An aerial photograph of a river delta system, likely the Mississippi River Delta, showing a complex network of distributaries and a large central bay. The land is colored in shades of green and brown, while the water is dark blue. The text 'GEOL-201' and 'Sedimentation in Deltas' is overlaid in white on the central part of the image.

GEOL-201
Sedimentation in Deltas

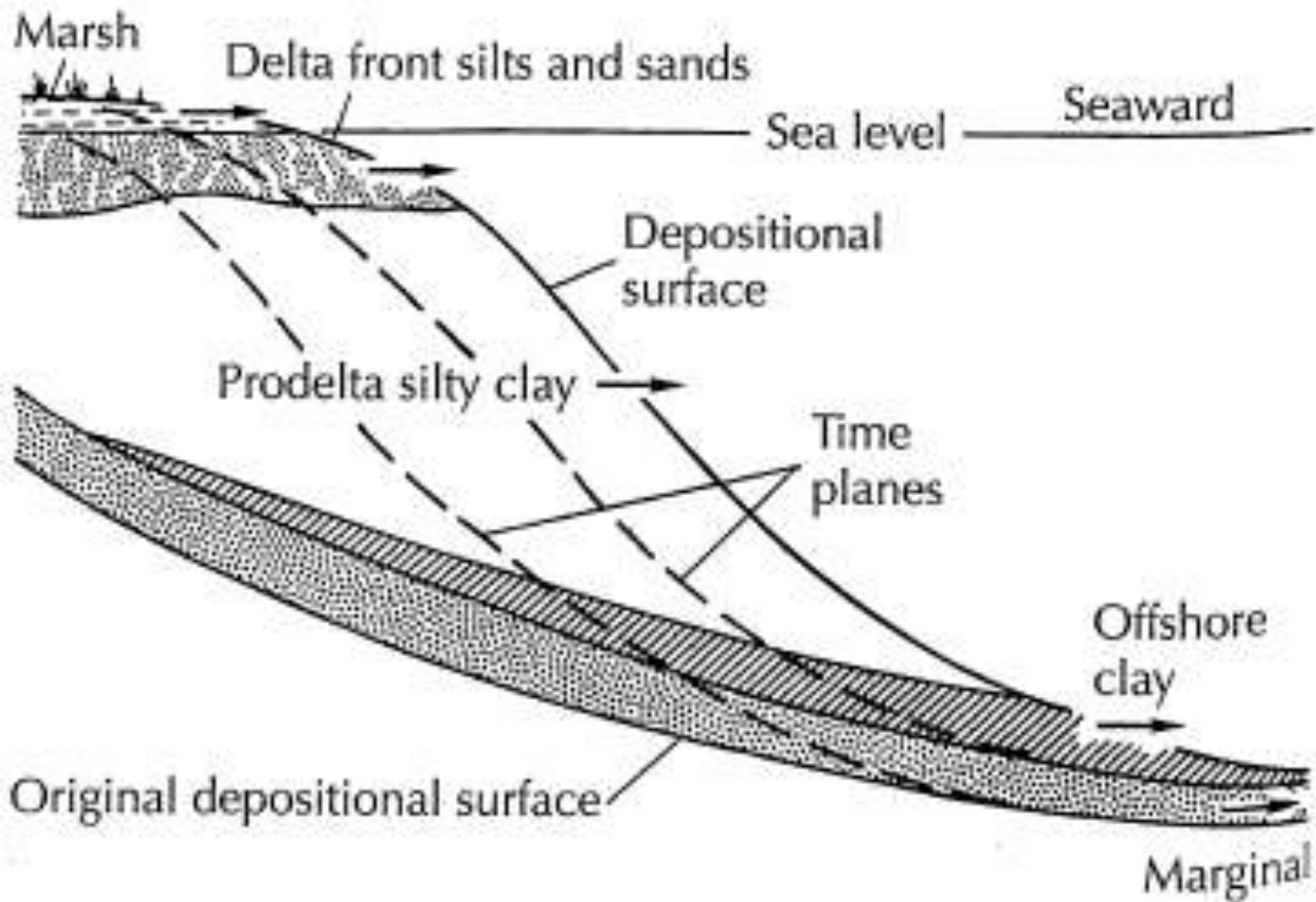


Figure 9.2 The constructional phase in a delta cycle; time planes parallel the depositional surface. (After Shepard, Phleger, and van Andel, 25; 1960: by permission of the American Association of Petroleum Geologists, Tulsa, Okla.)



