

STRATIGRAPHICALLY USEFUL CRETACEOUS MICROFOSSILS-INCERTAE SEDIS

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A B S T R A C T

Microfossils of unknown genetic affinities are often present in sedimentary rocks, but generally ignored. Two unrelated calcareous groups having stratigraphic significance in Cretaceous carbonates, the Nannoconids and Calcisphaerulids are discussed here. These microfossils are most easily studied in rock thin sections, although both can be identified from acetate peels, and species of Calcisphaerulids can be distinguished on broken rock surfaces.

Nannoconids are 0.003 - 0.06 mm. long, globular to cylindrical forms with a longitudinal canal open at both ends. The wall is composed of wedges of calcite oriented normal to the axis of the test. Differentiation of species is based on size and shape of the test and diameter and shape of the canal. Nannoconids are known from sediments ranging in age from Upper Jurassic to Upper Cretaceous.

Calcisphaerulids, the spherical bodies so abundant in the "spherulitic lime" of the Washita, are known from both Lower and Upper Cretaceous sediments. Spherical forms commonly have a diameter of 0.1 mm., and some elongate forms are twice that long. All species placed in the family Calcisphaerulidae have walls which are thinly lamellar or are composed of two or three distinct layers. Identification of genera and species is based on the number of layers in the wall, shape of the test, size of the oral opening, and presence of an aboral opening.

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