



THE FIRST INTERNATIONAL CONFERENCE “DREISSENIIDS: EVOLUTION, SYSTEMATICS, ECOLOGY” (RUSSIA, BOROK, OCTOBER 28TH – NOVEMBER 1ST 2008) – CONFERENCE REPORT

The First International Conference “Dreissenids: evolution, systematics, ecology” was organised by the Institute of Biology of Inland Waters, Russian Academy of Sciences, in cooperation with the Russian Hydrobiological Society, the Ukrainian Hydroecological Society and the Byelorussian National Academy of Sciences. The conference site – Borok – is a small town with a huge Institute of Biology of Inland Waters, ca. 300 km north of Moscow, on the Rybinskiy dam reservoir.

On seeing the conference announcement in the internet, and then, while registering for the conference, I was hoping to meet numerous scientists from many European countries and from North America – mussels of the genus *Dreissena* are very widespread, and Russia is home to such invasive species as *Dreissena polymorpha* and *D. bugensis*. These species are especially often and thoroughly studied in the United States and Canada where they were introduced only 20 years ago, finding excellent conditions for development and further invasion. They cause great ecological and economic problems in the invaded aquatic ecosystems, including especially the American Great Lakes. I was also interested in the scientific approach to these mussels in Russia – the country always had many outstanding specialists dealing with the mussels for a long time.

Thus, I was disappointed with the small number of participants (about 35 people) and the very local character of the conference. Foreign guests included only three persons from Ukraine and one from Poland. As a result the programme was not overly full, and the conference, initially planned for five days, lasted only three. The programme was apparently prepared from day to day and till the very last moment the participants did not know what would await them tomorrow.



The volume of the conference proceedings, prepared by the Organisers and published before the conference, should be especially appreciated. It is A4 format, 163 pages, and includes 40 publications, most of them of a few to more than ten pages. Publications in Russian constitute over 90%, the rest are in English. It is easy to guess that only a part of the included

materials were presented “in vivo”, in the form of lectures of nearly one hour (4), short communications of 15 minutes (23) and posters (3). It should be pointed out that some of the presentations were not included in the published volume.

The range of habitats in which *Dreissena* are studied, presented during the conference, was rather wide. In the case of Russia they are mainly dam reservoirs (Rybinskiy, Kuybyshevskiy, Gorkovskiy, Uglitskiy, Ivankovskiy, Uchinskiy, Chograyskiy, Kamskiy), to a lesser extent – lakes (Vishtynyetskoye, Pleshtshevo, Ilmien, Senega), large and small rivers (e.g. Volga, Kama, Viatka), canals, cooling reservoirs and the Baltic Kuronian Lagoon; in Ukraine – Dnieper and the Kievskiy dam reservoir, as well as the cooling reservoir of the Khmyelnitska Nuclear Power Plant, in Poland – the Great Mazurian Lakes. Water bodies in different parts of the world, studied by the authors, appeared in many presentations: Lake Constance, American Great Lakes, dam reservoirs in Serbia, heated Konin lakes in Poland.

The range of presented scientific problems was also great. Population studies on the occurrence of Dreissenidae (larvae and settled individuals) in various natural and human-affected habitats (e.g. heated waters) formed a large group; the topics included population structure, abundance dynamics, seasonal variation, long-term changes and growth. A few presentations dealt with appearance of the mussels in new habitats, migration routes and invasion monitoring. Biocoenotic studies analysed the role of Dreissenidae as fish food, their proportion in benthos and their effect on macrobenthos, overgrowing other invertebrates, and also mussel parasites and symbionts. Possibility of hybridisation of *D. polymorpha* and *D. bugensis*, heavy metal content in their bodies, and their colour variation were also analysed; various methods of control of mussels overgrowing hydro-technical constructions were evaluated.

Time for short questions was allowed after each presentation; a longer discussion took place once and dealt with a very wide range of problems. During the discussion, extremely efficiently and brilliantly chaired by Professor ALEKSANDR PROTASOV from the Institute of Hydrobiology in Kiev (Ukraine), the

possibility of precisely ascertaining the distribution range of dreissenids, the hybridisation problem and the effect of mussel populations on various ecosystems were analysed at length and in detail.

The party on the first evening included speeches, toasts and dances; giving a congratulation letter and presents to the doyenne of dreissenid studies – Professor ALEKSANDRA ALEKSANDROVNA LVOVA from Moscow University – was a very nice event. Her first studies on *D. polymorpha* of the Uchinskiy Reservoir started in the 1950s. All the conference participants, including the undersigned, feel that they are ALEKSANDRA ALEKSANDROVNA’s students. I had the opportunity to cooperate with her during my stay in Moscow and Borok exactly 30 years ago. Most of the participants were young people, normally scattered all over Russia, often only starting their scientific adventure but already fascinated by the dreissenid mussels.

Borok is an important scientific centre, creating ideal conditions for studies and surrounded by beautiful pristine nature. It has a long and interesting history. The town has three museums devoted to three outstanding persons each of whom died at the age of 92: IVAN PAPANIN (1894–1986) – polar researcher, organiser and director of the Institute of Biology of Inland Waters, MIKOLAY MOROZOV (1854–1946) – revolutionist-nationalist and scientist encyclopaedists and FIODOR SOLNTSEV (1801–1892) – a documentary artist. The Museum of Nature is now being organised.

Thanks to the Organisers’ hospitality the participants could visit the museums and also selected departments of the Institute of Biology of Inland Waters, and learn what problems were studied there.

To sum up, it can be said that three days spent in a very nice atmosphere, in sessions and discussions, proved to be too short a time to explain all the problems implied by the increasingly vast range of dreissenids worldwide.

The Organisers are planning more dreissenid meetings in Borok.

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