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### K/T - MACROPALEONTOLOGY

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#### **1134 - Early Cretaceous encrusting faunas from the Neuquén Basin west-central Argentina and their palaeoecological implications**

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The Agrío Formation (late Valanginian – earliest Barremian) of the Neuquén Basin (Argentina) presents diverse marine mollusk assemblages. Hard substrate faunas, however, have been given little attention. Shells of three cephalopods and two bivalve basibiont genera were examined for encrusters, in order to characterize and describe them. Nineteen encrusting taxa were found. Encrusting bivalves were represented by a gryphaeid oyster and a plicatuliid, while byssate one comprised mytilids and anomiiids. Six serpulids and one sabellid polychaete worms were recognized. Bryozoans comprised five cyclostomes, and one cheilostome. Agglutinated foraminifers are represented by one species, and a single coral specimen was also found. Oysters are overwhelmingly dominant, usually exceeding 70% of the fauna. Serpulids are a distant second in abundance, mostly represented by a single species. Cyclostome bryozoans are third in importance. The encrusting assemblage is indicative of a well-oxygenated, shallow-marine setting of moderate to high energy, and moderate to low turbidity. Several of the taxa show Tethyan affinities. While in composition this fauna is in agreement with other Early Cretaceous hard-substrate faunas, unlike most other cases solitary organisms are strongly predominant, in both diversity and abundance, over colonial species, resulting in a characteristic encrusting fauna strongly dominated by aggregated oysters and serpulids.