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Review

The Hierarchic Treatment of Marine Ecological Information from Spatial Networks of Benthic Platforms

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Crawler Faunal Time Series Analysis

The time series used for the estimation of the ecological indicators (i.e., diversity indices and biomass) were based on the animal counts in video transects published by Doya et al. [1]. Diversity analyses were performed with the "vegan" R package [2]. For biomass, animal densities (N/m^2) were calculated with the standardized counts over a total area of 120 m^2. Wet weights of animals were either calculated using growth curves based on animal sizes or, when sizes were not available, the published average weights, preferably from NE Pacific, were used instead. When available, data from comparable depth strata, such as the Barkley Canyon hydrates (~870 m), were preferred, while any reported differences in the vertical distribution of each species depending on sex and maturity level were also taken into account. More details for the procedure followed for each species are presented in Supplementary Table S1 below. All references are also included in the reference list in the main text.

Supplementary Table S1. Data sources for the steps in biomass estimation.

Species	Size	Weight
Licenchelys sp.	-	Average weight [3]
Microstomus pacificus	Average size [4]	Growth curve [5]
Embassichthys bathybius	Average size [4]	Growth curve [5]
Hippoglossus stenolepis	Average size [3]	Growth curve [5]
Coryphaenoides sp.	Average size [6]	Growth curve [5]
Sebastidae	Average size [7]	Growth curve [5]
Bathyagonus nigripinnis	Average size [8]	Growth curve [5]
Anoplopoma fimbria	Average size [9]	Growth curve [5]
Eptatretus stoutii	Average size [10]	Growth curve [5]
Salpidae	-	Average weight [11]
Opisthoteuthidae	-	Average weight [3]
Gonatus sp.	-	Average weight [3]
Buccinoidea	-	Average weight [3]

Ophiuroidea	-	Average weight [3]
Asteroidea	-	Average weight [3]
Zoroasteridae	-	Average weight [3]
Hippasteria sp.	-	Average weight [3]
Pannichia moseleyi	-	Average weight [3]
Paguroidea	-	Average weight [3]
Lithodes couesi	-	Average weight [3]
Small crabs	Average size [12]	Growth curve [13]
Chionnecetes tanneri	Average size [13]	Growth curve [14]
Bolinopsis infundibulum	Average size [14]	Growth curve [13]
Poralia rufescens	Average size [15]	Growth curve [15]
Solmissus sp.	Average size [15]	Growth curve [15]
Voragonema pedunculata	Average size [16]	Growth curve [16]

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