

6. Environmental Conditions Affecting Deposition of Beach Sands between Virginia and Florida
SUZANNE F. BERSHAD and JOHN K. DUNCAN, Division of Oceanography, U. S. Navy Hydrographic Office, Washington, D. C.
7. Middle Paleozoic Tectonic History of North-Central and Northwestern Utah
JAMES E. BROOKS, Southern Methodist University, Dallas
8. Triassic in Eastern Great Basin
DAVID L. CLARK and WILLIAM LEE STOKES, University of Iowa, Iowa City; University of Utah, Salt Lake City

THURSDAY, APRIL 26, 1:45 P.M. WALDORF ROOM

GENERAL PALEONTOLOGY AND STRATIGRAPHY

1. Identification of Ostracode Genera and Species in Thins Sections
STUART A. LEVINSON, Humble Oil and Refining Co., Houston
2. Faunule of Unusual Non-Marine Ostracoda from Pliocene of Idaho
DANIEL J. JONES and NORMAN R. ANDERSON, University of Utah, Salt Lake City
3. Conodonts from Type Chester, Illinois
CARL B. REXROAD, Texas Technological College, Lubbock
4. Upper Devonian Substages and Their World-Wide Correlation on Basis of Conodonts
KLAUS J. MUELLER, University of Iowa, Iowa City
5. Specific Variations among Arenaceous Silurian Foraminifera from Illinois
HOWARD SCHWALB and CHARLES COLLINSON, Illinois State Geological Survey, Urbana
6. *Acanthocladia guadalupensis* Girty, Possible Algal-Bryozoan Symbiot
J. KEITH RIGBY, Brigham Young University, Provo, Utah
7. Dendroaster: Problem in Echinoid Taxonomy
D. M. RAUP, Harvard University, Cambridge

WESTERN CANADA REGIONAL MEETING, JASPER, ALBERTA,
SEPTEMBER 14-17, 1955

ABSTRACTS

HANS FREBOLD, Geological Survey of Canada, Ottawa, Ontario
Stratigraphy and Correlation of Jurassic in Canadian Rocky Mountains and Alberta Foothills*

The Jurassic of the Canadian Rocky Mountains and Foothills comprising the Fernie group and the lower part of the Kootenay and Nikanassin formations is subdivided on a palaeontological basis into a number of units which correspond to zones and stages of the Northwest European standard section. The following stages are shown to be present by their index fossils: part of the Sinemurian, the Toarcian, the Middle Bajocian, the Lower Callovian, at least part of the Oxfordian and Kimmeridgian and the Upper Portlandian. A most significant feature of the Fernie group is its incompleteness, only 11 or 12 of the 59 Northwest European ammonite zones being proved to be present. Ammonite zones belonging to the Hettangian, parts of the Sinemurian, and the Pliensbachian are definitely absent. Stratal equivalents of the Lower and Upper Bajocian, Bathonian, Upper Callovian and parts of the Oxfordian, Kimmeridgian, and Portlandian are not indicated by index megafossils and may be entirely absent or represented by sediments without megafauna.

A variety of different facies is developed which can only be correlated by index fossils common to different facies districts. Some of the most prominent facies units are the Nordegg member, the Paper or Poker Chip shale of the lower Fernie, the Middle Bajocian Rock Creek member, the Callovian *Corbula murda* beds and *Gryphaea* bed which are equivalent to the Grey beds, the Oxfordian Green beds, and the Passage beds which are mainly of Kimmeridgian age.

Correlations of the Rocky Mountains and Foothills Jurassic with the Jurassic deposits in British Columbia, Yukon, Prince Patrick Island, and Montana are established. Absence of index megafossils in the Jurassic of the Alberta, Saskatchewan, and Manitoba plains renders correlation of these areas with the Fernie group difficult. A tentative attempt has been made to correlate these areas on the basis of existing literature and through the co-operative efforts of the Jurassic symposium committee. Interpretation of the data obtained from field studies has made possible a synthesis of the present Canadian Rocky Mountains and Foothills region during Jurassic time, a region which is considered as a non-geosynclinal border zone between the cordilleran geosyncline in the west and the land Laurentia in the east.

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