



Fishes (Elasmobranchii and Actinopterygii) of Picãozinho reef, Northeastern Brazil, with notes on their conservation status

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Abstract

Shallow reefs on the northeastern coast of Brazil are rich, productive and diverse environments, with great ecological and economical importance. Picãozinho is located 1,500 m off the coast of João Pessoa city, Paraíba state, NE Brazil. The aim of this work is to provide an updated list of the reef fishes of Picãozinho, based on a survey of approximately 350 hours of direct observation using free dive techniques, and complemented by collection data and other unpublished records. A total of 102 species of 43 families were recorded. Of these, 36 are new occurrences for the reef and seven are species that have been recently resurrected from synonymy, mainly with Caribbean species previously cited for Brazil.

Key words: ichthyofauna, shallow reef, Paraíba, reef fishes, conservation, checklist

Resumo

Recifes rasos na costa nordestina do Brasil são ambientes ricos, produtivos e diversificados, com grande importância ecológica e econômica. Picãozinho está localizado a 1500 m da costa da cidade de João Pessoa, estado da Paraíba, NE Brasil. O objetivo desse trabalho foi fornecer uma lista atualizada dos peixes recifais de Picãozinho, considerando a ictiofauna investigada em aproximadamente 350 horas de observação direta utilizando técnicas de mergulho livre, complementada com dados de coleção e outros registros não publicados. Um total de 102 espécies de 43 famílias foi registrado. Dessas, 36 são novas ocorrências para o recife e sete espécies foram recentemente revalidadas e consideradas distintas de espécies do Caribe previamente citadas para o Brasil.

Introduction

Reefs are vital ecosystems that provide income, food and coastal protection for millions of people. Recent studies have shown that reef goods and services provide an annual net benefit of US \$ 375 billion to economies worldwide (Wilkinson 2002). They cover only 0.2% of the ocean's floor, but are incredibly diverse and contain more than 25% of all marine species (Roberts *et al.* 2002). Unfortunately, reefs are also among the most vulnerable ecosystems in the world and despite their ecological and economic importance, we have a poor understanding of how reefs are responding to human activities, particularly in the vast Brazilian coast.

The tropical Brazilian coast represents an extensive area of about 3,000 km, and sustains many reefs that are characterized by a relatively low diversity and the presence of a substantial number of endemic species of several taxa (Leão & Dominguez 2000; Moura 2000; Neves *et al.* 2006). On the other hand, compared with