

Amphibians and reptiles in the collection of the Zoological Museum of the Tomsk State University (Western Siberia, Russia)

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Abstract. In this paper we provide information about the amphibians and reptile collections in the Zoological museum of Tomsk State University (Russia), including a historical overview of the development of these collections over the past 120 years and its geographical focus.

Introduction.

Museum collections are the main source of information about biodiversity and the basis of scientific information and aesthetic knowledge of nature as was stated in the Resolution I-th International Congress on Reservation of Natural-Scientific Collections, Madrid (1992).

The Zoological Museum of the Tomsk State University presents a classical zoological collection which has been founded some 120 years ago (fig. 1, 2). The Zoological Museum has started its function with the opening of the Imperial Siberian University in Tomsk in 1888 and is connected with the activity of professor N. F. Kaschenko and the “prosector” S. M. Chugunova .

The first herpetological collections were received in 1890. They were collected with the help of employees of the university researching the territory of Western Siberia, including Altai. The herpetological material that was connected with the annual expeditions of Zoological Museum of the Tomsk State University was often published in the Scientists Reports of the Tomsk State University and the year-books of the Zoological Museum of Imperial Science Foundation (N. F. Kaschenko, A. M. Nikolsky, G. E. Ioganzen, M. D. Ruzsky, S. M. Chugunov and others).

The earliest receipt of collections is 1890. Golubeva (1923) has published the results of regional herpetofauna’s research. Then systematic research of the batracho-fauna has not been conducted due to the educational practices of students. The following stage of the museum’s growth is connected with the employment

of zoologists (herpetologists V. N. Kuranova, I. V. Laletin) and the development of ecological and population studies.

In the Zoological Museum the annotated electronic catalogue with illustrations is accessible at: http://www.inf.tsu.ru/Works/Bio/site.nsf/entry_zoo

Results

Characteristics of the collections of Amphibia and Reptilia of the Zoological Museum in the period 1891-1950.

The collections gathered between 1891-1950 and consisting of 1102 specimens (100 Caudata, 483 Anura, 13 Testudines, 1 Rhynchocephalia, 285 Sauria, 217 Serpentes, 3 Crocodylia) is least known.

This collection includes a total of 583 specimens in the class Amphibia; 34 species belonging to 17 genera, 12 families, and 2 orders.

Order Caudata: 10 species, 8 genera, 6 families (Hynobiidae, Salamandridae, Plethodontidae, Ambystomidae, Proteidae, Sirenidae).

Order Anura: 24 species, 9 genera, 6 families (Discoglossidae, Pelobatidae, Pipidae, Hylidae, Rhacophoridae, Ranidae).

The specimens originated from Europe (Italy, Germany, Sardinia, Transcarpathia, European part of Russia); Asia (Western, Central and Eastern Siberia, Kazakhstan, Mongolia, Kamchatka); Africa (Madagascar); North and Central America.

Class Reptilia: 519 specimens; 101 species, 39 genera, 22 families, 5 orders.

Order Testudines: 5 species, 5 genera, 4 families (Trionychidae, Cheloniidae, Emydidae, Testudinidae).

Order Rhynchocephalia: 1 species, 1 genus, 1 family (Sphenodontidae).

Order Squamata:

1- suborder Sauria – 47 species, 12 genera, 8 families

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(Gekkonidae, Agamidae, Scincidae, Lacertidae, Anguillidae, Varanidae, Iguanidae, Chamaeleonidae).

2- suborder Serpentes – 46 species, 19 genera, 7 families (Typhlopidae, Boidae, Acrochordidae, Colubridae, Elapidae, Viperidae, Crotalidae).

Order Crocodylia: 2 species, 2 genera, 2 families (Alligatoridae, Crocodylidae).

Geographic origin of the collections. The specimens originated from Europe (Dalmatia, Sardinia, Yugoslavia, the Caucasus, Austria, Germany, European part of Russia); Asia (Western, Central and Eastern Siberia, Altai, Kazakhstan, Ussuriysky and Primorsky Territory, Japan, Arabia, Java); New Zealand; South America (Brazil, Peru, Surinam). Overall, Amphibia and Reptilia originating from Western, Central and Eastern Siberia, Altai, Kazakhstan predominate in the collection.

Most numerous are the following species represented: *Rana arvalis* 324, *Lacerta agilis* 126, *Salamandrella keyserlingii* 61, *Vipera berus* 61 specimens.

Conservation Status. The collection includes species listed by the International Union of Protection of a Nature

(IUCN), the Washington International Convention (CITES), the Bern Convention, and the Red Book of Russian Federation.

Species included in the Red Book of Russian Federation (Danilov-Danilyan, 2001): *Salamandra salamandra*, *Pelodiscus sinensis*, *Testudo graeca*, *Eryx jaculus*, *Macrovipera lebetina*.

Species included in the Red Book of the IUCN: *Proteus aguinus*, *Chelonia mydas*, *Emys orbicularis* (Bern Convention Appendix II).

Species included in the Red Book IUCN, CITES Appendix I+II and Bern Convention Appendix I+II (Ananjeva et al., 2004): *Testudo graeca* (IUCN, CITES Appendix II, Bern Convention Appendix II), *Agryonemys horsfieldii* (IUCN, CITES Appendix II), *Sphenodon punctatus* (IUCN, CITES Appendix I), *Varanus griseus* (IUCN, CITES Appendix I), *Iguana iguana* (IUCN, CITES Appendix II), *Chamaeleo chamaeleo* (IUCN, CITES Appendix II), *Crocodylus rhombifer* (IUCN, CITES Appendix I), *Alligator mississippiensis* (IUCN, CITES Appendix I).



Figure 1. The general view of the poikilothermic animals' systematic exposition in the Zoological museum of the Tomsk State University.

Figure 2. Amphibian specimens for exposure in the Zoological museum of the Tomsk State University.



Informations of the collections of amphibians and reptiles of the Zoological Museum of the Imperial Siberian University (later Tomsk State University) are presented in works of Kaschenko (1896, 1898, 1902, 1909), Anikin (1896, 1902), Chugunov (1911, 1913), Nikolsky (1915, 1916, 1918), Ioganzhen (1923), Golubeva (1923), Vashkevich (1925), Borkin (1975 a, b), Kuranova (1989, 1998, 2000, 2002).

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