

SHORT COMMUNICATIONS

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THE ZOOLOGICAL COLLECTION OF BORIS S. TUNIYEV WAS DONATED TO THE ZOOLOGICAL INSTITUTE OF THE RUSSIAN ACADEMY OF SCIENCES

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The private collection represented by comprehensive holdings of vertebrates (cyclostomes, fishes, amphibians, reptiles, mammals), i.e., Petromyzontida (11 specimens of two species), Actinopterygii (2897 specimens of 63 species), Amphibia (1365 specimens of 28 species), Reptilia (4430 specimens of 155 species), and Mammalia (32 specimens of eleven species) of the famous Russian zoologist Boris S. Tuniyev were donated to the Zoological Institute of the Russian Academy of Sciences in March 2025. The collection was transported to St. Petersburg in its original containers and transferred to the Laboratories of Ichthyology, Herpetology, and Theriology. Of special value are type specimens of 5 taxa of lizards and 12 taxa of snakes.

Keywords: Actinopterygii; Amphibia; Mammalia; Petromyzontida; Reptilia; the Caucasus; collection; type specimens.

In March 2025, the private collection of Boris S. Tuniyev was transferred to the Zoological Institute of the Russian Academy of Sciences. It was transported from Sochi to St. Petersburg in original containers and transferred to the Laboratories of Ichthyology, Herpetology and Theriology (Fig. 1). This event was one of the most significant additions to the vertebrate collection of the Zoological Institute for many decades.

Boris S. Tuniyev — herpetologist, botanist, Doctor of Biological Sciences, Honored Ecologist of Russia, President of the Nikolsky Herpetological Society (2015 – 2024). Since 2005, Tuniyev has been Deputy Director of Science of the Sochi National Park, one of the most famous specially protected natural territories in Russia. The scientific department he heads was until recently the largest in the entire system of nature reserves and national parks in Russia, conducting long-term research on natural-territorial complexes and biodiversity of the Rus-

sian Caucasus. Tuniyev himself is by far the leading expert on the biota of the Caucasus today (Doronin, 2022).

Tuniyev has enjoyed a long and fruitful collaboration with the Zoological Institute, which began in 1987 when he completed his postgraduate studies at the Institute. That same year, he successfully defended his candidate dissertation, entitled “Herpetological Fauna of the Caucasian Reserve,” under the supervision of the leading herpetologist of the USSR and outstanding expert on the Caucasus, corresponding member of Russian Academy of Sciences, Ilya Sergeevich Darevsky (1924 – 2009). In 1995, he successfully defended his doctoral dissertation, titled “Herpetofauna of the mountains of the Alpine folding of the Caucasus and Central Asia,” once again at the Zoological Institute.

To date, he has published more than 600 scientific papers, including species essays for the Red Data Books of the Russian Federation (2001; 2008; 2021), Krasnodar Krai (2007; 2017), Republic of Adygea (2011; 2021), Republic of South Ossetia (2017) and Kabardino-Balkaria (2020). He actively participated in the preparation of

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IUCN Red List of as a leading expert on the flora and fauna of the Caucasus. He is the author of 12 collective monographs published in Russian, English and German, including the basic monograph “Snakes of the Caucasus: Taxonomic diversity, distribution, conservation” (Tuniyev et al., 2009), which was supplemented and published in English ten years later (Tuniyev et al., 2019). The review “High Herpetological Diversity in the Caucasian Ecoregion: an Annotated List of Species Including Comments on Biogeography and Conservation” published in 2024 together with N. B. Ananyeva in the special issue of the Zoological Journal dedicated to the centenary of I. S. Darevsky was a definite stage of his activity.

Many of these publications were written while studying the collection now housed at the Zoological Institute. This collection was primarily formed by Boris S. Tuniyev during his numerous expeditions throughout the former USSR and beyond. In addition, his late son, the ichthyologist and herpetologist Sako B. Tuniyev (1983 – 2015) (Fig. 1), played a major role in its formation. Notably, he defended his doctoral thesis at the Zoological Institute in 2008, following in his father’s footsteps. The title of his doctoral thesis was “Ectothermic Vertebrates of Sochi National Park: Taxonomic Composition, Zoogeography and Conservation” (Tuniyev, 2015). Some specimens were donated by Russian and foreign colleagues.

