Faunistic research in the Moscow Governorate in the 19th century: the role of scientific societies

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Abstract. The present paper deals with the history of faunistic research in the Moscow Governorate in the 19th century Russia and the role played in this research by the Moscow University and affiliated natural history societies, especially the Moscow Society of Naturalists and Society of Friends of Natural Science, Anthropology, and Ethnography. The question is discussed why, in spite of a number of research projects on the Moscow fauna, initiated by these societies, even in the beginning of the 20th century the progress in the field, according to the leading Moscow zoologists, was still insufficient.

1. Introduction
The Tsardom of Russia founded in 1657 during the subsequent one and a half century considerably expanded its territory in Europe reaching the Baltic Sea in the west, the Volga Region and Crimea in the south, while Russian pathbreakers colonized the vast territories of Siberia, Far East and Kamchatka. The epoch of Peter the Great gave rise to systematic exploration of the immense territory of the Russian State (in 1721 it was proclaimed the Russian Empire) and the Saint Petersburg Academy of Science established in 1724 played an important role in this process [1, 2]. Obviously enough, members of the Academy were especially interested in exploration of far-off corners of the country, since it promised important discoveries in geography and natural sciences. Central Russia was less promising in this respect and therefore was vested in universities. The 1803 Regulations of the Academy stated that it “would address to universities <…> in regard to all information, reports and natural objects of their [educational – GK] districts” [3]. At the period this statement was nothing more than vain wishes: university science was still at its nascent stage as the educational reforms of Alexander I were only gathering momentum and the country had merely three universities in Moscow, Dorpat and Vilna (though in the following decades their number increased considerably). The present paper drawing on the example of the history of faunistic research in the Moscow Governorate in the nineteenth century shows how universities coped with the task of exploring the territory of their educational districts and what role university natural science societies played in this process.

2. Materials and methods
The present paper is based on published and archival sources, which were used to reconstruct the history of faunistic research of the Moscow Governorate and the contribution of scientific societies to this research. The published sources fall into four groups: general works on the history of natural science in Russia; works on the history of the Moscow University and affiliated scientific societies; faunistic research of the Moscow region; minutes of Moscow scientific societies. The analysis of the
published sources was supplemented, when needed, by the study of archival documents and manuscripts stored in the archives of the Moscow University and Moscow Society of Naturalists.

3. Natural history in the Moscow University in the eighteenth century
The Moscow University founded in 1755 was organized on the model of European universities, except for the lacking theological faculty, and had one “lower” philosophical and two “higher” faculties of medicine and law. Originally for lack of professors and students, only the Philosophical Faculty was able to start instruction. The Medical Faculty was opened in August 1758, when J.Ch. Kerstens came to Moscow from Leipzig. He took the chair of chemistry and was appointed curator of the Natural Cabinet of the University, while the chair of natural history remained unoccupied for another eleven years and only in December 1769 M.I. Afonin, an alumnus of the Uppsala University and student of the famous Swedish naturalist Carl von Linné, began lecturing on natural history. He also got the Natural Cabinet at his full disposal. In 1777 he was succeeded by I.A. Sibirskii and after his death in 1783 the chair was divided between two professors – F.K. Kurika and F.G. Politkovskii. The former read natural history in Latin and the latter in Russian. But in 1785 Kurika died suddenly leaving the chair to Politkovskii who was holding it up to 1802 [4].

Natural history under Politkovskii was gradually strengthening its presence in the University. In addition to his lectures to medical students, the course of natural history not referred to medical sciences was started at the Philosophical Faculty since 1791. Natural history collections of the University expanded considerably, so that on the turn of the nineteenth century the Natural Cabinet of the University developed into a true natural history museum, the center of attraction of Moscow naturalists, the more so that since 1803 public readings accompanied by experiments and demonstration of museum items were held there [4]. It was zoological collection of the Museum that made possible the first faunistic survey of the Moscow Governorate.

