



Helminths of the American bullfrog, *Lithobates catesbeianus* (Shaw, 1802), from Pawnee Lake, Lancaster, Nebraska, USA with a checklist of its helminth parasites

ROSARIO MATA-LÓPEZ¹, LUIS GARCÍA-PRIETO² AND VIRGINIA LEÓN-RÈGAGNON³

¹Departamento de Biología Evolutiva, Facultad de Ciencias, Universidad Nacional Autónoma de México, CP. 04510, Mexico D.F., Mexico; e-mail: gorgoderina@yahoo.com.mx

²Laboratorio de Helminología, Instituto de Biología, Universidad Nacional Autónoma de México. AP. 70-153, C.P. 04510, México D.F., Mexico.

³Estación de Biología Chamela, Instituto de Biología, Universidad Nacional Autónoma de México. A.P. 21, C.P. 48980, San Patricio, Jalisco, Mexico.

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Abstract

The American bullfrog, *Lithobates catesbeianus*, is one of the most intensively studied host species. However, most of the records related to the parasites of this anuran are scattered through the literature. The purpose of our study is twofold: 1) to list the helminths of this host from Pawnee Lake, Lancaster Co., Nebraska, USA, and 2) To compile all published records and those contained by several scientific collections to construct a checklist of helminth parasites associated with the American bullfrog through its range in both native and introduced geographical areas. Twenty-seven specimens of *L. catesbeianus* were collected and examined for helminth parasites; 20 frogs were infected. Nine species of helminths were collected: 4 digeneans: *Haematoloechus coloradensis*, *H. parviplexus*, *Gorgoderina attenuata*, and *Glypthelmins quieta*, and 5 nematodes: *Rhabdias ranae*, *Spinitectus gracilis*, *Cosmocercoides variabilis*, *Spiroxys* sp., and an unidentified ascarid nematode. Pawnee Lake represents a new locality record for *S. gracilis*. The digenean *H. parviplexus* had the highest prevalence and mean abundance (33.3% and 3, respectively). As a result of our study, the number of helminth taxa known for this host is 159 (75 digeneans, 4 monogeneans, 10 cestodes, 7 acanthocephalans, and 63 nematodes); these records come from 6 countries (Canada, Cuba, Japan, Korea, United Kingdom, and USA). Although well documented, the helminthological record of this host species could increase after further inventory work in poorly sampled regions.

Key words: *Lithobates catesbeianus*, American bullfrog, Pawnee Lake, helminths, Nematoda, Digenea, checklist