

===== DISTRIBUTION AND PROTECTION OF ECOSYSTEMS =====
AND THEIR COMPONENTS

UDC 502.74; 574.34; 574.474; 574.2

**SNOW SHEEP (*OVIS NIVIKOLA ALLENI* MATSCHIE, 1907),
WILD REINDEER (*RANGIFER TARANDUS* LINNAEUS, 1758) AND BROWN BEAR
(*URSUS ARCTOS* LINNAEUS, 1758) IN THE TOKO-STANOVIK NATIONAL PARK
AND ITS ADJACENT TERRITORY**

© 2021. S.A. Podolskiy*, **, T.A. Domanov**, E.K. Krasikova**

**Water Problems Institute of the Russian Academy of Sciences*
3, Gubkina Str., Moscow, 119333, Russia. E-mail: sergpod@mail.ru

***Zeya State Nature Reserve*
71, Stroitel'naya Str., Zeya, Amur region, 676243, Russia
E-mail: domanov.t@yandex.ru, zzap@mail.ru

Received October 14, 2021. Revised November 24, 2021. Accepted December 01, 2021

The Toko-Stanovik National Park covers about 257 thousand hectares. It was established at the end of 2019 in the north of Amur Region, next to where its boundary meets Yakutia and Khabarovsk Krai. This territory is highly important for preservation of *Ovis nivikola alleni* Matschie, 1907, which is a rare and insufficiently explored subspecies of bighorn sheep, listed in the Red Data Books of Amur Region and Yakutia. In the Amur territory they inhabit a relatively narrow area of 5-15 km of the Toko-Stanovik highlands (the eastern part of the Stanovik Ridge) that stretches along the northern boundary of the region, from the Okonon River source in the west to the Maya River source in the east. Moreover, the bighorn sheep are common species on the Dzhugdyr Ridge, from the Ayumkan River source (right inflow of the Maya River) to the Bolshiye Inagli and Lucha Rivers sources (left inflows of the Kupuri River; Podolskiy et al., 2009). The most of the bighorn sheep's population in the Amur Region can be found within the national park. Information on their spatial distribution, abundance, sex and age that we present in the article was obtained during four expeditions in 1993, 2009, 2018 and 2020. The main part of this work is based on the data for July-August 2020, when along with the data on bighorn sheep we collected some for the wild reindeer and brown bear. The results of our observations generally indicate the conditions of the national park territory are favorable for bighorn sheep, reindeer and brown bears. Within this specially protected nature area, according to our estimations, the animals' number is as follows: 250-300 snow sheep, 700-800 reindeer, 50-60 brown bears. However, we should note that the potential risks for the sheep population are increasing due to intensifying anthropogenic activities. A quick development of road system, mining and lumbering activities take place close to the main habitats of bighorn sheep. Trophy hunting intensifies, damaging their population in the Toko-Stanovik region; we have already registered a decrease in the amount of adult males and young sheep. To preserve this population group a special protection of the sheep's key habitats is organized, primarily of the large salt licks. Besides, it is necessary to create a protected zone of the national park and establish a specially protected federal area in the adjacent territory of Yakutia.

Keywords: snow sheep, bighorn sheep, wild reindeer, brown bear, trophy hunting, negative impact, population, population density, protected area.

Acknowledgements. The authors would like to thank S.Yu. Ignatenko, the director of the Zeya State Nature Reserve, for helping with organizing the expeditions in 2009, 2018 and 2020, and the heads of the Far Eastern Branch of the World Wildlife Fund for Nature for their financial support of the expeditions in 2009 and 2018. We are also very grateful to Dmitry

Kolesov, Alexandra Krasikova and Egor Trifonov, the reindeer-team drivers of the Evenk tribal community “Yukte” (Rodnik), for their invaluable assistance with our field work in 2018.

Funding. This study was carried out within the fundamental research of Water Problems Institute in 2021 “ Modeling and Forecasting of the Restoration Processes of Waters and Ecosystems Quality under Various Scenarios of Climate Change and Anthropogenic Activities” (No. 0147-2018-0002), State Registration No. AAAA-A18-118022090104-8.

DOI: 10.24412/2542-2006-2021-4-150-172