

Impact of the climatic fluctuations on the habitat suitability of the *Cetartiodactyla* in the Kunlun- Pamir Plateau

You are kindly invited to attend the public defense of the doctoral dissertation of

Xiaoran Huang

The defense will take place online on Monday, November 25, 2024, at 15:00 (Brussels time) / 22:00 (Beijing time)

Follow the livestream of the defense through the link:

<https://tinyurl.com/288hnrDH>



Summary

Climate change has resulted in significant alterations in the species' distribution globally, with a particularly pronounced impact in arid regions that are more sensitive to these changes. The Kunlun-Pamir Plateau, located adjacent to the Qinghai-Tibet Plateau, is an arid area characterized by an extremely fragile ecological environment. It encompasses various ecosystems, including alpine grasslands, deserts and glaciers, which serve as critical habitats for several rare and endangered species. Notably, the order Cetartiodactyla represents a vital group within this region, comprising numerous species that are sensitive to environmental fluctuations. Furthermore, over recent decades, both climate change and human activities have had a substantial impact on the Kunlun-Pamir region. However, research on the manner in which these changes affect the species' distribution in this area remains limited. The Post-2020 Global Biodiversity Framework proposes the ambitious goal of restoring at least 20% of the degraded ecosystems by 2030 so as to enhance biodiversity and the ecosystem services. This study seeks to contribute in order to achieve this goal. By establishing long-term ecological monitoring systems, adjusting and expanding existing nature reserves, implementing ecological restoration projects and enhancing policy and international cooperation, we could more effectively address the impact of climate change on biodiversity in the Kunlun-Pamir Plateau. These efforts will aid in the protection of this unique and fragile ecosystem and its rare species, thereby contributing to the objectives outlined in the Post-2020 Global Biodiversity Framework.

About the Author

Xiaoran HUANG (1992) is a joint PhD candidate at the Department of Geography at Ghent University and the University of Chinese Academy of Sciences. In 2014, she graduated from the Anyang normal university with a bachelor's degree in Geographical Science. In 2017, she completed her master's degree in Cartography and geographic information systems at the University of Chinese Academy of Sciences. In 2020, she started her Ph.D. studies at the State Key Laboratory of Desert and Oasis Ecology of Xinjiang Institute of Ecology and Geography, and the 3D Data Acquisition research group at Ghent University.

Examination Committee

Prof. dr. Alain De Wulf (Ghent University)
Prof. dr. Weikang Yang (Chinese Academy of Sciences)
Prof. dr. Dries Bonte (Ghent University)
Prof. dr. Peter Goethals (Ghent University)
Prof. dr. Hossein Azadi (Ghent University)
Prof. dr. Guli Jiapaer (Chinese Academy of Sciences)
Prof. dr. Tie Liu (Chinese Academy of Sciences)
Prof. dr. Wenqiang Xu (Chinese Academy of Sciences)

Supervisors

Prof. dr. Tim Van de Voorde (Ghent University)
Prof. dr. Philippe De Maeyer (Ghent University)
Prof. dr. Anming Bao (Chinese Academy of Sciences)

