## Obituary



Marina Nikolaevna Meyer (1927–2001)

The leading scientific researcher of the laboratory of theriology in the Zoological Institute RAS, Doctor of biological sciences, Marina Nikolaevna Meyer died on January 2, 2001, 73 years old.

It was a great loss for the whole collective of the laboratory and Institute. Many people worked with her in the Zoological Institute almost for forty years and first of all have maintained friendly relationships, secured by numerous mutual expeditions and common work. We knew her not only as an excellent organizer of scientific work, specialist in the systematics of rodents, but as a person who always can give an advise and consultation and sometimes support a colleague in a difficult time with a kind word and personal enthusiasm. People with a complicate personal fate strive for her and found response and consolation. We often visited her at home where spent long evenings talking and drinking coffee under accompaniment of her numerous favorite pets. Having not found happiness in a personal life she found it in her many years hobby – creation of own domestic zoo. I do not know anybody among my friends who can so thoroughly and selflessly take care of numerous birds, fishes, frogs, monkeys, and dogs. They occupied most part of her free time alongside with reading and collecting of fiction, books, and mostly detectives. Marina Nikolaevna was a dreamer, she was interested in unusual phenomena, in the nature of life and death, but at the same time she had a sober, "male" mind, easily recognizing nonsense and lie.

The interest to everything living Marina Nikolaevna showed from the early childhood. It was greatly promoted by her father – Professor, Doctor of biological and agricultural sciences, and, naturally, she entered the Biological faculty of Leningrad State University. Her scientific and work activity was continued in the All-

Union institute of Plant protection, where she start to work as a technical assistant, then post-graduate student, and afterwards she was hired in the staff of the Institute on the position of junior scientific researcher. Her post-graduate thesis was titled "Age criteria of little suslik (*Citellus pygmaeus* Pall.) and their use in the ecological studies". She was always interested in the questions of populations, intraspecies variation, and problems of speciation in rodents.

In 1962 Marina Nikolaevna was hired in the staff of Zoological Institute. She participated in writing the monograph on the ground squirrels (Gromov et al., 1965). At the same time she establishes vivarium for keeping rodents. There was supposed to study the peculiarities of their reproduction and growth, age variation and also to make experiments on hybridization of closely related, hardly distinguishable species. Vivarium became an experimental base for her further activity. Marina Nikolaevna was enforced to be busy not only with direct studies but with a lot of logistical questions: where to get the corn, hay, and how to repair cages. These questions always were solved quickly and energetically, despite of their difficulty. The living collection of rodents always flourished, all animals grew excellently and reproduced. It should be noticed, that Marina Nikolaevna had several bright talents. One is organizing: creation and maintaining of vivarium, organization of cooperative scientific work with collectives of other institutes. The second fantastic talent is ability to keep animals. All animals she kept reproduced, starting from fishes and frogs to monkeys. Sometimes she was the only person who was able to get an offspring from some animals very difficult for domestic breeding. She went deeply in the biology of species and was able to create conditions necessary for their existence.

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Marina Nikolaevna was an outstanding zoologist, which excellently combined experimental and theoretical work, field and laboratory methods. In her work on systematics, Marina Nikolaevna took as a basis the biological concept of the species, and as a main criterion – reproductive isolation. However, she always used other characteristics of the forms under study: features of the growth and development, morphology and morphometry, karyology, biochemical parameters. Karyological works were carried out on the material of M.N. Meyer at first by Polish colleagues and later on her established longlasting cooperation with geneticists from the Institute of Cytology and Genetics of the Siberian Branch of RAS -S.I. Radzhabli, A.S. Grafodatsky, S.M. Zakiyan, V.T. Volobuev, O.V. Sablina and colleagues from the Institute of Problems of Ecology and Evolution RAS, first of all with V.N. Orlov and N.Sh. Bulatova. With many of them she was connected not only by mutual work but and with sincere friendship. She organized and inspired the work of a whole collective, putting on the tasks and providing the studies with a valuable material, obtained in numerous expeditions and experiments on hybridization in vivarium. Already in 1967 Marina Nikolaevna formulated the new approach to the solution of complicated questions in the classification and taxonomy complex taxonomic analysis (Meyer, 1968). Marina Nikolaevna clearly understood that such a complex biological phenomenon as a species could be studied only from many aspects. One method, even if it would be absolutely logic would not give a comprehensive perception of the object. Such position allowed Marina Nikolaevna to get unique results in her work. Studying the group of forms with unclear taxonomic rank, usually referred to the species *Microtus arvalis*, she proved the existence of a new species, which was described under the name of M. subarvalis (Meyer et al., 1972). Later she studied all the voles belonging to the group "arvalis" and proved their independence. In parallel these voles were studied by other authors, however the works of Marina Nikolaevna were distinguished by special thoroughness, large amount of material used, and unique experiments on hybridization. Material always was gathered first of all in the type locality, which allowed to solve competently nomenclature questions, and only later, when it was exactly found out what form inhabits the terra typica, the studies were expanded on the whole range. In this way other representatives of the subgenus Microtus were studied. The theoretical ground of this approach found its reflection to a total degree in the doctorate dissertation of Marina Nikolaevna - "Complex taxonomic analysis in the systematics of rodents on the example of gray voles (genus Microtus) of the fauna of the USSR" which was successfully defended in 1985. Marina Nikolaevna is an author or co-author of five chapters in the book "Common vole: sibling species of Microtus arvalis Pallas, 1779, Microtus rossiaemeridionalis Ognev, 1924" published in 1994. The monograph on gray voles (Meyer et al., 1996) was a result of many years studies.

Objects of Marina Nikolaevna were not only gray voles. She studied also the steppe lemmings (*Lagurus*) and dwarf hamsters (*Phodopus*), and in the last time was

involved in the studies on the systematics of mouse-like hamsters (Calomyscus). To the studies on the last theme she attracted a young researcher V.G. Malikov, who currently prepared a candidate dissertation on this subject. Unfortunately, she did not see the work of her student finished. Marina Nikolaevna was also my scientific teacher. Under her supervision I finished my thesis on the voles of the Far East, then we had many common works and projects. In the last years we went together to the Vladimir Province in central Russia, trying to find the zone of hybridization between two chromosome forms of *M. arvalis*. By this time it was quite a hard for Marina Nikolaevna to endure field conditions. However in those places where it was possible to find the settlements of voles, she stood on knees and creep as the rest ones among the shrubs, informing us cheerfully about found traces of animals.

Marina Nikolaevna was a bright, easily carried away, all-round person. Now, almost a year after her death, these qualities are particularly clear. We should also remember her principal vital position. She never entered the Communist party and accused young specialists who in the sake of career entered its rows. However this did not prevent her from participating in many international projects, and to visit different countries, including the expedition to Vietnam. She was involved by many things, she was an excellent photographer of animals, collected stamps with animals, and her home zoo attracted both specialists and amateurs. As it can be seen all her passions were related to "younger brothers", which were devotedly loved by her. When it was suggested to her to shoot for TV her pets, first of all she cared about the shooting conditions, in order her pets were not frightened and suffered. She deeply suffered the loss of any of them. She particularly suffered when died her favorite dog. Her last pet, a small blue poodle Nika was almost like a human being and understood everything from half a word.

Her friends and colleagues still hardly can believe that such energetic, bright person had gone forever. We lost the friend and adviser in many vitally important questions, and science lost excellent, initiative specialist on rodent systematics.

## References

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