

BIODIVERSITY OF THE CRETACEOUS CARBONATE BANKS OF CUBA.

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The cretaceous carbonate banks of Cuba developed in two tectonic domains: Bahamas continental margin and cretaceous volcanic proto-cuban archipelago. The Bahamas domain includes the Remedios sequences that outcrops in Northern Central Cuba. The Remedios carbonate bank was a shallow water promontory as a long and narrow barrier situated in the southern edge of Bahamas platform. A deep water channel divided this bank from Bahamas. Remedios bank began in Aptian and was completely destroyed toward the end of Maestrichtian and eventually emerged between Turonian and Campanian. Limestones and dolomites are the dominant lithology of the section and include mainly shallow water marine and subordinated deep water facies. The rich faunal assemblage includes: benthonic forams (*Ataxophragmiidae*, *Alveolinidae*, *Pavonitidae*, *Rotalidae* and orbitoidal forms); calcareous algae (*Dasycladacea* and *Codeacea*); rudists (*Caprinidae*, *Radiolitidae* and *Antillocaprinidae*); gastropods (*Cerithiidae* and *Nerineidae*) and rare corals. Carbonate banks in volcanic arc are shallow water limestones interbedded with tuffs, lavas and tuffites. They appear in four stratigraphic levels: Albian, Santonian, Campanian and Maestrichtian. The faunal assemblage includes: rudists which are predominant, benthonic forams, alga and corals. The oldest level involves caprinids (*Tepeyacia*, *Kimbleia*, *Caprinoidea* and *Texicaprina*); forams (*Ataxophragmiidae*, *Cymbaloporiidae*, *Hedbergella* and *Ticinella*); algae (*Bacinella*, *Clypeina* and *Permocalculus*) and corals. The association of the Santonian level has Hippuritides (*Vaccinites*, *Torreites* and *Praebarretia*) and Radiolitides (*Durania*) as well as : forams from *Globotruncanidae* and *Heterohelicidae* families, calcipherids (*Stomiosphaera* and *Pithonella*) and alga. The Campanian includes Hippurites (*Barretia*, *Parastroma* and *Torreites*) and Radiolites (*Dirodialites* and *Bournonia*) associates with larger forams (*Sulcoperculina*, *Pseudorbitoides* and *Smoutina*) and algae. These levels of carbonate banks demonstrate the existence of pauses in volcanic activity that allowed the colonisation and irradiation of benthonic biota. The youngest level, Maestrichtian, presents the highest biodiversity of rudist community. The larger forams also reached a great biodiversity with a large number of orbitoidal forms.