

1939

Occurrence of Certain Small Fossil Plates in the Maquoketa Shale of Iowa

R. C. Spivey
State University of Iowa

Copyright © Copyright 1939 by the Iowa Academy of Science, Inc.
Follow this and additional works at: <https://scholarworks.uni.edu/pias>

Recommended Citation

Spivey, R. C. (1939) "Occurrence of Certain Small Fossil Plates in the Maquoketa Shale of Iowa," *Proceedings of the Iowa Academy of Science*: Vol. 46: No. 1 , Article 61.
Available at: <https://scholarworks.uni.edu/pias/vol46/iss1/61>

This Research is brought to you for free and open access by UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

OCCURRENCE OF CERTAIN SMALL FOSSIL PLATES
IN THE MAQUOKETA SHALE OF IOWA

R. C. SPIVEY

Small calcareous plates, possibly from Asteroidea or other Echinodermata, occur in the Maquoketa shale of Iowa. These plates all have similar characteristics, but vary in their minute structures, and the variations apparently have some stratigraphic significance.

DEPARTMENT OF GEOLOGY,
STATE UNIVERSITY OF IOWA,
IOWA CITY, IOWA.

PERMIAN AMMONOID ZONES

A. K. MILLER AND W. M. FURNISH

Ammonoids are among the best of index fossils and are particularly useful for intercontinental correlations. Five major ammonoid zones are recognized in the Permian, all of which are of world-wide significance. In Texas and northern Mexico the Permian is particularly well developed and is abundantly fossiliferous, and the section in this area serves well as a standard for the rest of the world.

DEPARTMENT OF GEOLOGY,
STATE UNIVERSITY OF IOWA,
IOWA CITY, IOWA.

CHARACTERISTICS OF HEAVY ACCESSORY MIN-
ERALS IN A PRE-CAMBRIAN GRANITE GNEISS

C. S. GWYNNE

Heavy accessory minerals have been separated from specimens of granite gneiss taken in a traverse across the Beartooth Plateau. Prominent accessories are biotite, magnetite, ilmenite, zircon, apatite, epidote and titanite. Characteristics of zircon, apatite and titanite from these samples are described.

DEPARTMENT OF GEOLOGY,
IOWA STATE COLLEGE,
AMES, IOWA.