Helminthofauna of birds of prey from the Lublin Voivodeship

Marta Demkowska-Kutrzepa¹, Monika Roczeń-Karczmarz¹, Maria Studzińska¹, Klaudiusz Szczepaniak¹, Paweł Różański², Grzegorz Kłys³, Krzysztof Tomczuk¹

¹Sub-Department of Parasitology and Invasive Diseases, Department of Parasitology and Fish Diseases, Faculty of Veterinary Medicine, University of Life Sciences in Lublin, Akademicka 12, 20-033 Lublin, Poland ²Department of Animal and Environmental Hygiene, Faculty of Animal Breeding and Biology, University of Life Sciences in Lublin, Akademicka 13, 20-035 Lublin, Poland ³Institute of Biology, University of Opole, Oleska 22, 45-032 Opole, Poland

Corresponding author: Marta Demkowska-Kutrzepa; e-mail: marta.demkowska@up.lublin.pl

The helminthofauna of birds of prey belonging to the orders Strigiformes (representatives of nocturnal predators) and Accipitriformes (representatives of daytime predators) has so far been studied in Poland only by Furmaga (1957) and Okulewicz (1998). These predators are rare material for research due to the strict protection that these species are subject to. The last research on this subject was conducted in the Lublin region in 1949–1955.

The aim of the study was to determine the parasitofauna of birds from the orders Strigiformes and Accipitriformes from the Lublin Voivodeship.

In the current research conducted in 2010–2020, 42 birds belonging to 12 species (*Accipiter nisus*, *Aquila chrysaetos*, *Asio otus*, *Athene noctua*, *Bubo bubo*, *Buteo buteo*, *Circus pygargus*, *Haliaeetus albicilla*, *Pandion haliaetus*, *Tyto alba*, *Strix aluco*, *Strix uralensis*) were examined. The material for the study was digestive tracts of birds. The digestive

tracts were analyzed with anatomical sections. The content of the intestines and scrapings of the mucosa were examined using flotation, decantation and the macroscopic method. Overall, 69% (29/42) of birds were infected. Among representatives of the order Accipitriformes, 77.4% (24/31) of infected birds were recorded. In this case, the infections of flukes (61.3%; 19/31) and nematodes (48.4%; 15/31) were the dominant ones, tapeworms (9.7%; 3/31) and spiny-headed worms infections were found less frequently (3.2 %; 1/31). Lower helminth infection was observed in Strigiformes (45.5%; 5/11). In the case of nocturnal predators, the most frequent infections were flukes (36.4%; 4/11) and nematodes (36.4%; 4/11), and less frequently spinyheaded worms (18.2%; 2/11). In this case, no tapeworm infection was recorded. Mixed infections dominated in both groups of birds.