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**HELMINTHS OF THE EURASIAN OTTER (*Lutra lutra* L. 1758) IN  
BELORUSSIAN POLESIE**

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**Abstract:** We present the results of helminthological examinations of 25 otter carcasses (14 males and 11 females) and 117 specimens of otter faeces (spraints), collected from both natural and transformed ecosystems of Belorussian Polesie between 1981 and May of 1999. Carcasses were collected from hunters, whilst the spraints were collected along riverbanks and adjoining channels. The rate of infection of otters by helminthes, determined by dissection, was found to be 76.0%.

The Eurasian otter (*Lutra lutra*) is a representative of the Mustelidae family (Order Carnivora) that swims well and forages mainly in the water. This carnivorous animal is present throughout the territory of Belarus, particularly in the southern part of Belarus (Polesie - the Brest and Gomel regions), where a wide network of channels attracts many otters.

In this report we present the results of helminthological examinations of 25 otter carcasses (14 males and 11 females) and 117 specimens of otter faeces (spraints), collected from both natural and transformed ecosystems of Belorussian Polesie between 1981 and May of 1999. Carcasses were collected from hunters, whilst the spraints were collected along riverbanks and adjoining channels. The rate of infection of otters by helminthes, determined by dissection, was found to be 76.0%. The results of our helminthological examinations are illustrated in Table 1. The otters were hosts to 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, which eat mainly fish, are commonly infected by four species of trematodes found in fish: *Apophallus donicus*, *Opisthorchis felineus*, *Pseudamphistomum truncatum*, and *Metorchis bilis*. *A. donicus* were found in the intestine and opisthorchiids, whilst *O. felineus*, *P. truncatum*, and *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 these findings. The eggs and larvae of helminths were found in 76.9% of the spraint samples. 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 spraints. Eggs of opisthorchiids were found in 7.7% of all faecal samples

Besides *I. melis*, *C.putorii*, *A.donicus*, and opisthorchiids, other parasites important in medical and veterinary science were also found at lower levels in the samples examined, including *Fasciola hepatica*, *Alaria alata*, *Spirometra erinacei*, *Mesocestoides lineatus*, *Trichinella spiralis*, and *Crenosoma vulpis*. These species of helminths are known to be parasites of humans as well as domestic and farm animals (e.g. dogs, cats, cattle, sheep, goats, pigs).

**Table 1:** Helminth infections of otters in Belorussian Polesie

Species of helminths	Number of Positive Findings	Prevalence (%)	Number of Helminths (min-max)
<i>Fasciola hepatica</i> (Linnaeus, 1758)	1	4.0	3
<i>Isthmiophora melis</i> (Schrank, 1788)	6	24.0	1-24
<i>Apophallus donicus</i> (Skrjabin et Lindtrop, 1919)	2	8.0	2-26
<i>Opisthorchis felineus</i> (Rivolta, 1884)	2	8.0	3-6
<i>Pseudamphistomum truncatum</i> (Rudolphi, 1819)	3	12.0	1-5
<i>Metorchis bilis</i> (Braun, 1890)	2	8.0	1-3
<i>Alaria alata</i> (Goeze, 1782), larvae	1	4.0	500
<i>Spirometra erinacei</i> (Rudolphi, 1819), larvae	2	8.0	1-3
<i>Mesocestoides lineatus</i> (Goeze, 1782)	1	4.0	2
<i>Capillaria mucronata</i> (Molin, 1858)	5	20.0	1-4
<i>Capillaria putorii</i> (Rudolphi, 1819)	7	28.0	1-10
<i>Trichinella spiralis</i> (Owen, 1835), larvae	1	4.0	3 in 1g muscle tissue
<i>Strongyloides martis</i> (Petrow, 1940)	1	4.0	4
<i>Crenosoma vulpis</i> (Rudolphi, 1819)	1	4.0	3
<i>Skrjabinogylus nasicola</i> (Petrow, 1927)	1	4.0	5

**Resumen: Helmintos de la nutria europea (*Lutra lutra* L. 1758) en Bielorrusia**

La nutria europea (*Lutra lutra*) está distribuida por todo Bielorrusia. Entre 1981 y 1999 se llevaron a cabo exámenes helmintológicos de 25 carcasas de nutrias (14 machos y 11 hembras) y 117 fecas provenientes de ecosistemas naturales y modificados del sur del país. Los animales fueron matados por cazadores y los excrementos recogidos por los autores en bancos de ríos y canales. La tasa de infección de nutrias por helmintos determinada mediante disección fue 76.0%. Se detectaron en total 15 especies de helmintos. El tremátodo *Isthmiophora melis* y los nemátodos *Capillaria mucronata* y *C. putorii* fueron los parásitos detectados con mayor frecuencia (encontrados en 24.0, 20.0 y 28.0% de las carcasas respectivamente). El número de parásitos varió de 0 a 30 especímenes. También se encontró *Apophallus donicus* en el intestino de las nutrias y en el hígado se encontraron *Opisthorchis felineus*, *Pseudamphistomum truncatum* y *Metorchis bilis*. La tasa de infección por estos tremátodos se determinó en 36.0%. Los estudios coproscópicos confirmaron los hallazgos mencionados. Se encontraron huevos y larvas de helmintos en el 76.9% de las fecas revisadas. No sólo *I. melis*, *C. putorii*, *A. donicus* y los opisthorchiidos son importantes en las ciencias médicas y veterinarias. *Fasciola hepatica*, *Alaria alata*, *Spirometra erinacei*, *Mesocestoides lineatus*, *Trichinella spiralis* y *Crenosoma vulpis* también lo son. Estas especies son tanto parásitas del hombre como de animales domésticos y de granja.