Long, P. L., and L. P. Joyner. 1992. Cocysts in muscle as intermediate cecal tissue of 7 of 10 cheetahs from bobcats. Todd, and Rupprecht, 1992, been reported for electro microscopy by methods described previously (Foreyt, 1989) and viewed with a transmission electron microscope (Hitachi H600, Hitachi, Santa Clara, California 95044).

Sarcocysts of S. felis were detected in 7 of 10 cheetahs (Fig. 1). Mean size of 48 sectioned sarcocysts was 251 x 121 μm (range, 64–997 x 49–
Mean intensity was 6.9 sarcocysts/cm². No inflammatory reaction was associated with the sarcocysts, and adjacent muscle fibers were histologically intact.

The septate sarcocysts (Fig. 2) were identified as *S. felis* based on published descriptions by Dubey et al. (1992). The primary vacuole membrane of the primary cyst wall was folded irregularly into short bumps and villar projections (Fig. 2).

Infections with *Sarcocystis* sp. in the musculature of carnivores are uncommon, because carnivores are the usual definitive hosts and herbivores are the usual intermediate hosts. In the present report, sarcocysts of *S. felis* were detected in 70% of the cheetahs sampled, but the importance of the infection could not be determined.

Many of the cheetahs subsequently died from a variety of diseases, particularly renal and hepatic failure, and virtually all cheetahs exhibited signs of muscle wasting. Cheetahs lack genetic diversity (O'Brien et al., 1985) and are highly susceptible to infectious diseases such as feline infectious peritonitis virus and feline leukemia virus, which are capable of compromising the immune system of the host (Briggs and Ott, 1986; Briggs
et al., 1986). The effect of a compromised immune system on the development of sarcocysts in the carnivore host has not been investigated (Edwards et al., 1988) but may be important. The life cycle of S. felis, including the definitive host, has not been documented.

**Literature Cited**


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