



New bryozoan taxa from a new marine conservation area in New Zealand, with a checklist of Bryozoa from Greater Cook Strait

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Abstract

Seven new species of cheilostome Bryozoa are described from the new Taputeranga Marine Reserve on the south coast of Wellington City, New Zealand. Four of them [*Catenicella pseudoelegans* (Catenicellidae), *Celleporina wellingtonensis* and *Osthimosia sirena* (Celleporidae), and *Reteporella aurantiaca* (Phidoloporidae)] were discovered during a month-long “BioBlitz” to determine aspects of the biodiversity of the Marine reserve ahead of its official gazetting and are so far known only from the marine reserve. The remaining species [*Electra oligopora* (Electridae), *Fenestulina littoralis* (Microporellidae), and *Rhynchozoon zealandicum* (Phidoloporidae)] occur both in the reserve and elsewhere on the New Zealand coast and this paper resolves long-standing taxonomic problems concerning their status, each of the three having previously been attributed to other species. All seven occur in the littoral zone, some extend into deeper water, and all are apparently endemic. With the addition of the new species, the bryozoan fauna of Greater Cook Strait comprises 232 species (13 undescribed/undetermined) and, for the New Zealand Exclusive Economic Zone, 953 marine species (of which 331 remain undescribed or undetermined).

Key words: Bryozoa, Cheilostomata, new species, *Electra*, *Catenicella*, *Fenestulina*, *Celleporina*, *Osthimosia*, *Reteporella*, *Rhynchozoon*, marine reserve, New Zealand

Introduction

Throughout October 2007, New Zealand’s first marine “BioBlitz” was conducted along a section of the Cook Strait coastline of Wellington City in an area then designated as the prospective Taputeranga Marine Reserve, which became a reality in September 2008 (Fig. 1). The BioBlitz was jointly coordinated by staff of the New Zealand Forest & Bird Society and was partly modelled on the land-based BioBlitzes that have been conducted for several years by Landcare Research Ltd, with the exception that, whereas they were held over two days of a weekend, the marine BioBlitz was extended to several weeks to accommodate the exigencies of tides and unsuitable diving conditions. Marine scientists and conservationists joined divers from local clubs to sample below low tide and members of the public and other scientists sampled the intertidal zone. Coupled with education and outreach, the goal was to record as many species as possible within the reserve in the requisite time. Added to the taxonomic data from published literature, the resulting checklist would comprise a kind of baseline against which to measure, at least in part, one outcome of the protection accruing to that part of the coastline from its protected status. Samples of all taxa were examined by Wellington-area taxonomists from the National Institute of Water & Atmospheric Research, Victoria University of Wellington, and Te Papa Tongarewa (Museum of New Zealand) in a community hall (for public education) and in the laboratory. More than a dozen undescribed species of invertebrates were found in several phyla, including the bryozoans described here.

Macken (1958) was the first to compile a list of bryozoans from Greater Cook Strait, from Cape Egmont and Farewell Spit in the west to Capes Palliser and Campbell in the east, based on dredgings made by M.V. *Alert*, collections held at (then) Victoria University College and the Dominion Museum, personal collecting,