

peratures from this track recorded by thermograph in the engine room intake, have been plotted as a function of position and time (Fig. 1). Temperatures grading from below 14.5°C in August to below 19°C in February (hatched area in Fig. 1) are below "normal" for the area (Garner, 1954, fig. 1) north of Cape Reinga, representing upwelled water. Although it is not possible to say anything about general upwelling position and strength, considerable variation in location and properties of cold water has been recorded along one track past Cape Reinga (Fig. 1) (see also Garner, 1961, fig. 6).

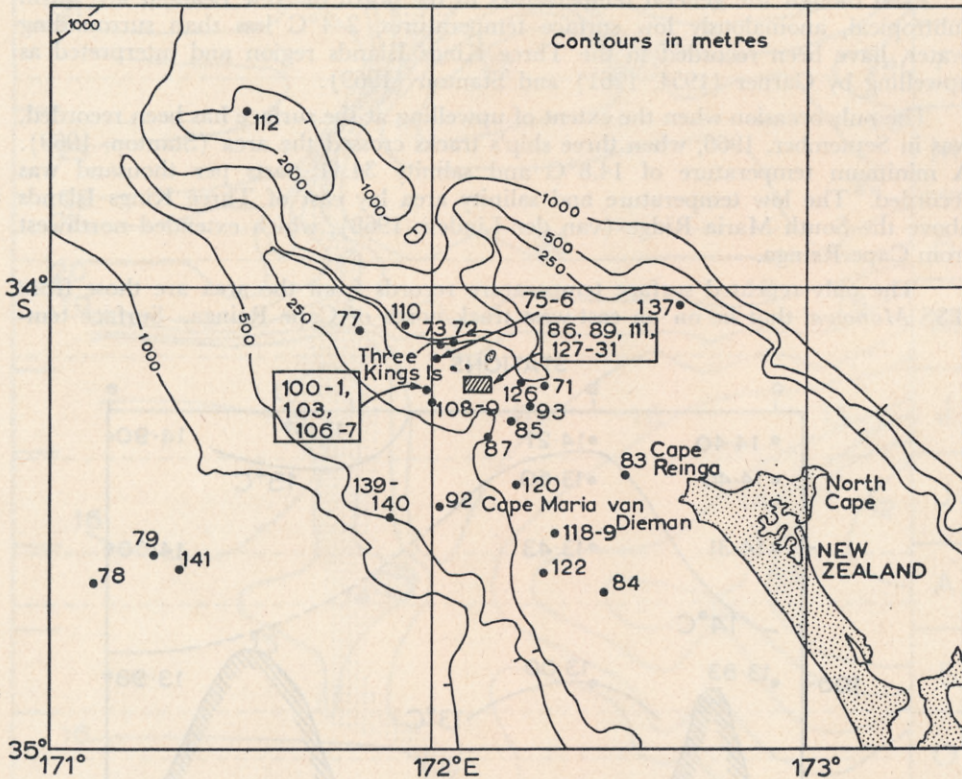


FIG. 3.—British Antarctic (*Terra Nova*) Expedition stations north of New Zealand. Bathymetry in metres.

In the temperature profiles that have been described for the Three Kings Islands region upward displacement of the isotherms has been shown (Fig. 2) (see also Garner, 1961, fig. 24; Garner and Ridgway, 1965, fig. 16). The temperature of the surface minimum in February and May would usually occur at a depth of about 100m in the surrounding water (Garner, 1961).

Garstang (1933) suggested that upwelling occurs on the north side of the Reinga ridge under the influence of a north or northeast current, but Garner (1959) deduced from the records of strong tidal streams, currents and races between Three Kings Islands and the mainland, that some characteristics of the upwelling pattern here would be dependent on the stage of the tide.

BRITISH ANTARCTIC (*Terra Nova*) EXPEDITION COPEPOD RECORDS

As Farran (1929) gave neither a list of copepods found, nor a record of the kind of plankton hauls made at each station, both were prepared for the Three