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FAR EASTERN BRANCH  
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INSTITUTE OF BIOLOGY AND SOIL SCIENCE  
A.V. ZHIRMUNSKY INSTITUTE OF MARINE BIOLOGY  
PRIMORSKY AQUARIUM  
FAR EASTERN FEDERAL UNIVERSITY  
PRIMORSKY BRANCH OF THE HYDROBIOLOGICAL SOCIETY AT RUSSIAN  
ACADEMY OF SCIENCES



## **ABSTRACT BOOK**

### **3<sup>rd</sup> INTERNATIONAL SYMPOSIUM OF BENTHOLOGICAL SOCIETY OF ASIA**

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The 3rd International Symposium of Benthological Society of Asia is held in Vladivostok, Russia, from 24 to 27 August 2016, then from 27 to 31 August 2016 is continuing as The First International Youth Freshwater Ecology School. Various aspects of freshwater and marine biodiversity, biology and ecology problems are in the focus of the Symposium papers. Special attention has been paid to conservation of waters in the urban and wildlife areas of Asian region. Water quality and transboundary water ecosystem monitoring and control are considered at the international point of view as well as questions of ecological education and involving of public to water resources protection. The future international cooperation in different branches of benthological fundamental and applied sciences is discussed.

The book will be interesting for specialists in biology, ecology and biogeography, for practical workers, students and public deal with the water ecosystems protection, monitoring and control.

Co-Conveners: Academician of RAS Yu.N. Zhuravlev,  
Dr. N.K. Khristoforova (FEFU) & Ph.D. T.S. Vshivkova (IBSS FEB RAS)

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(P34) FROM TIBET TO DESERT: ON THE AQUATIC MOLLUSK FAUNA IN THE UBSUNUR HOLLOW OF TUVA AND MONGOLIA

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The aquatic mollusk fauna of the Ubsunur Hollow consists of twelve species, belonging to seven genera and four families. Three endemic *Odhneripisidium* (*Tuvapisidium*) species group (Bivalvia: Pisidiidae) were described by Y.I. Starobogatov, E.A. Streletzkaja and Z.I. Izzatullaev in Tuvan-Mongolian Tore-Khol' Lake. The focus of this report is to show species composition of aquatic mollusk fauna within the "Ubsunur Hollow" State Nature Biosphere Reserve (UNESCO list). During 1994 and 2015 small bivalves and gastropods were collected in lotic and lentic freshwater habitats.

Shells and specimens were fixed in 75 % alcohol; the collection is now deposited at the Institute of Biology and Soil Science FEB RAS, Vladivostok. Shells and specimens were investigated by conchological, anatomical and SEM methods based on original study. Conchological characters include shell outline of small bivalves, sculpture, features of hinge, ligament, muscle scars and pores; the most important structures are illustrated on the SEM photographs. Anatomical characters were studied *in situ* and figured with a camera lucida. Russian taxonomic system is used. As a result, the Gastropoda are represented by six species: *Lymnaea* (*Radix*) *auricularia* (Linnaeus, 1758), *L. (Galba) bowelli* (Preston, 1909), *L. (Orientogalba) hookeri* Reeve, 1850 (Lymnaeidae), *Armiger annandalei* (Germain, 1918), *Anisus (Gyraulus) acronicus* (Ferrussac, 1807), *A. (G.) terekholicus* Starobogatov et Prozorova, 1997 (Planorbidae). Six species of small bivalves belonging to four genera and two families (Pisidiidae and Euglesidae) were established. Three species from three genera of the Euglesidae were found in the Tore-Khol' Lake: *Euglesa (Casertiana) zugmayeri* (Weber, 1910), *Pseudeupera (Pseudeupera) subtruncata* (Malm, 1853) and *Cingulipisidium (Cingulipisidium) crassum* (Stelfox, 1918). Four species: *Lymnaea (Orientogalba) hookeri*, *L. (Galba) bowelli*, *Euglesa (Casertiana) zugmayeri*, *Armiger annandalei* were described in Tibet and recorded in the north part of central-asian deserts within Ubsunur Hollow. In regard to zoogeographical considerations, the malacofauna has a mixed composition. The widely distributed Holarctic and Palearctic elements are *Lymnaea (Radix) auricularia*, *Anisus (Gyraulus) acronicus*, *Pseudeupera subtruncata* (Malm, 1853), *Cingulipisidium crassum* (Stelfox, 1918); while *Lymnaea (Galba) bowelli*, *L. (Orientogalba) hookeri*, *Armiger annandalei*, *Anisus (Gyraulus) terekholicus*, *Euglesa zugmayeri* and a member of the genus *Odhneripisidium* are the Asian species.

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**Key words:** *aquatic mollusks, Ubsunur Hollow, endemic species*

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