

SEASONAL AND INTERANNUAL DYNAMICS OF THE FEEDING SPECTRUM OF A PAIR OF GROUND EAGLES (*AQUILA HELIACA*, ACCIPITRIDAE, ACCIPITRIFORMES) IN THE RIGHT BANK OF THE MIDDLE VOLGA REGION (SENGILEEVSKY MOUNTAINS)

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Abstract. The food supply is a key factor determining the reproductive performance of populations of the large feathered predators. The distribution of the Imperial Eagle *Aquila heliaca* is primarily limited by the distribution and abundance of the main prey species, namely large colonial steppe rodents (ground squirrels and marmots). Despite the wide adaptive capabilities of the Imperial Eagle for food supplies, the role of secondary prey species in feeding of the young remains an urgent research topic. Modern methods of autonomous video surveillance used in this work enabled exploring the diet of a pair of the Imperial Eagles in the Sengileevsky Mountains National Park. The studies were conducted in 2023-2024 in the period from March to September. An autonomous video surveillance system was used for the observations. During the entire observation period, 444 prey items brought by the adults to the nest were recorded, of which 428 items were identified to the species, genus, family, order or class. 34 items of wild fauna belonging to 4 classes of vertebrates were identified in the diet of a pair of the Imperial Eagles. The maximum food intake is observed in June and July. The main prey items are Russet ground squirrels (20 %), common field voles (19 %) and steppe marmots (12 %). Large steppe rodents predominate in the diet at the initial stages of feeding of hatchlings (June). The proportion of large birds in the diet increases significantly during the feeding period of nestlings and fledglings (July-August). When raising two offerings, compared with one, there is a multiple (by an order of magnitude) increase in the number of large birds in the diet of the Imperial Eagles in the late stages of feeding nestlings and fledglings. Despite the adaptability of the Imperial Eagles in choosing prey items, large rodents of open spaces remain one of the key food supplies. Large steppe rodents, mainly colonial ones, ensure the continuity of feeding the young during the most critical period of their development. The diet of the Imperial Eagles can include almost the entire range of vertebrates found in the breeding territory of a pair.

Keywords: Imperial Eagle, *Aquila heliaca*, breeding biology, diet, Volga River Region population, Sengileevsky Mountains

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