



A CHanneled Urban Stream AS A FACILITATOR AND REFUGE FOR INVASIVE SPECIES: *XIPHOPHORUS HELLERII* IN THE PIQUIRI RIVER BASIN, UPPER PARANÁ

Rosilene Luciana Delariva^{1,2}, Flavia Begnini², Renan Borges dos Reis², Érika Spanhol Lemunie², Luciano Lazzarini Wolff¹, Franco Teixeira de Mello³

¹ Laboratório de Ictiologia, Ecologia e Biomonitoramento (LIEB), Centro de Ciências Biológicas e da saúde, Universidade Estadual do Oeste do Paraná, Cascavel, Paraná, Brasil.

² Programa de Pós-graduação em Conservação e Manejo de Recursos Naturais, Universidade Estadual do Oeste do Paraná, Cascavel, Paraná, Brasil.

³ Departamento de Ecología y Gestión Ambiental, CURE Centro Universitario Regional del Este, Universidad de la República, Maldonado, Uruguay.

E-mail: Rosilene.delariva@unioeste.br

Biological invasions are one of the main threats to native biodiversity, especially in freshwater ecosystems subject to intense anthropogenic pressures. In this study, we investigated the distribution of *Xiphophorus hellerii*, an exotic poeciliid species, in Brazilian streams, highlighting the first record of the species in the Piquiri River basin (Upper Paraná ecoregion, Brazil). We combined secondary data with primary field collections obtained through electrofishing in an urban stream subjected to urbanization pressures to map the species' national distribution. The results indicate a predominance of occurrences in metropolitan areas, totaling 76 records in Brazil. We recorded 19 individuals in the Piquiri River basin. The presence of this species in this urban context is likely due to accidental or intentional dumping by aquarists, a practice that may be facilitated by channelization in urban streams. Furthermore, these channelization areas and urban streams can serve as refuges for non-native species, thereby decreasing biotic and abiotic stressors, which in turn permits their introduction and establishment. These findings underscore the importance of addressing anthropogenic dispersal mechanisms and the potential ecological impacts on native fish fauna resulting from the introduction of non-native species, particularly in urban streams.

Palavras-chave: *Urban impacts; exotic fishes; management.*