

Long-distance travels with short-lived larvae – the peculiarities of seamount bryozoans

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In the intensified effort to study seamount biota during the last decade, the Bryozoa have almost completely been neglected, although they may form a major component of the sessile benthic community. A first screening of the sparse literature and some of the samples taken during several scientific cruises shows that cheilostome bryozoans are regularly found on NE Atlantic seamounts: 36 spp. on Gettysburg Smt, 27 on the Great Meteor Bank (GMB), 24 on Ampère Smt, 23 on Atlantis Smt, 21 on Hyères Smt, 14 on Irving Smt, and 13 on Conception Smt.

Due to the short-lived bryozoan larvae, dispersal is generally very restricted and long-distance transport of bryozoans to or between isolated offshore sites presumably only achieved by means of rafting of the colony. However, this mechanism is less likely for species adapted to bathyal habitats. Endemism, particularly on remote seamounts, is therefore expected to be comparatively high. Indeed, at least 18 of the 27 spp. (67%) found on the GMB are endemic to this seamount. Of the remaining species, one arrived on *Sargassum* from the W Atlantic, three species are known from the E Atlantic shelf, and another five are restricted to the Azores and other Atlantic seamounts. Moreover, at least 17 species, three genera and one family from the GMB are new to science.

Regarding the entire region, several higher taxa are endemic to seamounts, or are significantly more speciose there than on the continental shelf, indicating a long history of seamount faunas and, possibly, sporadic dispersal of founder species from seamounts to the shelf.

Given the number of scientific cruises to these and other NE Atlantic seamounts, and the great amount of unscreened samples that exist, a thorough taxonomic study of seamount bryozoans will certainly increase the number of taxa. With this knowledge it will then be possible to address more precise questions concerning the ecology, biogeographic patterns and processes, and the evolutionary history of seamount faunas.

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