SHORT COMMUNICATION

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Helminth fauna of otter (Lutra lutra Linnaeus, 1758) in Belorussian Polesie

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The substance of this report is the result of the helminthological examination of 25 otter carcasses (14 males and 11 females) and 117 specimens of otter feces, which was carried out in natural and transformed ecosystems of Belorussian Polesie (southern part of Belarus, the Brest and Gomel regions) between 1981 and May of 1999. The animals were killed by hunters. The excrement was gathered by us along the river and adjoining channel banks.

The rate of infection of otters by helminths was determined by dissection to be 76.0%. The results of our helminthological examinations are illustrated in Table 1. The otters were hosts for 15 species of helminths. The trematode Isthmiophora melis and the nematodes Capillaria mucronata and C. putorii were the most frequently detected parasites. The prevalence of these helminths in otter carcasses was 24.0%, 20.0%, and 28.0%, respectively. The number of parasites varied from 1 to 30 specimens. Otters eat fish and are infected by four species of trematodes: Apophallus donicus, Opisthorcis felineus, Pseudamphistomum truncatum, and Metorchis bilis. A. donicus were found in the intestine and opisthorchiids (O. felineus, P. truncatum, M. bilis) were detected in the liver. The rate of infection of otters by these helminths was determined to be 36.0%.

Coproscopical investigations confirmed the abovementioned findings. The eggs and larvae of helminths were found in 76.9% of the specimens of excrement. Eggs of Capillaria sp. (21.4%) and I. melis (12.0%) and larvae of Strongylata sp. (13.7%) were the parasite stages most frequently detected in otter excrement. Eggs of opisthorchiids were found in 7.7% of fecal samples.

Not only I. melis, C. putorii, A. donicus, and opisthorchiids but also Fasciola hepatica, Alaria alata, Spirometra erinacei, Mesocestoides lineatus, Trichinella spiralis, and Crenosoma vulpis are important in medical and veterinary science. These species of helminths are known to be parasites of humans as well as domestic and farm animals (dogs, cats, cattle, sheep, goats, pigs).

Table 1Helminth infections of otters in Belorussian Polesie	Species of helminths	Number of positive findings		Number of helminths (min–max)
	Fasciola hepatica (Linnaeus 1758)	1	4.0	3
	Isthmiophora melis (Schrank 1788)	6	24.0	1–24
	Apophallus donicus (Skrjabin et Lindtrop 1919)	2	8.0	2–26
	Opisthorchis felineus (Rivolta 1884)	2	8.0	3–6
	Pseudamphistomum truncatum (Rudolphi 1819)	3	12.0	1–5
	Metorchis bilis (Braun, 1890)	2	8.0	1–3
	Alaria alata (Goeze 1782), larvae	1	4.0	500
	Spirometra erinacei (Rudolphi 1819), larvae	2	8.0	1–3
	Mesocestoides lineatus (Goeze 1782)	1	4.0	2
	Capillaria mucronata (Molin 1858)	5	20.0	1–4
	C. putorii (Rudolphi 1819)	7	28.0	1–10
	Trichinella spiralis (Owen 1835), larvae	1	4.0	3 in 1 g muscle tissue
	Strongyloides martis (Petrow 1940)	1	4.0	4
	Crenosoma vulpis (Rudolphi 1819)	1	4.0	3
	Skrjabingylus nasicola (Petrow 1927)	1	4.0	5

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