

DULUTH--Beautiful as it is brutal, the Antarctic makes any thinking person more concerned with life and creation than ever before, the Rev. Fr. Daniel Linehan, Boston, Mass., scientist, told UMD groups Friday (April 17).

Director of Weston observatory and chairman of the department of geophysics at Boston college, Father Linehan is a veteran of three International Geophysical Year expeditions to the Antarctic.

"One of the most dramatic observations I have made is in the changed thinking of men who have come under the spell of that great and weird land," he noted.

Besides finding answers to some of the more immediate concerns of man in his relationship with nature, the visitor to the Antarctic is more likely to seek answers to the eternal questions also.

He addressed a public convocation in Science auditorium. His Duluth talk was one of 40 he is making on his current 36-day lecture tour in the U. S and Canada under auspices of the American Association of Petroleum Geologists.

Among projects in which he assisted was the extensive study of Marble point, whose four-inch average annual snowfall and ice-free land may be a feasible site for a 10,000-foot airstrip.

"Because it is near sea level and because the cold heavy air makes possible shorter landings and takeoffs, such an airstrip, ~~would be roughly~~ equivalent to a 14,000-foot airstrip in normal climate," he said.

Incredible contrasts in weather conditions made working in the Antarctic at once hazardous and enjoyable.

"Because the air is so dry, it is actually dangerously deceptive on a windless day to work out in the open. One crew member would watch the other for white spots because there would be little discomfort to warn of frostbite," he noted.

Sometimes the weather would permit walking from the base to work sites 10 to 15 miles away.

"The biggest problem then would be to keep ourselves in shoes. The jagged rocks would chew up our shoes on the average of one pair every 11 days."

Their weather experience ranged from "the hottest" day of 35 below in one spot to "the coldest" day of 15 above, depending on the Antarctic area visited.

From windless days they would go into blizzard weather with wind velocities of nearly 200 miles per hour. Antarctic illusion would sometimes hide an approaching 90-knot blizzard until it was less than five minutes away.

Studies indicated the Antarctic ice cap is as deep as 15,000 feet at certain points. Age studies argue from 3,000 to 50,000 years of age. Sahara dust and some of the soot from the 1883 eruption of Krakatos near Sumatra have been found in borings hundreds of feet into the ice.

Father Linehan said he cannot subscribe to the theory that melting polar icecaps could inundate the earth.

"True, a five-degree variation in temperature could be obtained by some major meteorological phenomena, like ocean current being diverted. But such a change would be gradual, and the elastic earth would adjust to the changing distribution of ice and water without a major catastrophe, he believes.