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## OCCURRENCE OF *Capillaria hepatica* (NEMATODA: TRICHURIDAE) IN THE SPOTTED SKUNK IN FLORIDA

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**Abstract:** An infection of *Capillaria hepatica* found in a spotted skunk (*Spilogale putorius*) from Highlands County, Florida, apparently constitutes the first record of this parasite in a wild carnivore.

*Capillaria hepatica* (Bancroft, 1893) typically occurs as an adult and deposits its eggs in the liver of mammals. Although primarily a parasite of rodents, it has been recorded from a variety of mammals in other orders. The only previously reported hosts in the order Carnivora appear to be the domestic dog (*Canis familiaris*) and house cat (*Felis catus*).<sup>1,5,6,7</sup> This paper reports the occurrence of *Capillaria hepatica* in a spotted skunk (*Spilogale putorius*) from Florida, which apparently constitutes the first record of this parasite from a wild carnivore.

The skunk, an adult female, was collected about 10 miles south of Lake Placid, Highlands County, on 7 October 1970, by John Winn. The pale yellowish lesions on the liver were similar in appearance to those produced by *C. hepatica* infections in rodents, and microscopic examination of tissue from the affected areas revealed the presence of the characteristic double-plugged, symmetrical ova with pitted surface. Individual worms were visible in some parts of the liver and the lesions were small and widely scattered, suggesting a relatively recent and light infection. The skunk exhibited no obvious deleterious effects attributable to the infection. It had been live-trapped and before being killed for internal examination showed no sign of ill health in either general appearance or behavior. It was of normal body weight and appeared

to be in good condition internally at necropsy. The liver was not obviously enlarged and, except for the lesions, was normal in appearance and coloration.

The infected skunk was collected in an area of sandy, well-drained soil with dense clumps of shrubs and scattered slash pines (*Pinus elliotii*). Previous studies in Florida have indicated a strong correlation between such environmental conditions and prevalence of *C. hepatica* in rodents.<sup>2,4</sup> Another spotted skunk examined from the same locality in August 1970 had no visible infection of *C. hepatica*. However, an infected cottontail (*Sylvilagus floridanus*) was collected from similar habitat close by, and approximately 62 percent of two rodent species (*Peromyscus floridanus* and *Peromyscus gossypinus*) trapped in the same vegetation type on the Archbold Biological Station 2 miles away were positive for *C. hepatica*.<sup>3</sup>

In an earlier study, 17 specimens of 5 species of carnivores in Florida were examined for *C. hepatica* with negative results.<sup>2</sup> Although this sample is obviously inadequate to give a reliable indication of the status of the parasite in wild carnivores in the state, it seems likely that it is rare. Support for this conclusion is the low over-all prevalence and spotty local distribution of *C. hepatica* in Florida rodents.<sup>2</sup>

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