The collection includes representatives of Petromyzontida (11 specimens of two species), Actinopterygii (2897 specimens of 63 species), Amphibia (1365 specimens of 28 species), Reptilia (4430 specimens of 155 species), and Mammalia (32 specimens of eleven species). The specimens were collected between 1937 and 2024. The majority of the specimens are ethanol preserved. There are also skulls of rodents, vertebrae of lizards and shells of turtles. Collections come from Andorra, Armenia, Azerbaijan, Cambodia, China, Cuba, Ecuador, France, Georgia, Indonesia, Iran, Kenya, Kyrgyzstan, Lebanon, Mexico, Mongolia, Montenegro, Russia, Rwanda, Spain, Tajikistan, Thailand, Turkmenistan, Turkey, Uganda, USA, Uzbekistan, Vietnam, and Yemen.

Of special value are type specimens. They are holotypes and paratypes of the following taxa (the names are given in the original version and according to the date of publication): 5 species and subspecies of lizards (*Lacerta dryada* Darevsky et Tuniyev, 1997; *Darevskia praticola hyrcanica* Tuniyev, Doronin, Kidov et Tuniyev, 2011; *D. p. loriensis* Tuniyev, Doronin, Tuniyev, Aghasyan, Kidov et Aghasyan, 2013; *D. aghasyani* Tuniyev et Petrova, 2019; *D. arribasi* Tuniyev, Petrova et Lotiev, 2023); 12 species and subspecies of snakes (*Coluber atayevi* Tuniyev et Shammakov, 1993; *Vipera orlovi* Tuniyev et Ostrovskikh, 2001; *V. altaica* Tuniyev, Nilson et Andrén, 2010; *Pelias olguni* Tuniyev, Avci, Tuniyev,



Fig. 1. Boris S. Tuniyev and Sako B. Tuniyev during an expedition in Turkey (Yalnızçam Mountains, 2012), and the arrangement of their collections of reptiles in the repository of the Laboratory of Herpetology of the Zoological Institute RAS.

Agasian et Agasian, 2012; *P. shemakhensis* Tuniyev, Orlov, Tuniyev et Kidov, 2013; *P. darevskii kumlutasi* Tuniyev, Avci, Tuniyev, Ilgaz, Olgun, Petrova, Bodrov, Geniez et Teynié, 2018; *P. d. uzumorum* Tuniyev, Avci, Tuniyev, Ilgaz, Olgun, Petrova, Bodrov, Geniez et Teynié, 2018; *P. sakoi* Tuniyev, Avci, Ilgaz, Olgun, Petrova, Bodrov, Geniez et Teynié, 2018; *P. shemakhensis kakhetiensis* Tuniyev, Avci, Ilgaz, Olgun, Petrova, Bodrov, Geniez et Teynié, 2018; *P. tuniyevi* Ananjeva, Gabaev, Iremashvili, Lotiev et Petrova, 2021; *P. dagestanica* Tuniyev, Petrova, Lotiev et Iremashvili, 2025; *P. fiagdonica* Tuniyev, Petrova, Lotiev et Iremashvili, 2025).

In the near future, several more viper taxa will be added to this list. In addition, there are topotypes of a number of amphibian and reptile taxa. This collection of type specimens appears in the global catalog of primary reptile type specimens as “Sochi National Park — SNP” (Uetz et al., 2019). According to the set of indicators, it can be summarized that this is the third most important herpetological collection in Russia (after the Zoological Institute and the Zoological Museum of Moscow University).

At present this collection is stored in modern metal boxes in the renovated storeroom of the Zoological Institute. Undoubtedly, it will be involved in the study of vertebrate fauna, first, of the Caucasus. One of its current functions is to monitor the state of biodiversity, including invasive reptile species (*Trachemys scripta*, *Tenuidactylus caspius*, *Hemidactylus turcicus*, *Podarcis siculus*) in the region (Tuniyev et al., 2023).

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