

INTERANNUAL VARIATION IN THE MACROZOOPLANKTON COMMUNITY STRUCTURE OF THE COSMONAUT SEA, EAST ANTARCTICA

BPV Hunt, EA Pakhomov

Department of earth and Ocean Science, University of British Columbia, Vancouver, BC, Canada

Between 1987 and 1990 four large scale summer (January to March) surveys were conducted on an interannual basis in the sea ice zone of the Cosmonaut Sea (30-60°E), East Antarctica. At each station the upper 200m of the water column was characterised from shallow (200m) CTD casts while plankton samples were collected with obliquely towed IKT and Bongo trawls.

In this paper we analysed the community structure of the macroplankton component of the zooplankton community using multivariate and indicator species analysis. These data provide a first insight into the plankton community of Cosmonaut Sea. The discussion compares the results with observations from the more extensively studied area of 80-180°E, including Prydz Bay. Particular attention is paid to the non-overlapping distributions of *Euphausia superba* (krill) and *Salpa thompsoni* (salps) in the study area, how this is influenced by the oceanographic environment.