

29. REGINALD J. SCOLARO, Tulane University, New Orleans, La.

SOME FLORIDA UPPER MIOCENE BRYOZOA: PALEO-ECOLOGY AND TAXONOMY

The bryozoans of the *Arca*, *Ecphora*, and *Cancellaria* biofacies of late Miocene age of northwestern Florida are reviewed and the taxonomy is revised. The *Arca* biofacies contains scattered fragments of three species. Because of the paucity of the bryozoan fauna, little additional information can be added to the present knowledge of the paleoecology of the *Arca* biofacies. The fauna of the *Ecphora* and *Cancellaria* zones is now known to number 41 species, of which 22 are reported here for the first time from the Choctawhatchee deposits. In addition, the biozones of two Recent species not known as fossils are extended to the Miocene. The total assemblage most closely resembles the Recent fauna in the Gulf of Mexico. Based on a review of the ecology of extant bryozoan species, the *Ecphora* and *Cancellaria* biofacies are interpreted as subtropical or warm-temperate, shallow-water deposits. The minimum winter temperature is 14°C. and the maximum depth of deposition is estimated to be about 100 ft. Vinculariform bryozoans are absent in the *Cancellaria* biofacies and are present in the *Ecphora*; thus, stronger currents are indicated for the *Cancellaria*. The bryozoan suite is useful for paleoecologic interpretations. However, the presumed index *Tremogasterina horrida* reported by Canu and Bassler (1923) was not recovered by the writer from these deposits. Because the majority of the other species range from Miocene to Recent, the present usefulness of the assemblage as a stratigraphic guide is limited.

30. DWIGHT A. FREE, JR., Consultant, Dallas, Tex.

WEST BLACK BAY, BLACK BAY, AND EAST BLACK BAY FIELDS, PLAQUEMINES PARISH, LOUISIANA

The West Black Bay, Black Bay, and East Black Bay fields are in the prolific upper-middle Miocene oil- and gas-producing trend of Plaquemines Parish, Louisiana.

The stratigraphic section in the area consists mainly of strata of Miocene age. In wells drilled to sufficient depth, three distinct facies were found: (1) shallow-water, massive upper Miocene nearshore to continental sandstone facies; (2) an intermediate facies consisting of alternating sandstone and marine shale of the early late Miocene and middle Miocene continental shelf; and (3) a massive shale or deep-water facies composed of a dark marine shale facies of the early middle Miocene continental slope.

The West Black Bay-Black Bay and East Black Bay structures are elongate simple anticlinal closures on the downthrown side of a regional growth fault. These structures have a northwest-southeast alignment, are of low relief, and exhibit a southwestward shift and growth with depth. There is no evidence of salt piercement. Buried faulting occurs on the southeastern end of the West Black Bay-Black Bay structure. This faulting is down-to-the-southeast and does not appear to penetrate early *Bigenerina 2* sediments.

Massive sandstone deposition is found as low in the section as the lower *Bigenerina 2* sediments. However, sandstone deposition in the lower *Bigenerina 2* and *Textularia W* zones was erratic, making electric-log correlations difficult in this zone.

The production is from sandstone beds of late and middle Miocene ages between the depths of 5,980 and 11,200 ft. A total of 218 producing wells has been completed in the three fields and cumulative production from them through December, 1964, was 31,318,202 bbls. of oil and condensate and 63,131,616 Mcf. of gas. The estimated recoveries for all reservoirs range from 455 bbls./acre-ft. to 692 bbls./acre-ft. An estimate of recoverable reserves is 72 million bbls. of liquid hydrocarbons. The reservoir mechanism is water drive.

31. S.E.P.M. COMMITTEE ON PALEOECOLOGY FORAMINIFERAL ECOLOGIC ZONES OF GULF COAST¹

Eight foraminiferal ecologic zones in the present Gulf of Mexico can be recognized in the ancient sediments. Each ecologic zone has a characteristic fauna which has its subsurface counterpart. Projection of Recent ecologic zones into older sediments is dependent on the degree to which the fossil assemblages reflect the same environment as their modern counterparts.

Extensive literature on modern and fossil foraminiferal ecology has been published. The selected bibliography lists that literature most pertinent to Gulf Coast paleoecology.

32. HUBERT C. SKINNER AND HERBERT C. EPPERT, Tulane University, New Orleans, La.
BIBLIOGRAPHY OF FORAMINIFERAL ECOLOGY AND PALEOECOLOGY (WITH ANNOTATIONS)¹

(No abstract)

33. W. E. WALLACE, Forest Oil Corporation, Lafayette, La.

FAULT AND SALT MAP OF SOUTH LOUISIANA¹

The 1966 edition of the map which accompanies volume 16 of the G.C.A.G.S. *Transactions* is on a scale of 1:500,000 with a blue-line print available separately on a scale of 1:250,000. A special effort has been made to obtain and present the most complete record of salt depths ever before assembled in one map. For the first time the faults have been tied across the Sabine River patterns into Texas.

The writer has returned township lines to the map, for more accurate location of details. The outlines of productive areas have been brought up to date as of the summer of 1966. There are no new developments which deserve any special comment. As before, the appearance of many more arcuate patterns and sinuous traces should be noted.

Previous editions of this map:

- 1943—Ph.D. dissertation, Louisiana State Univ.
- 1949—Gulf Coast meeting, Biloxi, Miss. Not published.
- 1952—Trans., G.C.A.G.S., v. II, Corpus Christi, Tex.
- 1957—Trans., G.C.A.G.S., v. VII, New Orleans, La.
- 1962—Trans., G.C.A.G.S., v. XII, New Orleans, La.

¹ Published without oral presentation.