

STANS KEHSITEN: MACROREMAINS FROM A NEOLITHIC LAKE SHORE SITE IN CENTRAL SWITZERLAND

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The site of Stansstad-Kehrsiten, located in the canton of Nidwalden (Switzerland), represents the first Neolithic lakeside settlement on the border of the pre-Alpine region. Following trial sondages in 2003 and 2004, a large underwater excavation was conducted in the winter of 2007/2008. In total 12 m² were excavated.

As usually found in lake shore settlements, several occupation phases are identified in Stansstad-Kehrsiten. The earliest phase dated to the Cortaillod (ca. 4000 BC) and the latest phase dated to the Horgen Culture (ca. 3200 BC); the latter did not yield a cultural layer.

The archaeobotanical analysis is confined to the settlement phases of the Cortaillod (ca. 4000 BC) and the Pfyn (3450 BC), from which sediments were available. 60 sediment samples were analysed, yielding approximately 255,000 plant remains belonging to more than 100 different taxa. In both the Cortaillod and Pfyn phases, waterlogged plant remains dominate, while the proportion of charred finds comprising mainly cereals is only about 7 or 6%.

The spectrum of cultivated plants is dominated by naked wheats and barley in both settlement phases, as is known from contemporary settlements in the northern Alpine foothills. Hulled wheats, on the other hand, are rare. In the Cortaillod there is evidence of einkorn; however it could not be detected in the layers belonging to the Pfyn culture. Notable is the almost complete absence of emmer.

In both settlement phases remains of opium poppy are abundant. Remains of flax are very frequently recorded in the Pfyn layer and almost absent in the Cortaillod layer. Peas are present in small numbers, and their evidence is limited to the Pfyn layer.

The spectrum of wild plants shows a remarkable number of forest plants, including large quantities of silver fir, hazel and wild apple. Remains of spruce, beech, lime-tree, maple, oak and alder are equally frequent. Noteworthy also are the large numbers of yew seeds, found mainly within the Cortaillod layer. In addition leaves and stems of mistletoe are found in large numbers.

In contrast to the forest plants, indicators of open land are scarce. Weeds of winter cereals and grassland plants are rarely represented. Nonetheless, in the Pfyn layer, the presence of *Silene cretica* represents a typical weed of flax cultivation. The small amount of aquatic plants indicates a low lacustrine influence on the cultural layers.

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