

Descriptions of four new species, redescription of *Paraliparis membranaceus*, and additional data on species of the fish family Liparidae (Pisces, Scorpaeniformes) from the west coast of South America and the Indian Ocean

DAVID L. STEIN

NOAA/NMFS Systematics Laboratory, Smithsonian Institution, P.O. Box 37012, National Museum of Natural History, Washington, DC 20013-7012, USA; steind@si.edu

Abstract

Liparids are a cottoid family of more than 350 species distributed worldwide in polar, temperate and deep tropical waters. About 20 species (in six genera) are known from the west coast of South America south of Panama to Tierra del Fuego, and four (in two genera) from the Indian Ocean. This paper describes an additional four species from existing collections: three from Peruvian and Chilean waters (*Paraliparis carlbondi* new species, *Paraliparis skeliphrus* new species, *Notoliparis antonbruuni* new species), and one from the Indian Ocean (*Pseudnos carolinae* new species). *Paraliparis membranaceus* Günther is redescribed, a range extension and additional descriptive information is reported for *Paraliparis merodontus* Stein, additional descriptive information is provided for *Careproctus pallidus* (Vaillant) and *Pseudnos steini* Chernova, the known range of *Careproctus longifilis* Garman is extended to Peru from the Gulf of Panama, and a species of *Pseudnos* similar to *Pseudnos dentatus* Chernova and Stein is described, but not named.

Key words: Chile, Peru, Southeastern Pacific Ocean, Indian Ocean, deep water, Liparidae, *Enantioliparis*, *Paraliparis*, *Notoliparis*, *Careproctus*, *Pseudnos*, new species

Introduction

Liparids are one of the most speciose families in deep waters of the North Pacific (Mecklenburg *et al.*, 2002), the Southern Ocean (Stein & Andriashev 1990; Andriashev & Stein 1998) and in the Southern Hemisphere (Stein *et al.* 2001; Andriashev 2003). They are relatively rare in South American collections, probably because sampling is uncommon in the deeper waters of the continental slope and abyssal plain where they occur. Deep-water liparids have been described from Russian and German research