

Region: Kudashevsky, Krasnoyarsky, Nivsky, Afoninsky, Izhevsky, Ust-Sarapulsky, Tarasovsky, Pokrovsky, Iksky, Turaevsky I burials. All cemeteries are ground. 213 samples pots were examined.

Some of the results are:

- 1) Ceramics was made without potter's wheel;
- 2) The raw material of ancient potters were fusible iron clays and river silts. Claylike silt raw material is absolutely new for Pre-Kama pottery. Silts had been discovered before by specialists in other Pre-Urals territories. The present raw material was widely used not only in the neolite age in the ceramics but much more later. Silts correspond to the pre-pottery period when the organic concentration was up to 50% in postsherd.
- 3) The methods of treatment the clay (silts). The clay were crushed into a dry condition before putting them into forming mass. Silts were dried before use and then they were crushed. Organic (sherds of shell river, plants) and inorganic (grog, dry clay) components were crashed too.
- 4) The most general reception to compose forming mass is the tradition to add to clay some bird dung.
- 5) The most popular form of pottery of masters Perm region are bowls.
- 6) The fire of pots was probably in bonfire or heart installments used to temperature conditions to the clay (450-470).
- 7) The level of pottery making may be define as pre-pottery.

## The architecture of the old-Russian settlements of the River Kama area

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The explorations found architectural ruins of an old-Russian population of Prikamye. It was discovered that before soil banks of settlements there were palisades (Kovrovo) or log-constructions (Hlynov, Slobodskoi). Later there were embankments of in-bank constructions made out of logs (Hlynov) of poles (Slobodskoi, Kovrovo) or of wattle-fence (Cherdyn), above that the frame-works' walls filled up with stones, were built (Cherdyn). Or log-made fences (Iskor). Side walls of fortresses were strenghtend with log-made fences (Kovrovo), or dwelling and frame-works (Kovrovo, Nikulitzyn, Podchurshino, Cherdyn, Shabalino), later the frame-works filled up with soil (Kotelnich, Podrelie II). The explorers found basements of towers with several (Kovrovo) or one hollow (Podchurshino), somethines with elemenys of heating (Kotelnich, Podrelie II). There were street lay-outs (Hlynov, Kotelnich, Orlov, Nikulitzyn, Cherdyn, Iskor) in the settlements, some of them even had log-made pavement.

Compact old-Russian settlements were found on the area of Volzhskaya Bolgaria there were 4 dwellings, 9 hollows, a fire-place, a wattle-fence in the North area of Bolgar, where artisans lived in the middle of XIII - first half of XIV century and there were discovered a farmstead which consisted of 2 dwelling buildings and some ones, in Bilyar, it's known that artisans of amber dwelt at the place before the Mongolian time usually settlements were situated near riverbanks (Iskra, Nikulchinskoe II, Rodionovskoe).

The dwellings of Rusian settlements of Prikamye were in two types: hallou-like and the ones above the ground, the first type of dwellings prevailled over the second one in earlier period of time. The scientists studied 4 dug-outs (1,4-1,7 m), 7 semi-dug-outs (0,6-1,2 m) and 5 houses situated on the ground with the area of 12-24 sq.m in the towns of Bolgar. There were discovered 56 dwellings (1 dug-out, 18 semi-dug-outs, and 37 on-the-ground buildings) in the area of middle Vyatka, there were found 6 on-the ground houses (6-17 sq.m) on the upper Kama River. There were discovered ruins of furnaces or fire-places in one of house's corners or near a wall, very rarely in the middle of a house. There were found also ruins of artisans' workshops (of a black smiths, jewellers, potters ets.), a basement of orthodox church (Poksta II) and ruins of pagan Russian - Permjak sacred place (Iskor).