

# PECULIARITIES OF PEAT FORMATION IN UPPER NEO-PLEISTOCENE AND HOLOCENE OF THE CENTRAL PART OF THE WEST SIBERIAN PLAIN

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**Abstract:**

Boggy deposits of the West Siberian Plain central are widespread covering min. 2/3 of the surface (excluding the floodplain) [1]. They are developed on all relief elements forming major wetlands, and their largest areas coincide with the I and II terraces raising above the floodplain of the Ob and its main feeders. Considering the Upper Pleistocene period, we will be concerned with MIS 3 deposits studied in the Kiryas section. In the beginning of MIS 2 (22-25 ths. years), the processes of deposition and peat accumulation were local and weak due to low temperatures and landscape drying out. A full section of MIS 2 was studied in the old settlement Mega. Their bottoms are clearly separated by peat lenses that are radiocarbon dated as 21.9 ths. years [2]. According to M.I. Neustadt [3], for MIS 1 the first signs of soil formation in the Ob River Region are radiocarbon dated as 10,585±80 years ago. The bog development is characterized by periodicity [4]. The beginning of soil formation here in the Holocene 10 585±80 y.a. coincided with the forest-tundra climate, spruce and larch dominated. These deposits were studied on the Vakh right bank within 110-120 km from the mouth, and according to the radiocarbon analysis, they are aged as 10675±100 BP (SPb-1696; 12407calBP). The economic structure of the study area is mainly represented by oil production facilities. In landscape terms, it is a segment of the Ob floodplain-terraced, meadow-swamp-forest area, where the percentage of the area occupied by oil production facilities is 88%. For 50 years, the process of bog-formation is complicated by human impact and this is primarily due to the reduction in the area of wetlands and an increase in infrastructure facilities necessary for oil and gas production. Favorable conditions for peat accumulation formed 8 780±35 years ago, and this process of varying intensity continues up till now. Biological adaptability of marsh vegetation to fluctuations of climatic conditions is important for peat formation.

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