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**ABSTRACTS**

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# ABOUT FINDS OF GLACIAL RELICTS IN CAVES OF WHITE SEA-KULOI PLATEAU

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Hydrobiological investigation of 18 lakes Pinega Nature Reserve was carried out in 1992-1995. Reserve is located in the southeast part of karstland – White Sea-Kuloi Plateau (64°27'24" – 64°42'42"N, 42°45'46" – 42°46'42"E).

During the first year of researches in the system of Eraskiny lakes we found rotifer *Notholca caudata* Carlin and it was one of mass species of zooplankton. Eraskiny lakes are situated below sea level (48.0 m) unlike other lakes of reserve. Waters of karst caves are the source of their feeding. The searches of this species during other years here and in other lakes have not given positive results. We have every reason to conclude that this species preserved in Eraskiny lakes since Iordiev Sea flooded this territory (Bayanov, 1997).

In 2000 during research the Kulogor caves near the reserve A.A. Semikolennyh and N.N. Franc (Institute of Geography RAS) found the representative glacial fauna *Mysis oculata* var. *relicta* Loven (Misida). Then relict *Pallasiola quadrispinosa* Sars (Gammarida) revealed. A determination of the species was made by N.W. Muge (N.K. Koltsov Institute of Biology of Development).

Early S.P. Kitaev (1981) marked relict crustaceans in 13 lakes of river basins of inflows Pinega-Vaimuga and Siya. Furthermore above-mentioned species *Pontoporeia affinis* Lingstrom and *Limnocalanus macrurus* Sars were revealed here.

Thus, the finds of glacial crustaceans together with *N. caudata* in the plateau caves confirm the Pejler' assumption (1962) that this rotifer is glacial relict. Occurrence of specimens in Eraskiny lakes was caused by casual carrying-out from caves by water flows. *N. caudata* is not the constant inhabitant of lakes but it inhabits underground caves waters. In our view one can to expect finds of other glacial species in caves of White Sea-Kuloi Plateau and a special researches of underground reservoirs fauna are necessary.

It is an interesting question how such ancient species (their age considerably more than one of last glacial epoch and modern caves), appear and remain in this area. The works of geologists and hydrologists who investigated genesis of karst caves will help answer it. According to the assumptions of A.V. Schavrina and V.N. Malkov (2000) underground cavities and caves of this area have a wide age diapason (middle and late Pleistocene-Golozene) and existed before glacier. Waters from afterward glacier of dam-reservoirs and ingression sea gulfs streamed down into ravines and caves of the southeast of White Sea-Kuloi Plateau after the degradation of glacier and the decreasing of water flow. Relicts presented in desalinating waters of water bodies adjacent to glacier and directions of ancient water flows defined ways of their migration. Representatives of relict fauna migrated to caves from glacier reservoirs.