

Scripps Institution of Oceanography Vermilion Sea Expedition to the Gulf of California

April 20, 1959

NEWS RELEASE

UNIVERSITY OF CALIFORNIA

SCRIPPS INSTITUTION OF OCEANOGRAPHY

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"Waterfalls" of sand cascade down the steep granite walls of submarine canyons in the ocean off Cape San Lucas, the tip of Baja California, according to diver-scientists at the University of California's Scripps Institution of Oceanography.

Study of the canyons was one feature of the first part of the Institution's Vermilion Sea Expedition to the Gulf of California.

Sand on the beaches of Cape San Lucas flows in rivulets to the edges of the canyons, which head near the shore. It then falls over the almost vertical walls of the canyons and sweeps down the canyon floors to be deposited on the deep-sea bottom several miles away.

Submarine canyon studies were directed by Francis P. Shepard, Professor of Submarine Geology, aboard the research vessel Spencer F. Baird. Divers were led by Mr. Conrad Limbaugh, diving specialist.

The Baird, with her sister ship, Horizon, is conducting an oceanographic exploration of the Gulf of California that will last through May.

The canyons were crossed scores of times, Shepard says, so that extensive sounding records could be made. The soundings show the canyons to be cut three to four thousand feet below the depth of the surrounding sea floor.

The expedition found that the narrow channel between Angel de la Guarda Island, toward the head of the Gulf, and the peninsula is scoured almost free of sediments by strong currents. The water is almost a mile deep there.

On the other side of Angel de la Guarda Island, between it and the mainland, one of the dredge hauls brought up a manganese nodule. It came from a depth of approximately 1500 feet. This is the shallowest water in which the nodules have been found. Studies have been under way some time on the feasibility of mining such nodules from the sea floor. They contain cobalt, nickel, copper and other valuable metals.