



SPECIFICS OF TEACHING THE BIOPHYSICS OF FUTURE DENTISTS (FROM EXPERIENCE OF THE RUSSIAN AND UZBEK MEDICAL UNIVERSITIES) PALEOECOLOGY OF ZARAFSHAN VALLEY

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ABSTRACT

This paper investigates major points specifics of teaching the biophysics of future dentists (from experience of the russian and uzbek medical universities). Therefore, it makes investigation of theoretical and practical points of the specifics of teaching the biophysics of future dentists. In conclusion, it concludes with outcomes and shortcomings as the whole

Keyword: *Specifics, teaching, biophysics, future dentists, russian, uzbek, medical universities*

INTRODUCTION

In the upper part of Zarafshan River, a total area of 557 km² is covered by glaciers and is an important and unique reservoir of water supply of the valley. The initial part of the area of Zarafshan is located at a higher altitude. For example, the average height of the section above the Gulistan-Bulak Bridge is 3,100 meters. Therefore, in its upper basin, there is a constant abundance of snow and ice. The Zarafshan River is saturated with permafrost, permanent and seasonal snow cover and spring water. There are also about 80 lakes of various sizes at the top of the basin. In addition, the river is saturated mainly by groundwater [1].

The Zarafshan valley consists of 3 large oases: Samarkand, Bukhara, Karakul, and the Samarkand oasis is located in the middle of the valley. The oasis is surrounded by moderately high mountains such as Gubdintog-Aktag-Karatag in the north and Qoratepa-Zirabulak-Ziyovuddin in the south. The width of the oasis is up to 50 km, and after passing through the city of Navoi, the valley narrows again. For example, the Kyzyltepa and Obtobachi ridges are much closer to each other, forming the Hazor corridor, which is 8 km wide.

Stone weapons of the Middle Paleolithic were also found around the current Pioneers' Building, in the area of the former Ivanovo Park, and in the streets of present-day Kashgari. Also, animals such as gazelle, moose, bear, wolf, mountain goat, mouflon, tortoise, bull, Bukhara deer, elephant found in Kotirbulak, as well as Bukhara deer, wild horse, bull, Pleistocene found in the Late Paleolithic Samarkand. The discovery of bone remains of such animals testifies to the fact that during the Pleistocene the Zarafshan valley was rich in various fauna and deciduous flora. In addition, the presentation of the remains of Asian sheep, wild ass (donkey), gazelle, steppe tortoise, rodent and other herbivores indicates that the hills and plains of the valley are overgrown with meadows. It should be noted that the Kotirbulak fauna complex is very similar to the Omonkoton and Takalisay sites. These finds belong to primitive people who lived 100-40 thousand years ago, and in terms of geological deposits correspond to the terrace of the Syrdarya O3. During the Paleolithic period, the Samarkand oasis was rich in tugai forests, thickets and forests, and was rich in various wildlife. For example, during the excavation of the Samarkand site, many fossilized bones of animals such as large wild horses, bulls, Bukhara deer were found.

The area of Zarafshan basin is 29.2 thousand m², and in the Quaternary period the right and left mountain banks of the Zarafshan river consist of deluvial, proluvial and alluvial layers in terms of origin. The Zirabulak mountain deposit of the Zarafshan River is richer in proluvial rock deposits than elsewhere [2.278].

Despite some shortcomings in the passage of the Quaternary deposits of the Zarafshan valley, it is possible to use the scheme developed by Yu.A. Skvortsov, N.T. Vasilkovsky, N.T. Kostenko, the Central Asian Quaternary deposits. The complex of comparative stratigraphy of the scheme of Quaternary deposits of the Zarafshan basin was developed by geologist GF Tetyukhin [3.39]. These data, obtained in the study of the formation and development of the Quaternary deposits of the Zarafshan Valley, in turn, are important in the stratigraphic analysis of the geology of the Paleolithic settlements. Paleolithic monuments in the Zarafshan valley are located mainly in the conditions of the Tashkent (Karnab) and Mirzachul (Soqay) complexes [4.90].

The Tashkent complex (O₃) has different geological strata, including the Middle Paleolithic monuments Omonkoton, Takalisay, Zirabulak, Kotirbulak, and the upper Mirzachul (O₃) deposit complex consists of various thin geological strata, including Samarkand, Saraf, the last Paleolithic sites of the Zarafshan valley. Such as Khojamazgil and other destinations [5.129].

