

The Quaternary is represented by two epochs of deposition, the Pleistocene and Recent. These deposits are characteristically fluvial gravels, sands, silts, and clays; they border or fill alluvial valleys and were deposited during or subsequent to the Pleistocene glaciation.

The outcrop patterns of the major rock divisions of the central Gulf Coastal Plain are illustrated by areal geologic maps and stratigraphic sections. The thickness and structural configuration of each division is shown by isopachous and structural contour maps. Representative electrical logs illustrate the electrical pattern of each rock division.

6. STATUS OF MICROPALAEONTOLOGY IN THE EASTERN GULF REGION, Henry V. Howe, Louisiana State University, Baton Rouge, Louisiana.

Since the paper by Finch in 1824, which initiated the study of the Cretaceous and Tertiary stratigraphy of the Eastern Gulf region, about 200 papers dealing with the microfossils of Mississippi, Tennessee, Alabama, Georgia, Florida, and South Carolina have appeared. Of these, at least 160 deal primarily with foraminifera, 21 with ostracodes, 11 with bryozoans, and 4 with otoliths. In these papers nearly 700 species of foraminifera, 150 species of ostracodes, 580 species of bryozoans, and 23 species of otoliths have been described as new from these states. Hundreds of other species whose type localities lie in other states or countries have been reported. The formations whose type localities have been reasonably thoroughly studied for their microfaunal content are indicated. Some suggestions of needed studies are made. The paper is accompanied by an annotated bibliography which lists the species which have been described as new from this region.

7. GENERAL GEOLOGY AND OCCURRENCE OF OIL IN FLORIDA, E. D. Pressler, Humble Oil and Refining Company, Tampa, Florida.

The eastern portion of the Gulf of Mexico Basin is divided into provinces on the basis of stratigraphy and subdivided further on the basis of its major structural features. The general area is considered to be a part of the Gulf of Mexico Sedimentary Basin. The Apalachicola Embayment of south Georgia and west Florida has a maximum sedimentary fill of approximately 15,000 feet of clastic sediments, the South Florida Embayment has a maximum fill of non-clastic sediments approaching 20,000 feet, and the area of the Great Bahama Bank is considered to be underlain by a section in excess of 10,000 feet. Anticlines may be the most prevalent type of structure of both embayments, though faulting is probably present, and conditions are favorable for the formation of stratigraphic traps. Oil production has recently been developed from the Lower Cretaceous on the Florida segment of the South Florida Embayment, and additional drilling development is under way. Gravity and core drill are the most widely used methods of prospecting, and it is indicated that additional experimental work is necessary to develop proper seismograph technique. The Sunniland field, Collier County, Florida, has three producing wells that have produced a total of 80,000 barrels of 20 to 24 degree gravity asphalt-base oil. One rig is working in the field, and eight wildcat operations are active in Florida.

8. NEW GEOLOGIC MAP OF TERTIARY FORMATIONS OF GEORGIA, F. Stearns MacNeil, Geological Survey, U. S. Department of the Interior, Dothan, Alabama.

The new map of the Tertiary formations of Georgia is exhibited, with a brief discussion of the stratigraphy.

9. THE FORMATION OF EVAPORITES UNDER MARINE EVAPORATION CONDITIONS, Paul Weaver, Gulf Oil Corporation, Houston, Texas.

Sediments consisting principally of salt, anhydrite and gypsum, potash, and certain types of limestone and dolomite have a wide areal extent in certain stratigraphic units