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On the diet of Short-eared Owls (*Asio flammeus*) wintering in south-western Slovakia

K potravě myšiarky močiarných (Asio flammeus) zimujících na juhozápadnom Slovensku

Alfréd TRNKA¹ & Ján OBUCH²

¹Department of Biology, University of Trnava, Priemyselná 4, 918 43 Trnava, Slovakia; atrnka@truni.sk

²Botany Garden, Comenius University, 038 15 Blatnica, Slovakia; obuch@rec.uniba.sk

Winter diet of the Short-eared Owl in the Western Palearctic has been studied mainly in British Isles and France (Cramp & Simmons 1985). Data on its diet in Central Europe are scarce (for summary of major studies, see Glutz

& Bauer 1994). Although these studies indicate that *Microtus* voles predominate in Short-eared Owl's diet, their proportion may vary between years and localities due to voles population cycles and different local conditions (Glue

1977). In Slovakia the species sporadically breeds and more commonly occurs over-winters in Podunajská and Východoslovenská nížina lowlands (Danko & Chavko 2002). However, no report on Short-eared Owl's diet was published from this area up to the present. In this note we present diet of Short-eared Owls, wintering in south-western Slovakia in 2004/2005.

The study was carried out in a farmland area near village Veľký Grob (SW Slovakia, 120 m a.s.l.). From November 2004 to February 2005, six specimens of Short-eared Owl occupied a small meadow surrounded with fields, black locust grove and large gravel pit. The diet of owls was examined by analysis of pellets that were collected on January 15 and February 8, 2005. Average weight of prey animals was taken from Glutz & Bauer (1994) and Hudec (1983).

From 132 pellets and other remains of pellets, 318 prey items were identified. The most numerous prey species was the Common Vole (*Microtus arvalis*), while other small mammals as well birds were foraged only occasionally (Table 1). The results confirm that Short-eared Owl prefer small voles also in winter period, although it's diet composition may depend on the

prey availability in the area or voles population cycles (Glue 1977). Our findings confirmed data gathered in other areas of Europe, such as the Netherlands, France (Cramp & Simmons 1985) or Hungary (Mészáros et al. 2003), where small voles comprised 97.6–99.8% in winter diet. According to our knowledge (J. Obuch unpubl.), diet of Short-eared Owl in the winter period is very similar to that found in Long-eared Owl (*Asio otus*). As they exploit the same winter hunting grounds, interspecific competition between two species can be expected.

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Table 1. Winter diet of the Short-eared Owl in SW Slovakia (N – number of prey items, B – biomass).

Tab. 1. Zimná potrava myšiarky močiarnnej na JZ Slovensku (N – počet kusov koristi, B – biomasa).

Species / Druh	N	N (%)	B (g)	B (%)
<i>Microtus arvalis</i>	288	90,6	7200	92,6
<i>Apodemus sylvaticus</i>	7	2,2	182	2,3
<i>Apodemus microps</i>	9	2,8	153	2,0
<i>Micromys minutus</i>	4	1,3	36	0,5
<i>Mus cf. musculus</i>	7	2,2	119	1,5
Mammalia, total	315	99,1	7690	98,9
<i>Carduelis carduelis</i>	1	0,3	18	0,2
<i>Carduelis cannabina</i>	1	0,3	19	0,2
<i>Cocco. coccothraustes</i>	1	0,3	53	0,7
Aves, total	3	0,9	90	1,1
Total prey	318	100,0	7780	100,0

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