Designing the Installation for Cleaning the Tasotkel Reservoir From Fishing Nets

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Objective: to develop an innovative way of cleaning the Tasotkel reservoir from fishing nets. Hypothesis: the developed cleaning method will allow cleaning the Tastkel reservoir from fishing nets. Research stages: preparatory: literature review; expeditionary: study of the level of pollution by fishing nets of the Tastkel reservoir in the Shu region; experimental: creation of an installation for cleaning the lake from fishing nets; analytical: evaluation of the efficiency of the installation for cleaning the reservoir from fishing nets. Research methodology: the study of the level of pollution by fishing nets of the reservoir was carried out using the methods of interviewing, mapping and visual inspection of the bottom of the reservoir; the definition of species diversity was based on the calculation of the Simpson index; determination of the systematic position of the ichthyofauna was carried out using a guide; when creating the installation, the methods of design, modeling and experiment were used. The novelty of the study lies in the fact that for the first time a schoolboy created an installation for cleaning the reservoir from fishing nets. Results of work and conclusions: the Tasotkel reservoir is experiencing the problem of pollution of the reservoir by fishing nets. The reservoir is inhabited by 9 fish species belonging to four genera: carp, perch, snakehead and catfish. The species biodiversity index is 0.82. The created model of the installation meets all the stated requirements and allows cleaning the Tasotkel reservoir from fishing nets. Areas of practical use of the results: the created model is able to help the ecosystem of the Tasotkel reservoir get rid of fishing nets abandoned by poachers.

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