

Land is winning a battle against the sea on the west coast of Mexico, geologists told scientific conference at University of California's Scripps Institution of Oceanography

March 22, 1962

The land is winning a battle against the sea on the west coast of Mexico and building rich farms, two geologists told a scientific conference at the University of California's Scripps Institution of Oceanography today.

Joseph R. Curray, Assistant Research Geologist at Scripps, and David G. Moore, U. S. Navy Electronics Laboratory, have conducted extensive geological studies of the shore and continental shelf of the states of Nayarit and Sinaloa in western Mexico, where the Rio Grande de Santiago, one of the major Mexican rivers, empties into the Pacific.

The area is geologically interesting, Curray and Moore say, because during the Pleistocene period, as recently as 20,000 years ago, when sea level was lower, the river emptied directly into the deep ocean. As sea level has risen, the river has built a wide and deep delta all the way across the continental shelf to the deep sea 35 miles away.

From the air, Curray says, the region looks as if it had been furrowed by a giant plow. This is because the land is steadily growing at the expense of the sea. As offshore sand ridges are built up, vegetation takes over, nourished by the silty floods of the rainy season. This result is a ridge-and-depression terrain. "It has been said that this is the only place in the world where a man can harvest shrimp and corn from the same land," Curray says. "You get shrimp in the wet season, corn in the dry. Within the past 3,000 years the land has built several miles seaward on the old delta."

Curray spoke at a conference on California Basins, Recent and Ancient," at Scripps. The conference summarized recent results on a project sponsored by the American Petroleum Institute.