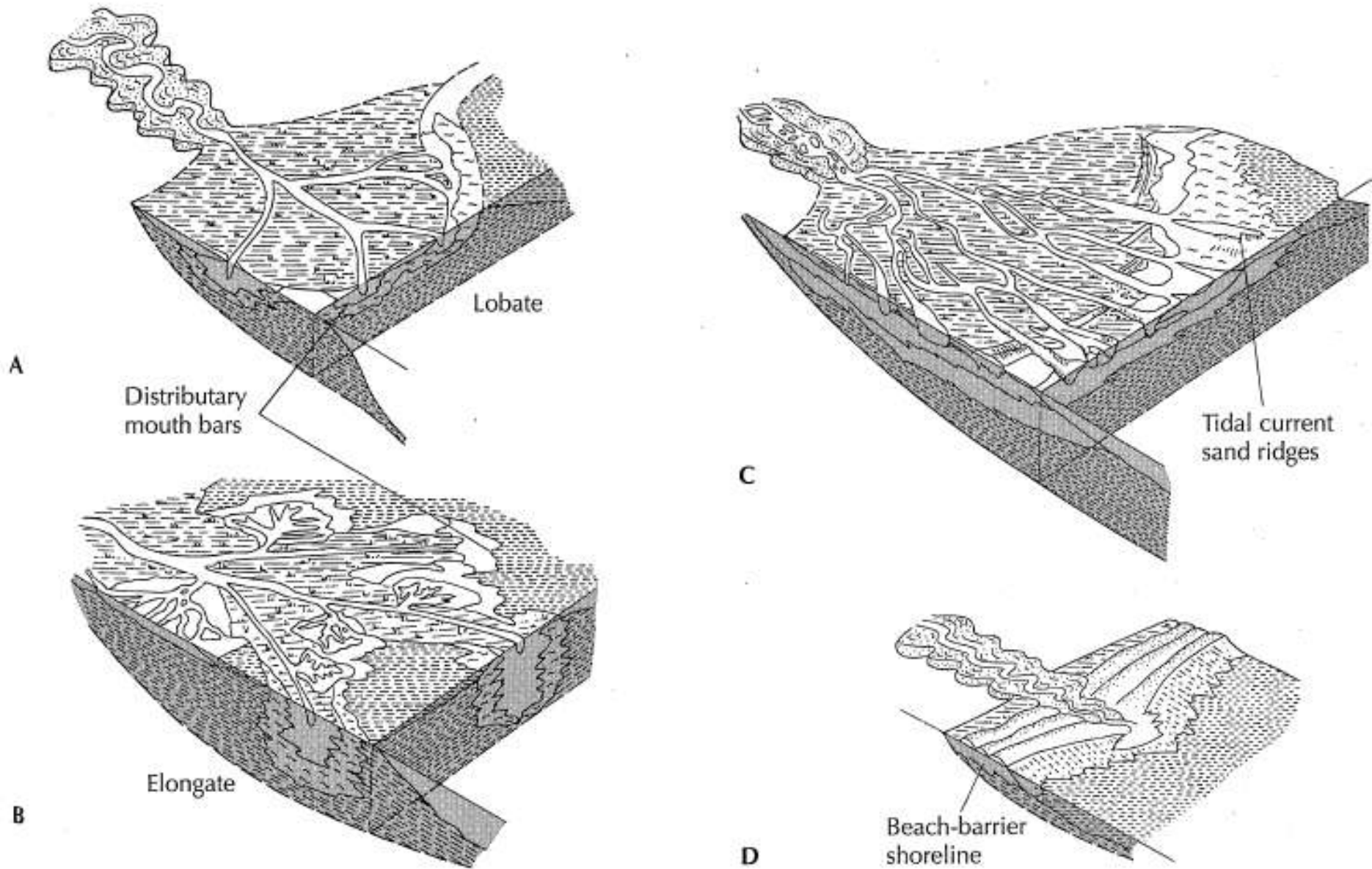


Figure 9.3 Various delta types: (A) Lobate and (B) elongate are river-dominated; (C) is tide-dominated; (D) is wave-dominated. (After Reading, 1986: 117; by permission of Blackwell Scientific Publishers.)



