

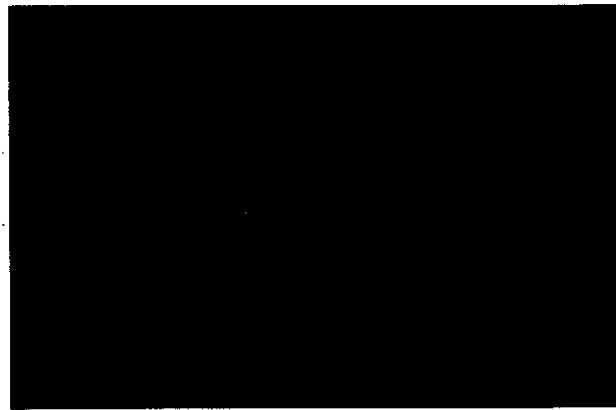


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# Helminths of owls (Strigiformes) in Calabria region of Southern Italy

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**AIM:** Here we examined and compared the helminth assemblage of 5 species of owls from the Calabria region of southern Italy. Moreover, we compared this data with that obtained on helminth communities of 6 species of birds of prey (Accipitriformes and Falconiformes) occurring in the same geographical region (Santoro et al., 2010, Vet J, 186: 119-122; 2012, J Parasitol, 98: 22-29).

**MATERIALS AND METHODS:** Owls naturally died between January 2005 and December 2011 at the Wildlife Rescue Centre in Rende, Cosenza (Calabria region), were examined for helminth parasites. We studied a total of 122 owls belonging to 5 species including 30 little owls (*Athene noctua*), 31 tawny owls (*Strix aluco*), 41 barn owls (*Tyto alba*), 10 long-eared owls (*Asio otus*), and 10 scops owls (*Otus scops*).

**RESULTS:** A total of 19 helminth taxa were identified including 3 cestodes *Chaenotaenia littoricae*, *Passerilepis stylosa*, and *Paruterina candelebraria*, 3 acanthocephalans *Centrorhynchus aluconis*, *C. clitorideus* and *C. globocaudatus*, 10 nematodes *Capillaria falconis*, *Dispharynx nasuta*, *Hannatospiculum* sp., *Heterakis gallinarum*, *Excisa excisiformis*, *Porrocaecum spirale*, *Synhimantus affinis*, *S. laticeps*, *Skjabinura spiralis*, and *Subulura* sp.; and 3 digenans *Brachylaima fuscatum*, *Neodiplostomum* sp., and *Zonorchis* sp.. Number of helminth taxa for host species ranged from 2 in long-eared owl to 12 in tawny owl. Twelve taxa were restricted to a single host species; 2 taxa were shared between 4 hosts; 3 taxa were shared between 3 hosts; and 2 taxa were shared between 2 hosts. In the Calabria region, owls and birds of prey share just 4 of the 50 helminth taxa found in total (19 in owls and 31 in birds of prey) including *C. globocaudatus* and *S. laticeps* (each shared with 5 birds of prey species) and *B. fuscatum* and *C. falconis* (each shared with 2 birds of prey species) (Santoro et al., 2010, Vet J, 186: 119-122; 2012, J Parasitol, 98: 22-29).

**CONCLUSIONS:** Data here obtained supports the hypotheses that each owl species host a specific helminth community; and their community are poor probably because of their high trophic spe-

cialization on a few prey species, and differ qualitatively and quantitatively by those of birds of prey from the same geographical area.