In 1796 an alumnus of the Medical Faculty I.A. Dwigubsky was appointed a curator of the university museum. As a student he was interested in natural history so it was clear enough, why he took this position. Less clear is the question why he started his research work with the museum zoological collections, while those of minerals and plants were far more rich and extensive. Besides, special course of zoology was not present in the university curriculum till the beginning of the 19th century [4] and neither of the above mentioned professors of natural history, including Politkovskii showed special interest in this discipline and preferred botany, chemistry, or even studies in polite literature. Dwigubsky himself, as well, switched later from zoology to botany and agriculture (he was a prolific author with wide interests in natural sciences). Nevertheless, he chose for his master’s thesis the study of amphibians of Moscow and its vicinity (De amphibis Mosquiensibus) and successfully defended it in 1798. Some years later he presented to the University his doctoral thesis in Latin on the fauna of the Moscow Governorate titled Primitiae faunae Mosquensis (defended and published in 1802). This work included descriptions of 962 species inhabiting the Moscow Governorate, among them 18 species of mammals, birds – 116 species, amphibians – 11, fish – 17, insects – 667, worms – 33 [5]. Though his list was essentially incomplete, the significance of this work can hardly be overestimated. It was not only a considerable step in development of zoological research in the University but, which is more important in the context of our theme; it laid foundation for faunistic research in the Moscow Governorate and regional faunistic research of Central Russia.

4. Natural history societies of the Moscow University in the first half of the nineteenth century
The beginning of the 19th c. was marked by significant changes in the University. Pursuant to the 1804 Regulation of the Imperial Moscow University one more faculty was established – the Faculty of Physics and Mathematics with nine chairs, including the chair of natural history, which was given to I.G. Fischer von Waldeheim. Besides, the Regulation awarded the University a “special privilege” to establish learned societies “whether practicing Russian and ancient literature or disseminating experimental and exact sciences” [6]. This was very important since the first university curators seemed to take particular interest in literature and poetry and initiated a number of literary learned
societies (Free Russian Assembly, 1771; Friendly Learned Society, 1782 et c.) but not a single naturalists’ society.

The first natural history society, the Society for Competition of Medical and Physical Sciences [4; 7], was organized in December 1804. Originally it intended to give an eye both to natural sciences and medicine but already in the 1810s it largely switched to discussion of medical problems. As for the study of the Moscow Governorate territories, from the very beginning it was limited to botanical and meteorological observations and examination of mineral springs.

Several months later another natural history society, the Moscow Society of Naturalists (MOIP in Russian initials), was established [7]. It was meant to be a Moscow substitute of the Saint Petersburg Academy of Science, which was no wonder in view of the undying rivalry between the two capitals. The society nurtured ambitious goals to explore the whole territory of the country and “to collect in geographical order all natural objects of the Russian State in regards to mineralogy, botany, zoology, agriculture, and industry” [8].

Besides, MOIP paid special attention to natural historic exploration of the Moscow Governorate. The founder and first director of the society Fischer von Waldheim stated that “Moscow and the whole Moscow Governorate in particular deserves our attention”, because “for the enlightened Society which took an aim to explore Nature it is inexcusable not to make research in the vicinity of where it is established” [9]. So, he initiated a project of a comprehensive geographical, naturalistic, historical, economical study of the Moscow Governorate and attracted many MOIP members to its realization. By the beginning of the 1810s extensive collections of animals, plants, and fossils were gathered but in 1812 they were partly lost during evacuation, partly destroyed by the Moscow fire. Unfortunately, this project was never relaunched by the Society and its only result was Fischer’s *Oryctographie du gouvernement de Moscou*, published in 1837.

5. **Faunistic studies of the Society of Friends of Natural Science**
A new phase in faunistic studies of the Moscow Governorate started in 1863, when on the initiative of professor of zoology and director of the Zoological Museum of the Moscow University A.P. Bogdanov the Society of Friends of Natural Science (since 1867 – The Imperial Society of Friends of Natural Science, Anthropology, and Ethnography, OLEAE in Russian initials) [10; 11] was established with the goal of natural-historical exploration of the governorates of the Moscow Educational District and promotion of natural science. Though later the Society became widely known all over the country due to its contribution to anthropology, ethnography, and geography and due to its scientific exhibitions, at the start its plans were not so extensive and focused mainly on zoological research of the Moscow region and development of the University zoological collections, which were extremely poor in local fauna, especially insects.

In the summer months of 1864, OLEAE organized zoological excursions to several *uezds* (districts) of the Moscow Governorate and this could be considered the starting point of the first comprehensive program of faunistic research of the Moscow Governorate. The Society invited all members to take part in these excursions. For those who were not proficient in collecting, Bogdanov and his students A.P. Fedchenko and N.K. Senger worked out a *Concise Advisory on Collecting Natural History Objects*. It described methods to collect and preserve various animals, plants, rocks, and paleontological artifacts but mostly dealt with insects. During 1864-1866 more than 35 thousand insect specimens were collected, mounted, and identified. In 1866 to further foster these research OLEAE established a Permanent Entomological Committee under the presidency of Fedchenko [12], which published in 1868-1870 the first three papers on insect fauna of the Moscow Governorate authored by A.P. Fedchenko (dipterans, 1227 species), V.N. Ul’anin (neuropterous and orthopterous insects, 196 species), and V.F. Oshanin (hemipterans, 384 species). The Committee also intended to publish research on the fauna of beetles, hymenopterans and other insect groups but they never appeared and the work of the Committee, in spite of several attempts to revive it, gradually came to an end.

