

Supervisor's feedback from to the Master of Science dissertation by Gleb Utvenko
«Study of migratory bats' orientation in the modified circular release box: *Nathusius pipistrelle*
(*Pipistrellus nathusii*) case»

Gleb Utvenko started his MSc study at the Department of Vertebrate Zoology of St. Petersburg State University in 2021. Before that, he graduated from the BSc programme at the Department of Zoology and Ecology of Moscow Pedagogical State University with the bachelor thesis 'Ontogeny of the star compass in night-migrating birds: the pied flycatcher *Ficedula hypoleuca* case' under the supervision of assistant professor Dr. D.A. Shitikov. The experimental work was performed at the Biological Station Rybachy of the Zoological Institute RAS under the immediate supervision of its researcher Dr. A.F. Pakhomov. I also participated in this research project. Gleb Utvenko already then behaved as a very responsible and interested student. It suffices to say that the results of that project were published in a WoS Q2 journal: Zolotareva A., Utvenko G., Romanova N., Pakhomov A., Chernetsov N. 2021. Ontogeny of the star compass in birds: pied flycatchers (*Ficedula hypoleuca*) can establish the star compass in spring. *Journal of Experimental Biology* 224 (3): jeb237875. <https://doi.org/10.1242/jeb.237875>

When doing his MSc project at the Department of Vertebrate Zoology of St. Petersburg University Gleb has chosen a novel topic of bat orientation. This field is not being developed in several countries, Germany and Latvia including. This research is hindered by methodological difficulties that Gleb tried to overcome. He showed persistency and creativity, did not give up when he encountered difficulties which a inevitable in a novel project. When overcoming these difficulties he learned a lot about experimental zoology, mastered literature on the subject and also the methods of experimental work, participated in developing new methods of testing migratory orientation of bats in round arenas. Gleb also learned how to use circular statistics. I am content with his attitude and I am ready for new projects together with Gleb.

Supervisor

Nikita Chernetsov,

Professor of the Department of Vertebrate Zoology of St. Petersburg State University



25.05.2023