Fraser



Limpopo



McKenzie



Ganges





Mississippi



Senegal

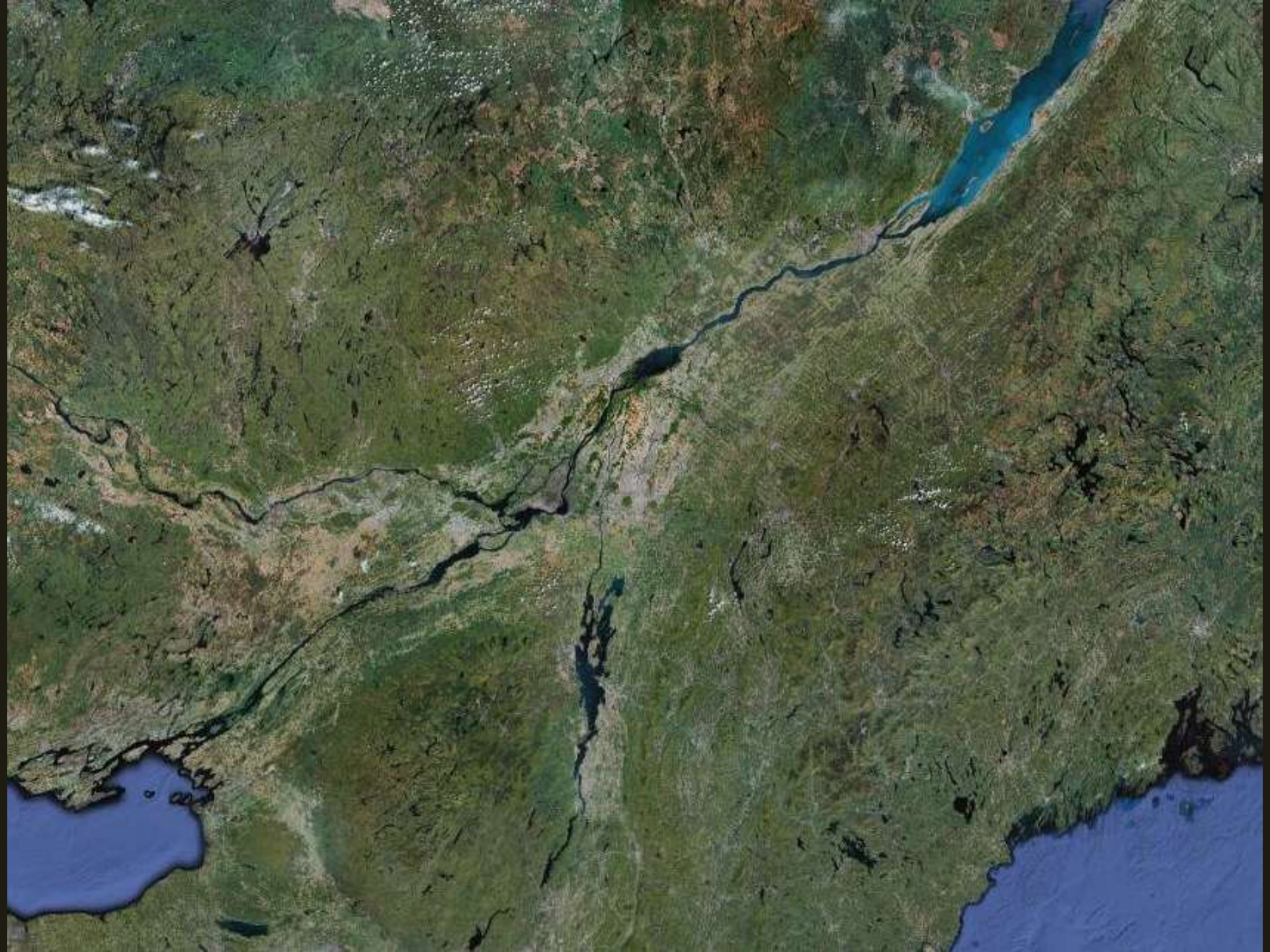


Ord





St. Lawrence

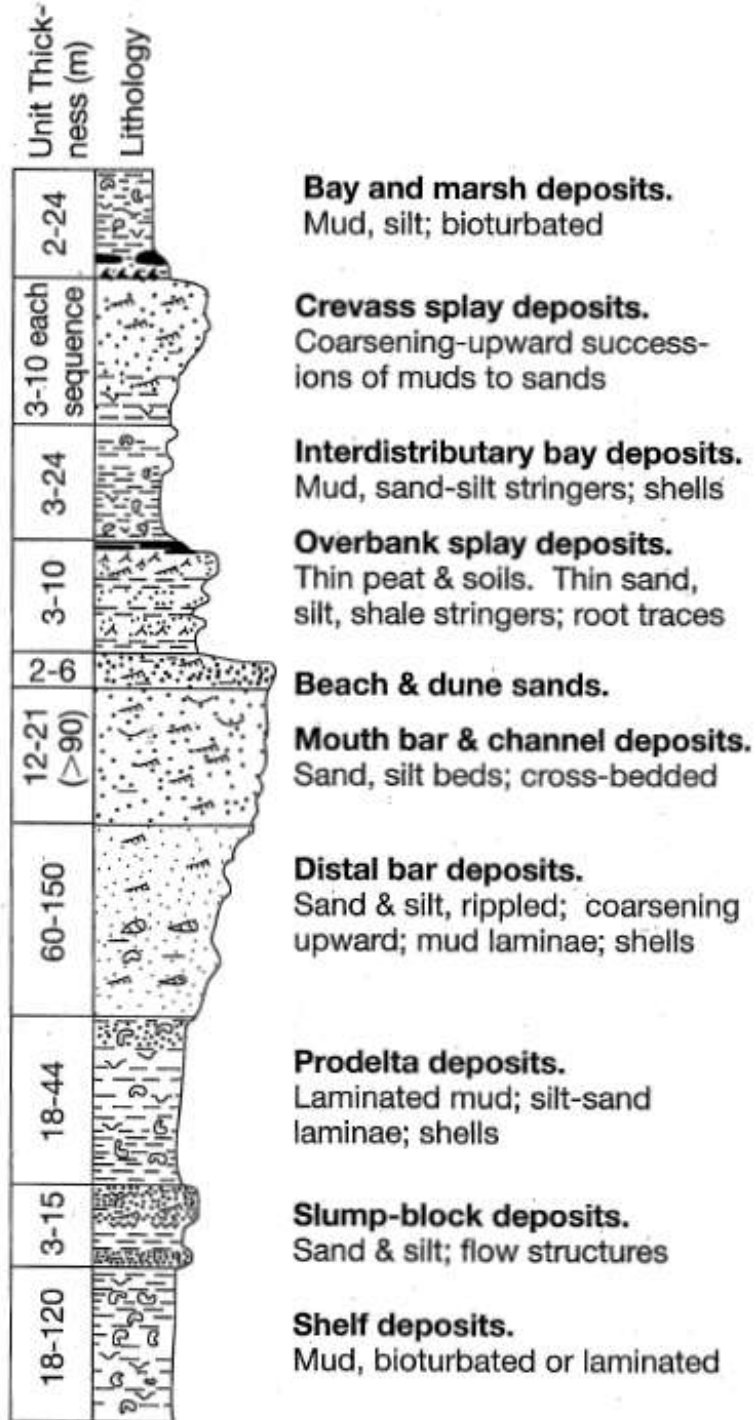




Boggs, 2006

Figure 9.13

Idealized vertical succession of facies in a fluvial-dominated (Mississippi) delta. Note the thickness of individual units shown in the column. [From Coleman, J. M., 1981, *Deltas: Processes of deposition and models for exploration*, 2nd ed., Fig. 4.3, p. 91, reprinted by permission of IHRDC Publications, Boston.]



