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### Research Note

**Occurrence of Larval *Contracaecum* sp. (Ascaridida: Anisakidae) in Rio Grande Lesser Sirens, *Siren intermedia texana* (Amphibia: Caudata), from South Texas**

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ABSTRACT: Unencapsulated third-stage larval anisakid nematodes, *Contracaecum* sp. Railliet and Henry, 1912, were recovered from the coelomic cavity of all of 8 Rio Grande lesser sirens, *Siren intermedia texana* Goin, 1957, from southern Texas. Mean intensity was 2.1 (range 1-5) worms per host. This is the first report of larval *Contracaecum* sp. infecting a caudate amphibian.

**KEY WORDS:** Anisakidae, Ascaridida, Nematoda, *Contracaecum* sp., Caudata, *Siren intermedia texana*, Sirenidae.

The Rio Grande lesser siren, *Siren intermedia texana* Goin, 1957, is a large eellike salamander that ranges from the lower Rio Grande Valley of Texas to Tamaulipas, Mexico (Martof, 1973; Dixon, 1987). The species inhabits a wide variety of aquatic sites. In Texas, *S. i. texana* is considered an endangered taxon and is afforded protection by the Texas Parks and Wildlife Department.

Although a great deal of information is available on endoparasites of conspecific western lesser sirens, *S. i. nettingi* Goin, 1942 (Nickol, 1972; Dunagan and Miller, 1973; Dyer, 1973; Brooks and Buckner, 1976; Brooks, 1978; Buckner and Nickol, 1979), nothing has been published on parasites of *S. i. texana*. During a morphometric study of *S. i. texana* (McDaniel, 1969), several...
sirens were observed to be infected with the anisakid nematode reported here.

During April 1968, the junior author collected 8 adult S. i. texana (mean ± SD snout–vent length [SVL] = 228.4 ± 30.8, range = 190–272 mm) by seineing, hand, or with wire traps from freshwater ponds in the vicinity of Kingsville, Kleberg County, Texas (27°30'N, 97°51'W). Specimens were killed with a dilute solution of chloroform and a midventral incision was made to expose the viscera. Nematodes were collected from the coelomic cavity and fixed in 70% ethanol. Voucher specimens of hosts are deposited in the Texas A&I University Museum (AIM 574.21, 574.38, 574.43, 574.47, 575.77, 575.94, 575.109, and 575.111). Voucher specimens of Contracaecum sp. are deposited in the USNM Helminthological Collection, USDA, Beltsville, Maryland 20705, as USNM 82004.

All of 8 S. i. texana were infected with third-stage larvae of the anisakid nematode Contracaecum sp. Railliet and Henry, 1912. A total of 17 unencapsulated worms was recovered from the coelomic cavity of 8 sirens; a mean intensity of 2.1 (range 1–5) worms per host. The largest siren (SVL = 272 mm, AIM 574.38) was most heavily infected (5 worms).

Sirens have been reported to feed on a variety of prey items, including fish (Goin, 1957; Duellman and Schwartz, 1958; Altig, 1967; Hanlin, 1978) and crustaceans (Scroggin and Davis, 1956; Altig, 1967). Perhaps immature sirens become infected by ingesting invertebrates (copepods) harboring larval stages of Contracaecum, whereas the adults are infected from ingestion of encapsulated third-stage larvae found in fish (see Huizinga, 1967).

In summary, this is the first report of Contracaecum sp. from a member of the order Caudata and, to our knowledge, only the second time the parasite has been reported from amphibians. Coy Otero and Ventosa (1984) previously reported larval Contracaecum sp. from Cuban treefrogs, Osteopilus septentrionalis (Dumeril and Bibron, 1841), and bullfrogs, Rana catesbeiana Shaw, 1802, from Cuba.

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**Literature Cited**