It was not until the beginning of the 1890s that the idea of a large scale program of faunistic exploration of the Moscow Governorate once again began to take its shape [13]. At that time OLEAE
was busy organizing the International Congress of Zoology, which was to be held in Moscow in August 1892. In the beginning of this year Bogdanov suggested to include into the Proceedings of the Congress a review of Moscow fauna. In April 1892, to accomplish this task, a special commission was established to compile the updated and enlarged second edition of Dwigubsky’s *Primitiae Faunae Mosquensis*. A year later the commission was reorganized into permanent Committee for Faunistic Exploration of the Moscow Governorate, but actually it belonged to the 20th century when it founded the Kosino biological station, organized a number of expeditions across the Moscow Governorate, published a series of papers on the Moscow fauna etc. Unfortunately it shared the same fate as its predecessors in the field of faunistic research of the Moscow region and though it survived well through the 1917 revolution and was active during the following decade and a half, in the early 1930s it was eliminated together with OLEAE.

6. Conclusion

The history of the two 19th century faunistic projects initiated by MOIP and OLEAE raises more questions than it gives answers. And the most important question is why the both societies later were not too eager to revive them in spite of their declared scientific and economic importance. If we consider that the projects were started during the very first years of the societies’ existence we may suppose that faunistic research of the local fauna (it might be flora or minerals, as well) was regarded by the leaders of the societies as the most obvious and inexpensive way to attract naturalists, both professional and not, to cooperative work in the society. And when the standing of the society strengthened, this faunistic research could easily be abandoned in favor of more ambitious and money-consuming projects. And this was what actually happened.

Fischer von Waldheim, for example, in the 1810s-1820s was busy developing his idea of the National Natural History Museum, which promised to make MOIP independent of the University authorities and support solid academic reputation of the society. Similarly, the most active members of the Entomological Committee switched in the end of the 1860s – 1870s to other projects, e.g. Fedchenko headed the OLEAE Turkestan expedition that brought him a world-wide fame and Oshanin travelled in the South Caucasus and moved to Tashkent to head the OLEAE Turkestan Division, which was being established at that time. The Faunistic Committee founded by a younger generation of OLEAE zoologists seemed more successful but it didn’t survive the reform of scientific societies undertaken by the Soviet power in the late 1920s – early 1930s.

References

[1] Vucinich A 1963 *Science in Russian Culture: A History to 1860* (Stanford, California: Stanford University Press)
[2] Kolchinsky E I, Sytin A K and Smagina G I 2004 *Natural History in Russia* (St. Petersburg: Nestor-Historia)
[3] Skriabin G K 1974 *Regulations of the Academy of Sciences of the USSR: 1724 – 1974* (Moscow: Nauka) p 65
[4] Shevyriov S P 1855 *The History of the Moscow University* (Moscow: University Typography)
[5] Dwigubsky I A 1892 *Primitiae Faunae Mosquensis* (1802) 2nd ed. (Moscow: I.N. Kushnerev and Co)
[6] The Imperially established Regulation of the Imperial Moscow University 1804 *Complete Collection of Laws of the Russian Empire* 28 571
[7] Krivosheina G G 2019 Scientific societies and exploration of the territory of the Russian Empire *IOP Conference Series: Earth and Environmental Science* 350 012007
[8] Lulinetskaiia Z P 1958 *Materials to the History of the Moscow Society of Naturalists* [Unpublished manuscript, the MOIP Library] 1
[9] Fischer G 1812 *Research on Fossils Found in the Moscow Governorate* (Moscow: University Typography) 4
[10] Bradley J 2002 Subjects into Citizens: Societies, Civil Society and the State in Tsarist Russia *Am.
Hist. Rev. 107 1094-1123

[11] Krivosheina G G 2013 “Society of destroyers of natural science” or “Moscow academy of science”? VOMET 4 57-71

[12] Krivosheina G G 2018 Entomologists’ associations in the 19th century Russia: The story of the Entomological Committee of the Society of Friends of Natural Science Rus. Ent. J. 27 451-458

[13] Kozhevnikov G A 1901 Committee for faunistic exploration of the Moscow Governorate Russian Entomology Review 1 215-219