

Monograph



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Annotated list and key to the stream fishes of Trinidad & Tobago

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Abstract

Based on historical and museum records and recent extensive collecting we compiled a checklist of 77 fish species reported from the streams of Trinidad and Tobago. A key with photographs is provided to aid in identifications, as well as brief notes on habitat, diet, reproduction, maximum size, local common names and distribution.

Key words: biodiversity, continental island, South America, West Indies, biogeography, freshwater

Introduction

Trinidad & Tobago (T&T) is a twin-island nation that sits on the South American continental shelf opposite the mouth of Venezuela's Orinoco River (Figure 1). This positions T&T between two distinct freshwater fish faunas, the Antillean from the islands to the northeast, and the South American from the continent to the south and west. Differing theories about the geological history of T&T place much of Trinidad as part of the Orinoco River delta, from which it made its final separation either 10,000 years ago (Curray 1964, Millinan & Emery 1968), or as recently as 1,000 years ago (Kenny 1989). Tobago's geological history differs somewhat from that of Trinidad. The southwestern portion of Tobago is a raised coral platform, whereas the Main Ridge mountains of Tobago and the Northern Range mountains of Trinidad are considered to be the eastern end of the Andean mountain range, contiguous with that of the Paria Peninsula in Venezuela. The three land masses are separated by drowned valleys. Tobago, however, was never part of the Orinoco River system. These differences in their development are mirrored by differences in the freshwater fauna of the two islands. Trinidad's proximity to the Paria peninsula and the Orinoco delta (Boos 1984), the sheer volume of rainy season freshwater input from the Orinoco, and to a lesser extent Amazon outflows, and the prevailing marine currents, conspire to facilitate movement of organisms from northeastern South America, especially Venezuela, to Trinidad (Alkins & de Souza 1984, Boos 1984, Ali 1989, Kenny 1995, Vanegas-Rios & Phillip in press). The Northern Range of Trinidad, running across the northernmost part of the island in line with the Andean mountain range in the Venezuelan Paria Peninsula, acts as a zoogeographic barrier that keeps freshwater fishes in southern streams from invading the north coast. Consequently, streams on the northern slopes of the range have Antillean affinity. Tobago's fauna more closely