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An examination of 246 mink, *Mustela vison* Schreber, from both southeast and southwest Manitoba, showed *Dioctophyme renale* in three animals from the former area but none in the latter. This is the first record of *D. renale* from wild mammals in Manitoba.

Introduction

Dioctophyme renale (Goeze, 1782) Stiles, 1901, has never been found in wild Canidae or Mustelidae in Manitoba. The literature contains only

two published records of this parasite in the province. Cameron et al. (1940) found it in both kidneys of a sledge dog that died in the Berens River district. McLeod (1967) recorded D. renale in two dogs from the Winnipeg city dog pound and six sledge dogs from a team owned by the Manitoba Game and Fisheries Branch. In the latter case, five dogs had nematodes in the right

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kidney, while the sixth dog had seven male worms in the body cavity and eight females in the right kidney.

Results and Discussion

In 1966, Urban examined 118 mink from the Whiteshell Provincial Park in southeast Manitoba. A single male mink contained one *D. renale* 19.1 cm long. This specimen was within the right kidney but protruded into the abdominal cavity. The affected kidney was about twice the normal size.

In 1969, Crichton found two of five mink from southeast Manitoba infected with *D. renale*. The first host was a female trapped on December 28, 1968, in Twp. 13 R. 12 S23 SW6 of the Whiteshell area. The enlarged and partially calcified right kidney of this animal contained two female worms about 54 cm long, and one male about 24 cm long. The second infected mink, also a female, was trapped on February 2, 1969, in Twp. 13 R. 12 S20 NW13 of the Whiteshell area. One female worm about 18 cm long was found in the right kidney of this animal.

It is interesting to note that Urban (1966) did not find *D. renale* in the Turtle or Duck moun-

tains in western Manitoba, despite the examination of 123 mink and 92 weasels. This negative result and the finding of three infected mink in southeast Manitoba suggest that this area is part of a larger focus including northwestern Ontario and Minnesota. Fyvie (personal communication 1966) and Erickson (1944) reported *D. renale* from these areas.

This is the first record of *D. renale* in wild mammals of Manitoba.

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CAMERON, T. W. M., I. W. PARNELL, and W. W. TAYLOR, 1940. The helminth parasites of sledge-dogs in northern Canada and Newfoundland. Can. J. Res. 18:325–332.

McLeod, J. A. 1967. Dioctophyma renale infections in Manitoba. Can. J. Zool. 45: 505-508.

Stiles, C. W., and A. Hassall. 1920. Index-catalogue

STILES, C. W., and A. HASSALL. 1920. Index-catalogue of medical and veterinary zoology. Bull. Hyg. Lab. U.S. Public Health Serv. 114.