

been captured freely by some skuas. Not a sign was seen of the large race of fluttering shearwater (*Puffinus gavia huttoni*) reported from the Snares. A few nellies frequented the eastern shores (one day two were ashore on the rocks), and royal albatross (*Diomedea epomophora*) also showed interest in the land, but in neither case was breeding proved. The handsome Buller's mollymawk (*Thalassarche bulleri*) which at other seasons is such a conspicuous inhabitant of the Snares, had not yet come ashore, but its nests were found in large numbers above the coastal cliff, and even some distance inside the bush margins.

"Alert" returned on December 4, and on the same day Dr. Falla and Captain Black landed on one of the islets of the Western Reef. This was the highlight of the trip, for there is no record of such a landing since the days of the sealers who handed down the almost legendary report of meeting cape pigeons there: certainly this was the first time a scientist had been ashore on those forbidding rocks. Fur seals dominated the beaches; white-capped mollymawks were nesting nearby on adjacent islets; populous penguin colonies on the bare rocky slopes rivalled those of the Bounty Islands for spectacle; and Dr. Falla was able to settle one of the outstanding problems of seabird distribution by studying at close quarters the cape pigeons which were sitting on eggs in every cranny. Weather prevented a repetition of the landing on the following day; in fact, there are probably few days in an average year when conditions of wind and swell would allow the approach of a boat.

On December 6 camp was broken, "Alert" bore the party back to Stewart Island in perfect weather—oily swell and brilliant sunshine—and reached Bluff on Sunday, December 7.—C.A.F., 27/12/47.

IDENTIFICATION OF BIRDS BY RADAR.

By C. A. FLEMING, Wellington.

During the war, Dr. Elizabeth Alexander (Radio Div. Lab., Department of Scientific and Industrial Research) engaged on secret radar research in the Cook Strait area, inquired as to the probable identity of birds which caused characteristic effect on the radar screen at night. One, relatively small, fed on the surface of the water in large flocks, and rose in characteristic fashion in front of advancing vessels, "peeling off" the surface of the sea and settling again behind after the disturbance passed. Another larger bird seemed more solitary, and flew in wide sweeps over the surface.

Gulls and terns roost at night, but petrels are known to be active at night, so, in view of the limited number of petrel species abounding in Cook Strait, it was suggested that the flocks of small birds were fluttering shearwaters (*Puffinus gavia*) whose daytime feeding habits closely resemble the description given. The larger solitary birds might be anything from sooty shearwater (*P. griseus*, the muttonbird) to albatrosses. These birds were observed at night from land some 10 miles away—surely a record, even for a tentative identification.

Birds and fish give characteristic disturbances on the radar screen, and failure to distinguish a breaching whale from a surfacing "sub.", or a low-flying frigate-bird from a periscope caused a number of false alarms on merchant vessels during the war.