## ECOLOGICAL STRUCTURE OF AVIFAUNA IN THE CHELYUSKINTSEV PARK AND THE CENTRAL BOTANICAL GARDEN IN MINSK

## E. Svistun, V. Gorbach, M. Jasoveev

Belarusian State University, ISEI BSU, Minsk, Republic of Belarus svistyn.alena@yandex.by

The article presents data on the ecological characteristics of the avifauna of the Park Chelyuskintsev and Botanical garden in Minsk. The identified environmental group, the ecological status and population density of birds. The biggest variety of different Passerine. Dominant are forest birds, found that most nesting birds are migratory.

Keywords: avifauna, ecological status, birds, environmental groups, density.

The territory of the city creates new habitats for animals, the features of which is due to the increase of urban buildings, construction of roads and modification of suburban zones. Birds are an essential component of all natural ecosystems and are the most visible group of vertebrates in the urban landscape. The presence of certain types and the nature of their stay in the city can serve as an indicator of the state of the urban environment – the extent of landscaping, sanitary conditions, and intensity of technogenic load [4].

The purpose of this work is to study the structure of the avifauna of the Park Chelyuskintsev and the Central Botanical garden in Minsk. Scientific novelty of the research lies in the fact that for the first time in the Park Chelyuskintsev and Botanical garden were studied contemporary species composition and structure of bird population.

Place research Park Chelyuskintsev and the Central Botanical garden, located in the city center of Minsk. North side restricts intensive Avenue of the city, on the other sides of industry. Therefore, this area is subjected to intensive anthropogenic load and, consequently, environmental pollution.

The studies revealed that the Park Chelyuskintsev and Botanical garden in summer inhabits 33 species of birds. The vast majority belongs to the Passerine – 82 %. Followed by a detachment of Columbiform, and Anseriformes at 6 %, Charadriiformes and Piciformes at 3 % [3].

Environmental status in the study area was selected birds: nestling non-migratory species – 13 species breeding migratory, 11 species and nesting migratory and limited numbers of wintering birds – 9 species [2].

In the Park and garden community of birds is divided into 4 ecological groups. The dominant species are forest birds -52 %, synanthropic -33 %, wetland and wading birds -9 %, and birds of open landscapes -6 % [1]. This distribution of birds according to ecological groups associated with different types of plantings, well-defined layering and the presence of shrubs in the undergrowth where the birds find favorable places for nesting, and can also hide from people. The presence of representatives of synanthropic avifauna due to the fact that the study area is located in the city, where people feed birds. The presence of wetland and wading birds due to the presence of the pond at the Botanical garden.

The population density of birds amounted to 352,756 individuals/km². The highest density has a great tit – 38 individuals/km². The lowest density has an eurasian wren 0,59 animals/km².

Thus, it is established that the Park Chelyuskintsev and Botanical gardens play a significant role in maintaining the species diversity in the condition of anthropogenic load.

## **BIBLIOGRAPHY**

- 1. *Khandogiy, D. A.* Features of the spatial structure of birds in channel habitats of the river Svisloch and Park zones of Minsk Megopolis / D. A. Khandogiy, K. V. Gomel // Problems of natural Sciences. 2010. P. 3–11.
- 2. *Nikiforov*, *M. E.* Belarus on the migration routes of birds / M. E. Nikiforov, P. V. Pinchuk, N. V. Kalinova // Science and innovations, scientific-practical journal. 2013. P. 20–24.
- 3. *Nikiforov*, *M. E.* The formation and structure of the avifauna of Belarus / M. E. Nikiforov. Minsk: Belarusian. science. -2008. -297 p.
  - 4. Sauer, F. Birds- inhabitants of meadows, fields, forests / F. Sauer. Moscow: Astrel, 2002. 286 p.