

Halimeda bioherms along an open seaway: Miskito Channel, Nicaraguan Rise, SW Caribbean Sea

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Abstract. A recent research cruise to examine small, detached carbonate platforms situated on the Nicaraguan Rise in the SW Caribbean Sea has revealed the presence of numerous *Halimeda* bioherms. Based upon interpretations from seismic reflection data some exceed 140 m in relief. This is the first documented occurrence of these green-algal buildups in the Caribbean/Bahama Bank region. The *Halimeda* bioherms form a nearly continuous band that borders the margins of the Miskito Channel – a shallow, open, 125 km long seaway. This 220 m deep channel bisects the Miskito Bank which is a major carbonate shelf. In seismic profile the bioherms appear acoustically “soft” and reveal a local relief of 20–30 m. Tops of these features lie in about 40–50 m of water. Samples from dredge hauls are coarse, poorly cemented packstones/grainstones which are dominated by largely unbroken, disarticulated *Halimeda* segments set in a poorly sorted sandy matrix. Exposed surfaces were stained brown. Very little living material was brought up in the dredges. The significance of these bioherms and their full extent in the Caribbean are not understood. Undoubtedly, further study will provide important answers concerning their role in the geologic development of Caribbean carbonate platforms.

in relief) that extends from Central America east to Hispaniola (Arden 1975; Case and Holcombe 1980; Pindell and Dewey 1982).

The overall purpose of the research project was to determine the late Quaternary sedimentologic/stratigraphic development of several of the platforms situated upon the Nicaraguan Rise and to compare and contrast them to other well-known carbonate banks, such as the Bahama Banks to the northeast. Pedro, Serranilla, Rosalind, Miskito, and several unnamed banks located in the study area are relatively deep (30–40 m), small, are unaffected

