

## The diet of the greater spotted eagle (*Aquila clanga*) in Belarusian Polesie Potrava orla hrubozobého (*Aquila clanga*) v Bieloruskom Polesí

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**Abstract:** During 1999–2009 the food remains from the nests of 43 breeding pairs of the greater spotted eagle in Belarusian Polesie (southern Belarus) were collected. 797 prey items were determined, including mammals (40%, 15 species and *Sylvaemus* sp., 4 orders), birds (36%, 35 species and *Phylloscopus* sp., Corvidae sp., 11 orders), evertebrates (16%, Coleoptera, Odonatoptera, Gastropoda), reptiles (6%, 4 species and *Lacerta* sp.), amphibians (1%, *Rana* sp.) and fish (1%, 3 species). Small rodents from the genus *Microtus* (*M. arvalis* and *M. oeconomus*) as well as *Arvicola amphibius* were the most numerous mammal species, followed by *Erinaceus roumanicus* and *Talpa europaea*. Rallidae (mostly *Rallus aquaticus*, *Porzana porzana* and *Crex crex*), waders (mainly *Galinago gallinago*), dabbling ducks (mainly *Anas platyrhynchos* and *Anas querquedula*), Galliformes (*Lyrurus tetrix*), Ciconiiformes (*Ardea cinerea* and *Botaurus stellaris*) were the most numerous bird prey species. *Emberiza schoeniclus* was predominated prey species among Passerines. Reptiles were frequently represented by snakes (mainly *Natrix natrix*, but also *Vipera berus* and *Coronella austriaca*). Biomass predominance in diet of the greater spotted eagles is as follows: birds (67.9%), mammals (25.3%), reptiles (3.4%), fish (3.0%) and amphibians (0.3%). Prey species with a body mass of 51–200 g (41.9%) and 11–50 g (38.3%) were predominant in the food spectrum of the greater spotted eagles. In the weight category of 1–50g, mammals were dominant, but from the categories of 51–200 g and heavier, birds occupied the leading position. The prey which made the largest contribution in total biomass of the greater spotted eagle were in the prey weight category from 601 to 1200 g (34%), then from 51 to 200 g (24%), from 11 to 50 g (16.6%) and more than 1200 g (16%). The species of the genus *Microtus* were equally represented in prey set of the greater spotted eagle in habitats with different degrees of anthropogenic transformation (24% in each habitat type). The share of *Arvicola amphibius* in the diet of the greater spotted eagle decreased from 12% in natural habitats to 4% in transformed habitats; the share of birds decreased from 41% to 26% correspondingly. The share of Insectivora and Evertebrata, on the contrary, increased to 3% and 11% in natural habitats and to 6% and 27% in transformed habitats correspondingly.

**Abstrakt:** V rokoch 1999–2009 boli zozbierané vzorky potravy z hniezd 43 hniezdiacich párov orlov hrubozobých v Bieloruskom Polesí (južné Bielorusko). 797 identifikovaných vzoriek potravy zahŕňalo cicavce (40 %, 15 druhov a *Sylvaemus* sp., 4 rady), vtáky (36 %, 35 druhov a *Phylloscopus* sp., Corvidae sp., 11 radov), bezstavovce (16 %, Coleoptera, Odonatoptera, Gastropoda), plazy (6 %, 4 druhy a *Lacerta* sp.), obojživelníky (1 %, *Rana* sp.) a ryby (1 %, 3 druhy). Malé hlodavce rodu *Microtus* (*M. arvalis* a *M. oeconomus*) ako aj *Arvicola amphibius* boli najpočetnejšími druhmi cicavcov, nasledované druhmi *Erinaceus roumanicus* a *Talpa europaea*. Rallidae (hlavne *Rallus aquaticus*, *Porzana porzana* a *Crex crex*), bahniaky (hlavne *Galinago gallinago*), kačice (hlavne *Anas platyrhynchos* a *Anas querquedula*), Galliformes (*Lyrurus tetrix*), Ciconiiformes (*Ardea cinerea* a *Botaurus stellaris*) boli najpočetnejšími vtáčimi druhmi v potrave. Zo spevavcov bola prevládajúcou potravou *Emberiza schoeniclus*. Plazy boli dosť častou potravou prezentované druhmi *Natrix natrix*, ale taktiež *Vipera berus* a *Coronella austriaca*. Prevládajúca zložka biomasy v potrave orlov hrubozobých bola nasledovná: vtáky (67,9 %), cicavce (25,3 %), plazy (3,4 %), ryby (3,0 %) a obojživelníky (0,3 %). V potravnom spektre orlov hrubozobých boli prevládajúce druhy s hmotnosťou 51–200 g (41,9 %) a 11–50 g (38,3 %). Vo váhovej kategórii 1–50 g boli dominantné cicavce, ale už od kategórie 51–200 g a ďalej vtáky obsadili dominantné postavenie. Najväčší podiel z celkovej biomasy koristi orlov hrubozobých bol tvorený váhovou kategóriou 601–1200 g (34 %), následne 51–200 g (24 %), 11–50 g (16,6 %) a viac ako 1200 g (16 %). Druhy z rodu *Microtus* boli rovnomerne zastúpené v koristi orlov hrubozobých v habitatoch s rozdielnym stupňom antropogénnej zmeny (24 % v každom habitatovom type). Podiel *Arvicola amphibius* v potrave orlov hrubozobých poklesol z 12 % v pôvodných habitatoch na 4 % v zmenených habitatoch, podiel vtákov súbežne poklesol zo 41 % na 26 %. Podiel Insectivora a Evertebrata naopak vzrástol na 3 % a 11 % v pôvodných habitatoch a na 6 % a 27 % v zmenených habitatoch.

**Key words:** food, diet composition, dominant prey, natural habitat, transformed habitat, Belarus

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