



## Reconstruction of a paleolandscape in the Hunzebasin (Northern Netherlands)

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### RECONSTRUCTION OF A PALEOLANDSCAPE IN THE HUNZEBASIN (NORTHERN NETHERLANDS)

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In recent decades, significant changes have occurred in ways of thinking about the genesis of the coastal areas of Northwest Europe. In the study of the Holocene coastal genesis of Northwest Europe, a new diversified model has been developed. While the old model was based on a synchronized and coherent development of the entire Northwest European coast, the new model focuses attention on domain-specific natural processes. At the same time, the interaction between man and nature in the coastal zone is put into another perspective. The idea that man unilaterally conformed to the natural influence of the sea has gradually been replaced by a more dynamic and co-adaptive model.

These developments in ways of thinking are also important for the research of medieval reclamation of peatlands in the coastal area in the Northern Netherlands (present provinces of Friesland and Groningen). This research has long been overshadowed by theories and research concerning other areas, particularly the Western Netherlands. The classic uniform reclamation model, which has until now been applied to the peatland reclamations in the Northern Netherlands, needs revision. In my PhD research, I develop a new diversified reclamation model based on interdisciplinary research into the natural landscape and the reclamation history. The study focusses on the medieval peatland reclamations in the Hunze basin. The Hunze basin is a deeply eroded Pleistocene valley filled up with Holocene sediments in the Northern Netherlands, where in the late Holocene a tidal system has developed with its own domain-specific characteristics.

This paper, based on empirical research, covers the reconstruction of the 'natural' early medieval coastal peatlands in the Hunze basin. From previous research, it is known that the complete study area was covered with a layer of peat. In these studies, however, no statements are made about the peat landscape itself or the vegetation. At present a major part of the peatlands has disappeared by oxidation, but in the stream valleys layers of peat are still remaining. In order to reconstruct the former peat landscape the stratigraphies of the peat remains have been analysed for peat types and clastic sediments, using hand augering and analysis of plant macroremains. These empirical data, together with the known geological, archeological, historical, historic geographical and historic ecological sources, are used to reconstruct the development of the peatlands and make a paleogeographic map of the early medieval peat landscape. The map not only shows the peat distribution, but also the sequence of peat and vegetation types. This landscape reconstruction will serve as a basis for research into medieval reclamation of peatlands in the Hunze basin.