The fauna and flora (fauna and flora) found in the Paleolithic monuments erected along the valley are an important source in the reconstruction and imagination of the oldest paleoecology and paleogeography of the Zarafshan valley. Among the sites studied in the Paleolithic fauna of the Amankotan area in the Early and Middle Paleolithic period, paleontological materials found in the Late Paleolithic area of Samarkand in the Late Paleolithic period is an important source in identifying the paleogeography of the Zarafshan valley.

The geology of archaeological monuments of the Central Zarafshan mountain massifs was also developed by M. Djurakulov, D. Yamamedov [6.15-17]. The ancient dry river beds of Zarafshan consist of a large number of cones of sedimentary deposits of different ages, occupying the lands stretching from the Nurata Mountains to the Amudarya. Within the valley are several flat-topped plateaus - plateaus (separated by cliffs from similar places about the edges of the plateaus) ancient deposits protrude and visible ridges. These are the Uchbosh, Karakir and other flat hills, which date back to the Pleistocene, are based on the remains of the ancient river plains (microfauna) of the first Zarafshan. The oases near the city of Gazli consist of alluvial-river sediments, and the Chorbakti and Jusan-tepa ridge peaks may belong to the Middle Pleistocene. Lyuchcha valley is analyzed as the oldest of them. The oldest in terms of formation between this river and the old rivers is the Echkiliksay-Daryosay branch, and the last is the Bukhara and Karakul rivers (deltas). The formation of the canals was attended by layers of sand, fine sand and sandstone, coarse gravel, the upper part of which was strongly affected by the wind. Sections of paved deposits in the Daryosay oasis and related archeological monuments have been studied by a new technological research method and it has been determined that their dates are 6630-100 and 6590-130. Interestingly, Uchashi 131 was found to have early Neolithic deposits. The complex of deposits of the Echkiliksay-Daryosay branch is stratigraphically old, there are more ancient archeological finds in the Ayokagitma sediment, mainly of the Muste period.

The Mohandarya tributary of the Old River Lake and Delta was formed by Zarafshan during the Middle Holocene, and the tributary periodically recurred during the Late Holocene. Ya.G.Gulamov, U.Islamov, A.Askarov found and studied 45 Neolithic settlements and more than 30 Bronze Age settlements on the banks of these rivers and lakes. As for the Karakul and Bukhara deltas, the sandy clay and sand layers that form them

depend on irrigation - irrigation, which includes coal, animal bones, pottery, medieval and modern brick fragments [7.119].

The Kyzylkum region, which covers the lower reaches of the Zarafshan basin, has been developed by humans since the first half of the first Pleistocene, and during the first and middle Holocene, all areas of the region were developed by primitive communities. In some parts of the south-western Kyzylkum, the first Muster period monuments of the late Pleistocene were found and studied. During this period the natural climatic conditions were still quite cold and arid. Rainfall in the Kyzylkum was 100 mm per year, and wind speed played a major role in the sanding and desertification of the region. The wind speed here is 5-6 meters per second. Nevertheless, Kyzylkum is rich in various flora. From here, there are currently more than 1,000 plant species. There are 556 plant species in the southwestern Kyzylkum [8.17]. Water and wind played an important role in the formation of the Kyzylkum terrestrial landscape. Mil. avv. The Holocene period begins in 10-12 thousand years. Mil. avv. It starts hot and dry 10-9 thousand years ago. During this period, Mesolithic communities developed large areas.

Neolithic monuments are widespread along the old banks of Zarafshan and along the banks of the Amudarya. Neolithic monuments have also been found in many of the deserts that have now become deserts. The Karakat, Lavlyakan, Beshbulak, Mingbulak, and Koshbulak swamps are deserts, which have been developed by human communities during the Mesolithic period.

In the Zarafshan oasis, communities living in the Mesolithic period mastered subsistence farming and lived by hunting, fishing and gathering. However, they testify to the end of the Mesolithic and the end of the first Neolithic period. Some buds of production appeared in some places. For example, Neolithic communities living on the eastern slopes of the Qal'atpa-Sazagan mountains, which is connected to the middle basin of the Zarafshan Valley, were familiar with agriculture and animal husbandry.

CONCLUSION

Thus, the Zarafshan oasis, which consists of many natural, ecological corners, and then gradually assimilated a wide range of districts, shows that it is a favorable area for human habitation. The monuments found in the territory of Samarkand can be seen mainly hunting in the Early Paleolithic period. The present-day Kyzylkum deserts were also suitable for human habitation in ancient times. Rich in flora and fauna. People may have used fish meat as well, compared to the places found around the lake and river. So, it can be said that the Zarafshan oasis is considered to be an ecologically favorable area for human habitation.

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