CZU: 598.279.25(478)

TROPHIC SPECTRUM OF THE LONG-EARED OWL (*ASIO OTUS*) IN THE REPUBLIC OF MOLDOVA

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The long-eared owl (*Asio otus)* is a sedentary bird in Moldova and one of the most widespread in Europe. The trophic spectrum of *A. otus* was established during the winter and nesting periods in different regions of the Republic of Moldova in the period 2009-2022. During the digestion process the owl regurgitate the undigerable rests of eaten animals (bones, fur, feathers, insect chitin etc.) as pellets. The study of the pellets provides important data concerning the diet of prey birds, the small mammal fauna in the area, the density of small mammal species, their spreading etc. The small mammals and bat species were identified after the dentition, maxillary and mandibulary bones.

In the northern area (Volodeni locality, Edineț district) the trophic spectrum of *A. otus* during the winter period consists only of rodent species. The field voles (genus *Microtus*) were dominant with over 70%, followed by the species genus *Apodemus* with 12.66%, *A. agrarius* with 7.59% and *Mus* species with 5.07%.

In Unguri village (Ocnita district) the trophic spectrum of the long-eared owl in nesting period also consisted only of rodents. The most abundant were the *Microtus* genus species, constituting 73.02%. *Mus* genus species constituted 11.11%, the three species of *Apodemus* genus constituted about 15%, the dominant being *A. sylvaticus* with 8.73%, and *Muscardinus avellanarius* with less than 1%. In the urban ecosystems of Chisinau, the trophic spectrum of the *A. otus* was much more diverse and consisted of mammals of three orders (Soricomorpha, Chiroptera, Rodentia) and birds, of which the share of shrews was 0.81%, of bats – 0.2%, of birds – 2.55%, while the main trophic objects were the rodents - over 95%. The *Microtus* species dominated with 70.99%, followed the *Mus* species with 10.88% and *A. sylvaticus* with 10.34%. Other species of the genus *Apodemus* accumulated less than 4%. *M. avellanarius* and *R. norvegicus* had a share of only 0.13%. Among other mamals groups in the diet of long-eared owl from Chisinau representatives of shrews and bats have been registered in very low percent. The shrews were represented by 4 species (*Crocidura suaveolens*, *C. leucodon*, *Sorex minutus*, *S. araneus*) and the bats – by 2 species (*Eptesicus serotinus* and *Vespertilio murinus*).

In the Sadaclia village (Basarabeasca district) from the southern part of the republic in the pellets mammals of the orders Soricomorpha, Rodentia and birds were identified. The dominant species were the field voles (*Microtus*), which represented more than half of identified animals, followed by the *Apodemus* species with 19.71%, and *Mus* species with 16.42%. Other species had a lower percent: *A. agrarius* (2.55%), *Rattus norvegicus* (0.73%) and *Muscardinus avellanarius* (0.37%). The birds had a rather high proportion – 9.49%, while the shrews, represented by one species *C. leucodon* – only 0.37%.

Many rodent species are important pests to agriculture. The long-eared owl is a predator that exerts constant pressure on rodent density, thus regulating their number.

Acknowledgments: The studies were performed within the State Program project 20.80009.7007.02.

Keywords: *Asio otus*, undigerable rests, trophic spectrum, urban ecosystems.