

**CHELYDRA SERPENTINA** (Common Snapping Turtle) and **EMYDOIDEA BLANDINGII** (Blanding's Turtle). **PARASITES.** Nematode and hirudinean parasites have been reported for *Chelydra serpentina* and *Emydoidea blandingii* in North America (see Baker 1987. Mem. Univ. Newfoundland Occas. Pap. Biol. 11:1-325; Watermolen 1996. J. Fresh. Ecol. 11:211-217), but few reports exist from Wisconsin, USA (Gulford 1959. Trans. Wisconsin Acad. Sci. Arts Letters 48:121-124; Amin 1981. Trans. Amer. Micros. Soc. 100:42-51; Watermolen 1996, *op. cit.*). Of these studies, Gulford (*op. cit.*) sampled for helminth parasites among several turtle species, including six *C. serpentina* and one *E. blandingii* from northeastern Wisconsin. Amin (*op. cit.*) reported one *Placobdella parasitica* and three *P. ornata* leeches from a single *E. blandingii* from southeastern Wisconsin, and Watermolen (*op. cit.*) reported *Desserobdella picta*, an amphibian leech, from a snapping turtle from Green Bay, Wisconsin. Here, I report a new locality record for nematodes of *C. serpentina* in Wisconsin and report prevalence and mean intensity data for nematode and leech parasites of *C. serpentina* and *E. blandingii* from eastern Wisconsin.

Turtles were collected by hand or dip-net at the Carroll College field station located in Genesee Depot, Waukesha Co., and at a pond in Wauwatosa, Milwaukee Co. Live-caught turtles were in-

spected for leeches, measured, and released. All leeches were placed in individual vials and relaxed by slowly dripping 95% ethanol into the vial, they were then fixed in 10% formalin. Leeches were identified using a stereo microscope and keys provided by Klemm (1991. Michigan Acad. 24:37–103) and Sawyer (1972. Illinois Biol. Monogr. 46:1–154). Prevalence is the percentage of infected turtles in a sample; mean intensity is the mean number of worms per infected turtle. In addition, three road-killed specimens (two *C. serpentina*, one *E. blandingii*) were collected in Waukesha and Racine Counties, Wisconsin, during 1995–1998. These turtles were inspected for helminth parasites, and were collected within 24 h of death. Upon necropsy, the digestive tract and internal organs were examined for endoparasites for both *C. serpentina* specimens examined. Only the digestive tract was examined from the single *E. blandingii* necropsied because all other organs were badly damaged. All nematodes were fixed in 10% formalin, dehydrated in 70% ethanol, cleared in glycerol, and identified as temporary mounts according to the descriptions of Hedrick (1935a. Trans. Amer. Microsc. Soc. 54:307–335, 1935b. J. Parasit. 21:397–409) and Baker (1986. Can. J. Zool. 64:228–237). Voucher specimens were deposited in the Harold W. Manter Laboratory, University of Nebraska State Museum, Lincoln (accession no. *Placobdella parasitica* HWML 15008, *Placobdella ornata* HWML 15009, *Falcaustra wardi* HWML 15010, *Spiroxys contortus* HWML 15011).

Among the live-caught turtles, five (71%) of seven *C. serpentina* examined were infected with *Placobdella*, with a mean intensity of  $21.2 \pm 44$ . Most turtles contained 1–2 *P. parasitica* and/or *P. ornata* with the exception of one immature turtle that contained one adult and 99 young *P. parasitica*. A total of four *E. blandingii* were collected on seven different occasions. A single *P. ornata* or *P. parasitica* was recovered on three out of seven different dates with a intensity of one. A single *E. blandingii* male (carapace length 200 mm) contained one *P. ornata* on 10 June 1998 and one *P. parasitica* when recaptured on 14 June 1998. In total, 103 *P. parasitica* and three *P. ornata* were recovered from *C. serpentina*, and one *P. parasitica* and two *P. ornata* were recovered from *E. blandingii*. All leeches were attached to the ventral surface of the carapace and/or the limbs of the turtles.

Among the road-killed turtles, one immature *C. serpentina* (100 mm carapace length (CL), 172.4 g) was negative for helminths while an adult male (280 mm CL, 3991.6 g) contained four male and five female *Falcaustra wardi* in the large intestine. Gulford (*op. cit.*) previously reported *Spironura affine* (= *Falcaustra affinis*, Baker 1986 *op. cit.*) in Wisconsin snapping turtles. *Falcaustra wardi* is a common parasite of *C. serpentina* (see Baker 1986 *op. cit.*). However, Wisconsin is a new locality record for this nematode. The road killed female *E. blandingii* (210 mm CL, not weighed because of damage) contained four *Spiroxys contortus* nematodes in the stomach, which previously have been reported by Gulford (*op. cit.*) from the northeastern part of the state.

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