

Contents

1	Introduction	1
	References	8
2	Characteristics of the Sub-equatorial North-Eastern Pacific Ocean's Abyss, with a Particular Reference to the Clarion-Clipperton Fracture Zone	13
	References	24
3	Meiobenthos of the Sub-equatorial North-Eastern Pacific Abyssal Seafloor: A Synopsis	29
3.1	General Considerations	30
3.2	Methodological Problems	32
3.3	Composition of the Abyssal Pacific Meiofauna	33
3.4	Biodiversity Issues	49
3.5	Variability of Distribution of the Pacific Deep-Sea Meiobenthic Communities: Quantitative Characteristics	51
	References	58
4	Meiobenthos as a Component of Anthropogenic Disturbance Assessment in the Abyssal Pacific Environment	67
4.1	General Considerations: Meiobenthic Communities in Relation to Environmental Disturbance	68
4.2	Deep-Sea Mineral Resources Development versus Benthic Communities	71
4.3	Programmes Aimed at Assessing Mining Effects on Abyssal Benthic Communities	74
4.3.1	Background Considerations	74
4.3.2	DOMES (Deep Ocean Mining Environmental Study), USA, 1975–1980	74

4.3.3	DISCOL (Disturbance and Re-Colonization Experiment in a Manganese Nodule Area of the Deep South Pacific), Germany, 1989–1996	78
4.3.4	The “Benthic Disturber”: A Nodule Mining Simulator	80
4.3.5	Joint US-Russian BIE (Benthic Impact Experiment), USA-Russia, 1991–1993	82
4.3.6	JET (Japan Deep-Sea Impact Experiment), Japan, 1994–1997	83
4.3.7	IOM BIE (Interoceanmetal Benthic Impact Experiment), 1995–2000	85
	References	94
5	Epilogue	101
	References	104

Meiobenthos in the Sub-equatorial Pacific Abyss

A Proxy in Anthropogenic Impact Evaluation

Radziejewska, T.

2014, XVII, 105 p. 20 illus., 15 illus. in color., Softcover

ISBN: 978-3-642-41457-2