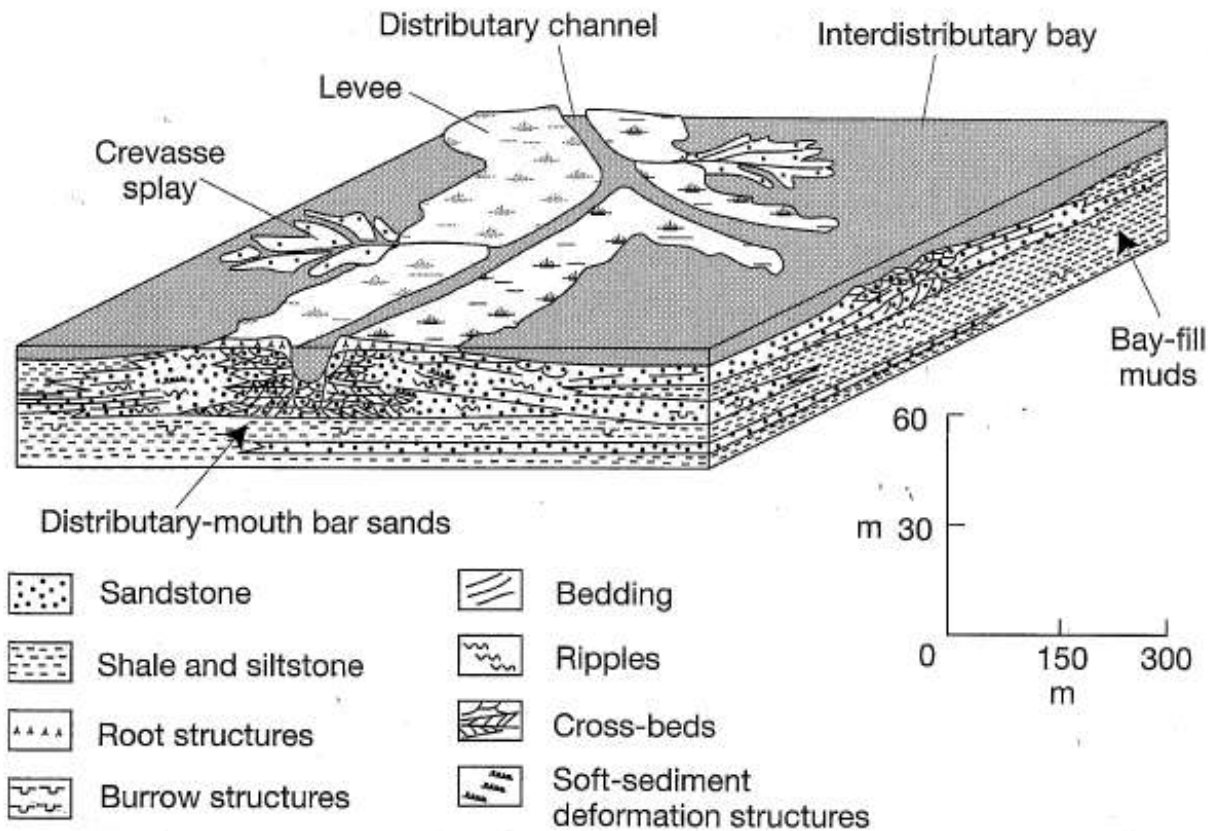


Figure 9.14

Three-dimensional model of fluvial-dominated delta deposits from eastern Kentucky. [After Horne, J. C., et al., Depositional models in coal exploration and mine planning in Appalachian region: Am. Assoc. Petroleum Geologists Bull., v. 62, Fig. 6, p. 2387.]

