## obituary

## N. A. Mackintosh

NEIL ALISON MACKINTOSH, CBE, DSc, ARCS, the distinguished biological oceanographer and authority on the ecology and populations of whales, died on April 9, at the age of 73. He was educated at Westminster School and Imperial College where he very soon showed an aptitude for zoological research; in less than two years after graduation he had completed two papers on such widely different subjects as the chondrocranium of fish (*Proc. zool. Soc.*, 1923) and the crystalline style of gastropods (*Q. Jl. microsc. Sci.*, 1925).

He was in at the very beginning of that great enterprise, the Discovery Investigations of the Antarctic seas, when in 1924 he led the advance party to establish and take charge of the Marine Laboratory for the study of whales at South Georgia. Later he took part in three major expeditions of the Discovery II, being leader of two circumpolar voyages and bringing back a wealth of information on the plankton and hydrography of the Southern Ocean. In 1936 he had succeeded Dr Stanley Kemp as Director of Research until 1949 when the Investigations were merged with the new National Institute of Oceanography, of which he became deputy director, and since 1936 he had edited the long series of 'Discovery' Rep. to which he made many outstanding contributions including one to be published in the thirty-sixth volume only four months before he died. In 1961 he established and directed the Institute's whale research unit at the British Museum (Natural History). He took a prominent part in the International Whaling Commission, being chairman



of its Scientific Committee. His contributions to knowledge lay in two main fields: the biology and conservation of whales, and the oceanic macroplankton.

It was at the laboratory adjacent to the whaling station at Grytviken, South Georgia, and on visits to stations on the African coast during the Antarctic winters (when the whales go north) that Mackintosh and Dr J. F. G. Wheeler, working together, amassed the enormous amount of information, based on the examination of nearly 1,700 whales. for their important monograph on the Southern Blue and Fin whales ('Discovery' Rep., 1, 1929). This and a number of later reports by Mackintosh laid the foundations of most of the current knowledge of the economically important species.

At Grytviken, Mackintosh and

Wheeler discovered the remarkable rates of growth of the Blue and Fin whales. Mackintosh's book *The Stocks of Whales* (1965) is an important contribution to a study of their populations and conservation prospects based on a number of his earlier investigations, particularly his "Southern stocks of whalebone whales" in 'Discovery' Rep., 22, 1942.

He made an extensive oceanographic survey of the macroplankton of the Atlantic sector of the Antarctic seas and was the discoverer of a remarkable seasonal vertical migration of many of the species whereby they are carried northwards in the surface waters during the summer months and then sink in winter to be returned towards the pole by a lower south-bound current ready to arise again the following spring. More recently, from the vast collections of earlier years, he renewed the investigation of the krill, producing two important studies: one relating the life cycle to ice and water conditions ('Discovery' Rep., 36, 1972) and another on the circumpolar distribution of the post-larval stages ('Discovery' Rep., 1973).

Neil Mackintosh was one of the kindest and most modest of men, intensely disliking anything in the way of publicity. Indeed, his retiring nature was perhaps a fault, for because of it, so few in the outside world realised the greatness of the Discovery Investigations' achievements, including, of course, his own. He was awarded the Polar Medal in 1942 and the Patron's Medal of the Royal Geographical Society in 1954.

## **Announcements**

## **Appointments**

Henryk M. Wisniewski has been appointed Director of the Medical Research Council's Demyelinating Diseases Unit at Newcastle upon Tyne.

Gwynne James Morgan has been appointed Professor of Theoretical Physics at the University of Leeds.

C. D. Green, A. P. Halestrap, D. I. A. MacLeod, J. R. Rhodes, Barbara M. F. Pearse, Elizabeth C. Cartwright and C. R. Hiley have been elected to Beit Memorial Junior Fellowships for Medical Research.

**David Anthony King** has been appointed to the Brunner Chair of Computer Studies at the University of Liverpool.

Geoffrey Bernard Cook has been appointed to the Chair of Computer Studies at the University of Hull.

D. P. J. Browning, Violet R. Cane, K. M. Clayton and T. W. Goodwin have been appointed to the University Grants Committee.

A. S. V. Burgen, J. N. Walton, S. Cohen and D. C. Phillips have been appointed to the Medical Research Council.