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남극 King Geogge Island, Marian Cove의 중형저서생물 군집 구조에 관한 연구

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The community structure, vertical distribution and harpacticoids composition of the meiofauna community were observed from five stations in Marian Cove, King George Island and one station on the northeastern side of Nelson Island. Sample was taken by a free-fall corer in December 2002. Generally, 11 taxa of meiofauna were found, and meiofauna abundance ranged from 322 to 1575 ind./10cm² (mean 781 ind./10cm²). Nematodes were the most dominant group, making up 89% of total meiofauna, followed by harpacticoids (6.8%). Benthic harpacticoids appeared 19 species of nine families at all the stations, and most various taxa appeared at station B (13 species of seven families). For vertical distribution, more than 70% of meiofauna was concentrated in the upper 0~2 cm sediment layers, and the density abruptly decreased with depth in all the stations. Total biomass of meiofauna varied between 41 and 360 $\mu\text{gC}/10\text{cm}^2$, and overall mean biomass was 205 $\mu\text{gC}/10\text{cm}^2$. Also nematodes had the highest percentage of total meiofauna biomass (62.4%). The analysis results of Canonical Correspondence Analysis between meiofauna community and sediment grain size showed that polychaets, oligochaets and cumaceans were influenced by silt&cray, and sand, granule and pebble had a influence on harpacticoids, kinorhynchs and ostracods respectively. But nematodes were not affected by sediment grain size.