

THE STRUCTURE OF THE STEPPE MARMOT COLONIES AND THE INFLUENCE OF ITS VITAL ACTIVITY ON THE FLORAL COMPOSITION OF THE VEGETATION OF THE OSTROVTSOVSKAYA FOREST-STEPPE

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Abstract. The steppe marmot (*Marmota bobak* Mull.) is an important component of the Eurasian forest steppes. However, at the turn of the XIX-XX centuries. The steppe marmot was almost exterminated in Russia. In the Privolzhskaya Forest-Steppe Nature Reserve, as a result of reintroduction, marmots live on the territory of the Ostrovtsovskaya Forest-Steppe. In 2023, in the spring-summer period, using a UAV (DJI MavicAir 2s), we took photographs and interpreted orthophotomaps using the ArcMap 10.4 program. Maps of the location of various types of marmot holes, trails and butanes were created. Vegetation research has been carried out since 2019. At the base of different types of burrows, the floristic composition was identified. On the territory of the Ostrovtsovskaya forest-steppe reserve area, over the past 10 years (since marmots settled this territory), 210 burrows were noted in the surveyed marmot colonies. Three types of burrows have been identified – temporary burrows are divided into protective and permanent summer ones, as well as wintering ones. 78 species of vascular plants were identified in the marmot colonies. The grass species most resistant to failure are *Festuca valesiaca*, *Calamagrostis epigeios* and *Bromopsis inermis*. The total area of territory used by marmots has increased 4 times over 7 years. The degree and nature of the impacts of marmot colonies on vegetation depend on the time and intensity of burrow use, as well as the stability of the plant communities themselves. In the habitats of marmots, herbaceous polycarpics are the absolute dominants; on butanes, the participation of annual and biennials plants.

Keywords: steppe marmot, holes, butanes, flora

For citation: Dobrolyubov A.N., Leonova N.A. The structure of the steppe marmot colonies and the influence of its vital activity on the floral composition of the vegetation of the Ostrovtsovskaya forest-steppe. Russian Journal of Ecosystem Ecology. 2024;9(1). (In Russ.). Available from: <https://doi.org/10.21685/2500-0578-2024-1-5>