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THE ROLE OF THE SHAHRIKHONSOY CANAL IN THE ANDIJAN REGION, THE BIODIVERSITY OF ORGANISMS AND MACROZOOBENTHOS LIVING IN IT

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Аннотация: В этой статье представлена научная информация об истории создания канала Шахрихансай,его роли в сельском хозяйстве,флоре и фауне шахрихансая,а также о макрозообентосе, населяющем его.

Ключевые слова: Канал Шахрихансай, водоток, биологический индикатор, макрозообентосар, разнообразие, уровень загрязнения воды, физико-химические показатели

Annotation: This article provides scientific information about the history of the creation of the Shahrikhonsoy Canal,its role in agriculture,the flora and fauna of Shahrikhonsoy,as well as the macrozoobentos living in it.

Keywords: Shahrikhonsoy canal, water flow, biological indicator, macrozoobentosar, diversity, water pollution level, physico-chemical indicators

ENTRANCE

Shahrikhansay - a main canal in the Andijan and Fergana regions.

The beginning of the canal is the Kampirravot hydroelectric power station. It was built by human hands in 1887. Its total length is 120 kilometers. The water carrying capacity at the beginning of the Shahrikhansay Canal is 110 m3/s; At the intersection with the Great Fergana Canal, 30 m3/s. Near the city of Asaka, two power plants operate with canal water (40 m3/s). Water in the canal is distributed through 8 large hydraulic structures. Reconstruction work has been carried out on the canal since 1976. The canal serves to receive floodwaters and winter discharge waters from the Akbura and Aravan rivers, which flow through the canal to the Asaka hydraulic junction. At 62 km of the route, the Shahrikhan-Sai merges with the Aravan-Sai River and flows from here (to the Nayman regulator) in the ancient riverbed. Together with the South Fergana Canal, it irrigates the lands of Andijan, Fergana regions and Osh region of Kyrgyzstan (127.5 thousand ha). In the Andijan region, up to the intersection with the Great Fergana Canal, 68,000 hectares of land are irrigated from the city of Sharixon alone. The role of the canal in agriculture, animal husbandry, and industry in the valley is invaluable.

The width of the Shahrikhansay canal varies in different regions.In Kampirravot, its width does not exceed 150 meters. In some areas, especially where the canal branches off, its width reaches 500 meters. The greatest depth reaches 1.5 meters in the head structure. Usually, along the entire length, the depth of the river varies from 20 to 100 cm in different places. Even without considering changes in water level and depth throughout the year, fluctuations throughout the day are significant. The soils of Shakhrikhansay undoubtedly have alluvial properties. It consists of stones and gravel of various sizes along its entire length. In the upper

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Although Shahrikhansay has the status of a canal, in addition to its initial part, its middle and lower parts embody the features of a natural aquatic ecosystem.In other words, as a result of continuous feeding from watercourses for many years, the species diversity of hydrobionts has increased, which has made it possible to spread widely. In particular, it has also had an impact on gerudafauna. Gerudafauna is a world of leech species that participate in biotic relationships with bioindicator properties in the form of "parasite-host" and "predator-prey." When studying the herudafauna of the Shahrikhansay River, it was established that 7 species of leeches belonging to 2 orders, 3 families, and 4 genera are distributed in this canal and its tributaries, and ecological groups were formed based on their habitat biotopes.The high turbidity of the Shahrikhan-Sai water has a serious negative impact on the overall development of benthos along the entire length of the canal. In coastal areas, the fauna increases. In the middle part of the canal, fauna is practically absent. Due to the high content of sand and clay in the water, the canal water is quite poor in vegetation. Near autumn, when the water becomes much clearer, positive changes occur in the flora and fauna.

In conclusion, due to the water regime and transparency of the Shahrikhansay canal, biodiversity is high. On the contrary, with a steady decrease in the amount of water, as well as with the deterioration of the ecological state of water, a decrease in the species of algae and macrozoobenthos living in it is observed. Since maintaining a constant water level, reducing the amount of waste discharged into the water, and the integrated proper use of canal water are urgent problems, it is necessary to find solutions to them and implement them in life, establishing the effective use of these methods.

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