

CHRONICLE

The 7th International Beaver Symposium, Voronezhsky Biosphere Reserve, Russia, 14-17 September 2015

The Voronezhsky Biosphere Reserve is one of the most famous protected areas of Russia, which has gained its distinction on behalf of beavers. Since 1923 the Voronezhsky Reserve has become the centre of dispersal of Eurasian beavers (*Castor fiber*). More than 2,500 animals were captured here and translocated to the wild within the former USSR and other countries. In 1932 an experimental beaver farm was established for breeding and studying these mammals. Gradually, this reserve has developed to one of the centers of beaver research in Eurasia. It is obvious, is hard to overestimate the role of the Voronezhsky Reserve in the restoration of beaver range. Nowadays the Voronezhsky Reserve is also an important centre of environmental education in the forest-steppe zone of Russia. Achievements of the Voronezhsky Reserve have logically led to including this institution to the network of venues of the International Beaver Symposia (IBS) started in 1997 and held every three years. The last one was already the seventh.

Many themes are usually discussed at these symposia: from the fundamentals of beaver biology to applied problems on practical management of this species. No exception was also the the 7th IBS. It was clearly reflected by the flagship title of the 7th IBS: "Beavers: from genetic variation to landscape-level effects in ecosystems". Actually, there were held five thematic sessions during the symposium: 1) biocenotic relations and impact on ecosystems, 2) genetics and morphology, 3) behaviour and ecology, 4) the status and dynamics of populations, and 5) management and cultural aspects?. Altogether 28 talks and 32 posters were presented by researchers and managers from 16 countries of Europe, Asia and the North America.

Biocenotic relations and beaver impact on ecosystems remains the most urgent topic during the last symposia. Ten oral presentations and 8 posters were devoted to this theme at the 7th IBS. It was shown the long-term occupation of various wetland habitats by beavers supposes significant changes of these sites not only with respect of structural alterations, but also with respect of adaptations of the related biota like fish, amphibians, zooplankton, small and medium-sized

mammals. New methods, like GIS technologies, camera traps, radio telemetry, etc., are implemented to study relationships of beavers with other species

Helminthological relations of beavers I would highlight as one of the specific topics of this symposium. Russian colleagues basing on the very long experience of helminthological research on beavers have demonstrated very interesting results about tight relation of parasite species composition and systematical status of beavers. This is the very important contribution to the old and ongoing discussion on intraspecific systematics of Eurasian beaver.

Genetic variation of beavers remains under the scope of international team of scientists. Indeed, it is related with the already mentioned discussion on Eurasian beaver systematics. However, genetic methodology was implemented also at the intrapopulation level, e.g., for genetic monitoring of the newly reintroduced populations of beavers to find out distribution of genotypes during the process of expansion and detect the potential of an invasive species, the North American beaver (*Castor canadensis*). The restored populations of Eurasian beaver are intensively studied using also classical morphological methods of craniometry. Findings clearly show domination of the origin of populations in determining morphological polymorphism of the studied populations. On the other hand, there are some morphological indications of adaptation to local environmental conditions of the reintroduced beavers. For summary, one can see that certain multidisciplinary approach should be taken to solve problems of systematics: data on genetics have to be overlaid with morphological data and with parasitological data as well.

Two outstanding scientific monographs were presented on the 7th IBS. One of them is devoted to beaver helminths (Romashov B.V. 2015. Beaver helminths: *Castor fiber* and *Castor canadensis*. Voronezh: FSBEI HPE Voronezh SAU Press.). Dr. B. Romashov presented original helminthological data processed in the Voronezhsky Reserve, but sampled in many regions of Eurasia. The second book is dealing with the beaver's role as an ecosystem engineer in the small rivers of

Russia (Zavyalov N.A. 2015. Ecosystem engineering of the beaver (*Castor fiber* L.) in the forest zone of European part of Russia. Proceeding of State Nature Reserve Rdeysky. V.3. Velikij Novgorod).

Russian colleagues have organized an excellent meeting. Many people have noted rich post conference programme, which included many historical highlights of this region.

By the collegial decision of the scientific committee of the 7th IBS, the next 8th International Beaver Symposium was proposed to organise in Denmark, in 2018.

Dr. Alius Ulevičius

Member of the scientific committee of the 7th
International Beaver Symposium
Faculty of Natural Sciences of Vilnius University