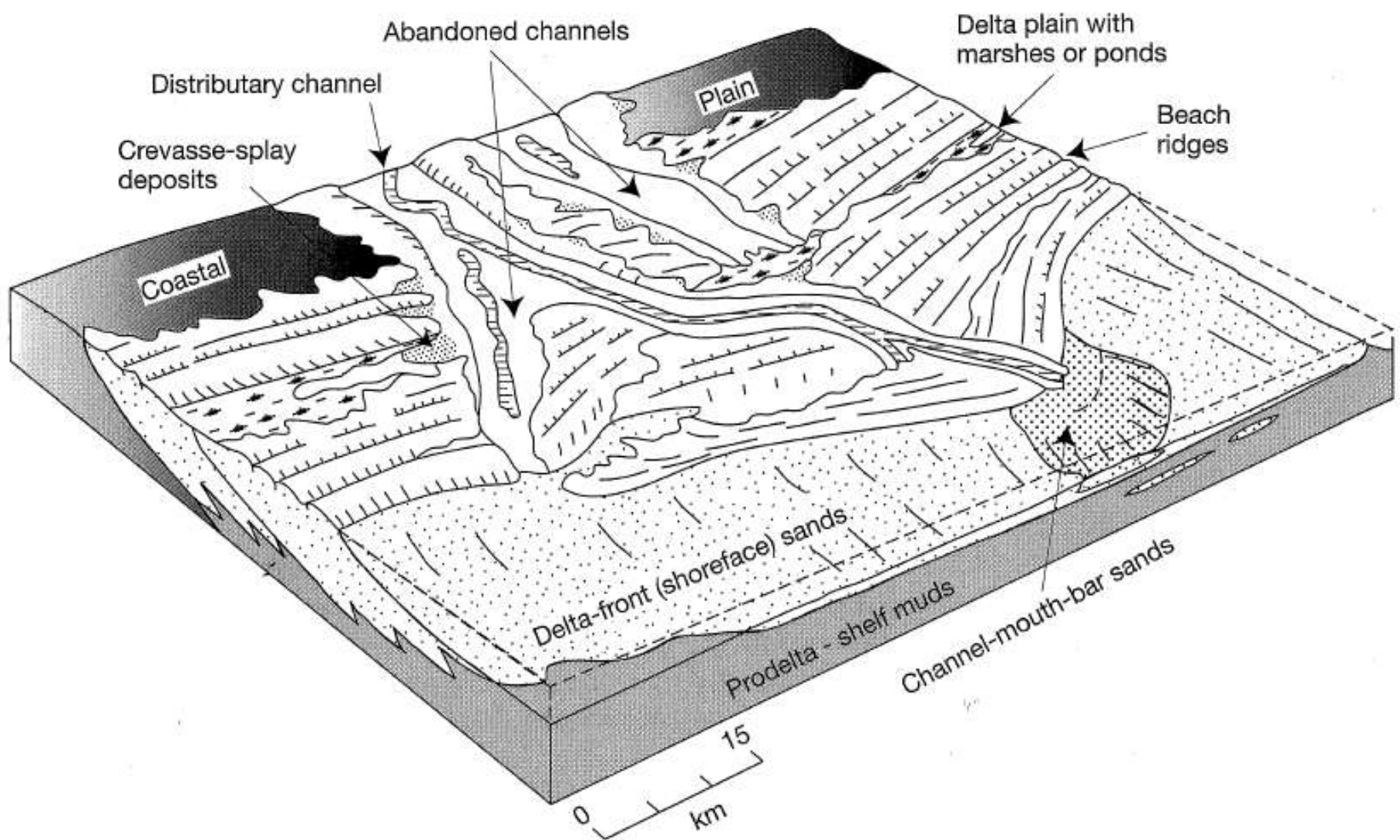
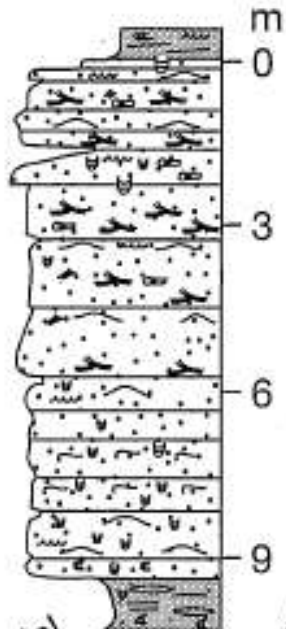


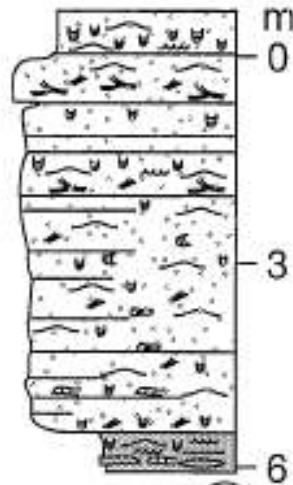
Figure 9.15

Three-dimensional model illustrating the sand-body geometry and facies of a wave-dominated delta system in the San Miguel Formation (Cretaceous), South Texas. [After Weise, B. R., 1980, Wave-dominated delta systems of the Upper Cretaceous San Miguel Formation, Maverick Basin, South Texas: Bureau of Economic Geology, University of Texas at Austin, Report of Investigations 107, Fig. 26, p. 20, reproduced by permission.]

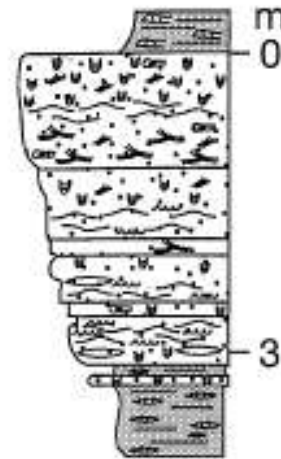
(a) Estuarine distributary complex



(b) Transitional estuarine to tidally modified distributary mouth bar



(c) Proximal tidal sand ridge



(d) Distal tidal sand ridges

