

ENDNOTES

1 Diagrams showing the vertical order and thicknesses of limestone and other rock types, and isopach (thickness) maps of them in many parts of the world, can be found in petroleum-research publications such as the following: (1) Giant Oil and Gas Fields of the Decade 1968-1978, Halbouty, M. T., ed. Amer. Assoc. of Petroleum Geologists (Tulsa, OK 74101 U. S. A.), 1980, 596 p. (This book is worldwide in scope.) (2) Stratigraphic Atlas of North and Central America, Cook, T. D., et al. Princeton University Press, 1975, 272 p. (An amazingly helpful and comprehensive work)

2 Dolostone is carbonate rock, the main component of which is calcium magnesium carbonate (dolomite, $\text{CaMg}(\text{CO}_3)_2$). Most ancient limestones have had at least a small percentage of their calcium carbonate converted to dolomite during the long-term percolating of magnesium-bearing water through the pores of the rock layers.

3 There are now a great number of publications which show and explain photomicrographs and electron micrographs of many kinds of microfossils embedded in ancient limestones. Two of these which are very usable for undergraduate students are the following: (1) Atlas of Sedimentary Rocks Under the Microscope, Adams, A. E., et al. Longman Group Limited, 1984, 104p. (2) Electron Micrographs of Limestones and Their Nannofossils, Fischer, A. G., ed. Princeton University Press, 1967, 141 p.

4 For methods by which larger marine animals were apparently buried rapidly in sediment gravity flows of diatomaceous sediments see Wonderly, 1987, p. 55-58.

5 The well-known Eniwetok (Enewetak) atoll reef in the Pacific has a thickness of 4,610 ft. (1,380 m), resting on an extinct volcanic cone.

6 It will also be helpful to read the chapters on evaporites, in Origin of Sedimentary Rocks, Blatt, H., Middleton, G. V., and Murray, R. C. Prentice-Hall, 1980, 782 p., for gaining an understanding of the general principles and geochemistry of evaporite deposition.

7 A treatment of some of the main processes of lithification in relation to the age of the earth's rock strata is given in Wonderly, 1987, p. 33-38.

REFERENCES CITED

- Barss, D. L., 1970, "Geology of Middle Devonian Reefs, Rainbow Area, Alberta, Canada," in Geology of Giant Petroleum Fields, M. T. Halbouty, ed. American Association of Petroleum Geologists Memoir no. 14, p. 19-49.
- Bebout, D. G. and Maiklem, W. R., 1973, "Ancient Anhydrite Facies and Environments, Middle Devonian Elk Point Basin, Alberta." Bulletin of Canadian Petroleum Geology, v. 21, no. 3, p. 287-343.
- Chen, Ping-fan, 1977, Lower Paleozoic Stratigraphy, Tectonics, Paleogeography, and Oil/Gas Possibilities in the Central Appalachians. West Virginia Geological and Economic Survey, Reports of Investigations 26, Part I, 141 p.
- Davies, G. R. and Ludlam, S. D., 1973, "Origin of Laminated and Graded Sediments, Middle Devonian of Western Canada." Geological Society of America Bulletin, v. 84, p. 3527-3546.
- Deep Sea Drilling Project, 1969-1976, Initial Reports of the Deep Sea Drilling Project, vols 1-36. U. S. Govt. Printing Office.