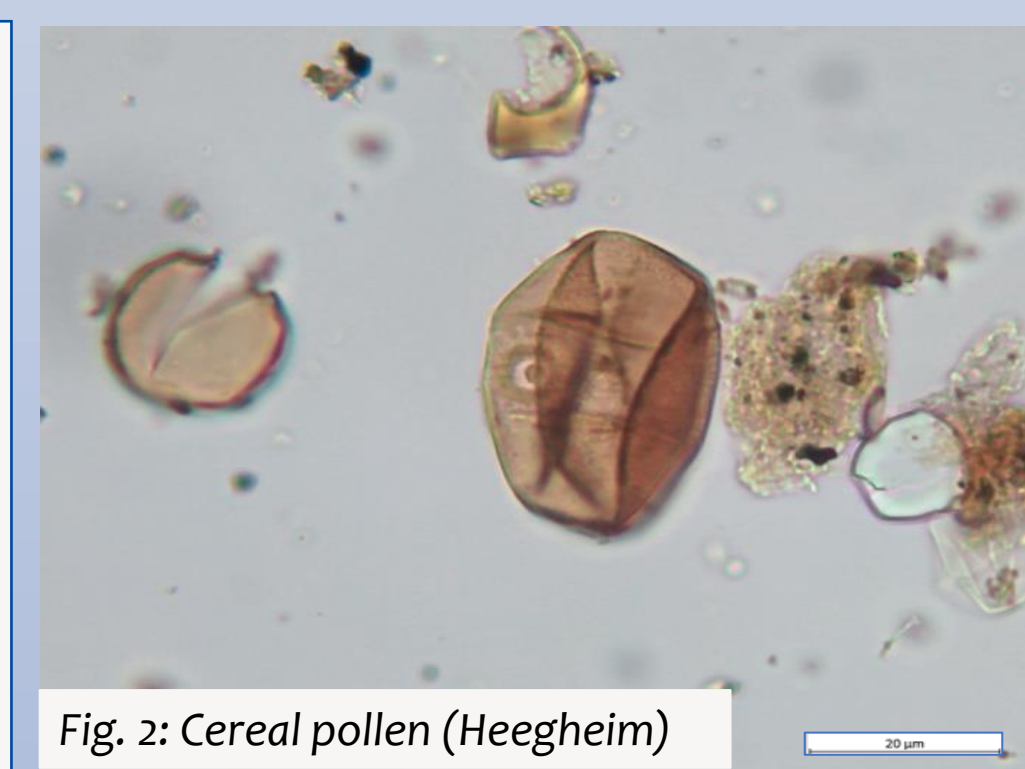


### On-site

- ❖ When were naked wheat and naked barley introduced and where did they come from?
- ❖ Can we find tetraploid naked wheat from the 46th c. BC onwards only in North-Rhine Westfalia?
- ❖ Were they used as summer and winter crops, granting more flexibility in crop cultivation?
- ❖ Did the soil quality deteriorate? Can manuring be detected?
- ❖ What are the major temporal and regional differences in terms of land use (crop cultivation and livestock rearing)?

## Planned Analyses

- ❖ Collecting more cores from wetland deposits near archaeological sites in the regions
- ❖ Close dating of the core segments
- ❖ Sampling for pollen, micro charcoals and NPP in ½ cm intervals



- ❖ Bringing together existing archaeobotanical data from older studies
- ❖ Adjusting the research status of the three regions by processing of samples from old and current excavations

- ❖ Comparison and merging of results from off-site and on-site archaeobotanical, archaeological, archaeozoological and dendrochronological analyses

## First Results

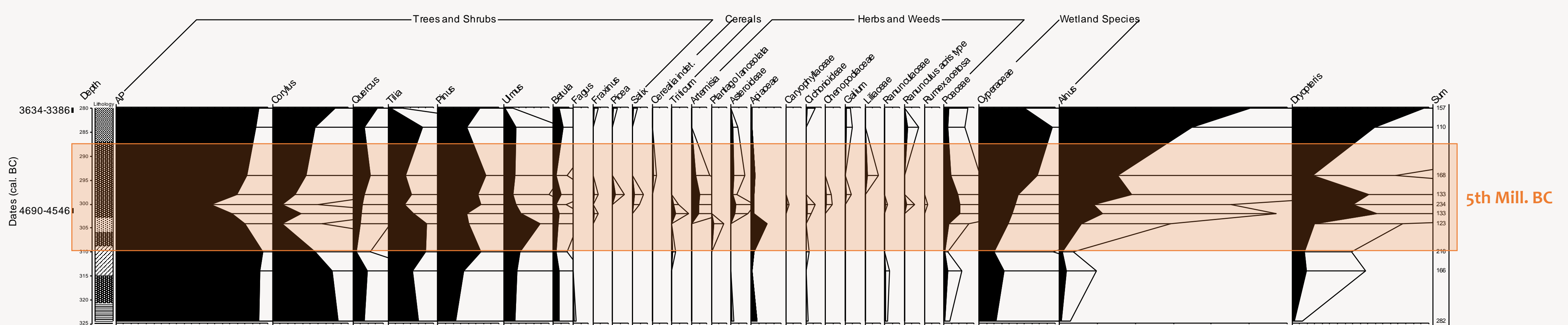


Fig. 4: Pollen profile from the Wetterau (Heegheim near Glauberg)

Preliminary pollen diagram from the eastern margin of the Wetterau. Different from profiles in the central Wetterau, where AP values started to decrease at the time of the Linear Pottery Culture, forest clearings did not take place before the Middle Neolithic.

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