

Contents

1	Introduction	1
	Ivan Nagelkerken	

Part I Biogeochemical Linkages

2	Nitrogen and Phosphorus Exchange Among Tropical Coastal Ecosystems	9
	Stephen E. Davis III, Diego Lirman and Jeffrey R. Wozniak	
3	Carbon Exchange Among Tropical Coastal Ecosystems	45
	Steven Bouillon and Rod M. Connolly	

Part II Ecological Linkages

4	Dynamics of Reef Fish and Decapod Crustacean Spawning Aggregations: Underlying Mechanisms, Habitat Linkages, and Trophic Interactions	73
	Richard S. Nemeth	
5	The Senses and Environmental Cues Used by Marine Larvae of Fish and Decapod Crustaceans to Find Tropical Coastal Ecosystems	135
	Michael Arvedlund and Kathryn Kavanagh	
6	Mechanisms Affecting Recruitment Patterns of Fish and Decapods in Tropical Coastal Ecosystems	185
	Aaron J. Adams and John P. Ebersole	
7	Habitat Shifts by Decapods—an Example of Connectivity Across Tropical Coastal Ecosystems	229
	Michael D.E. Haywood and Robert A. Kenyon	
8	Diel and Tidal Movements by Fish and Decapods Linking Tropical Coastal Ecosystems	271
	Uwe Krumme	

9	Living in Two Worlds: Diadromous Fishes, and Factors Affecting Population Connectivity Between Tropical Rivers and Coasts	325
	David A. Milton	
10	Evaluation of Nursery function of Mangroves and Seagrass beds for Tropical Decapods and Reef fishes: Patterns and Underlying Mechanisms	357
	Ivan Nagelkerken	
11	Sources of Variation that Affect Perceived Nursery Function of Mangroves	401
	Craig H. Faunce and Craig A. Layman	
Part III Tools for Studying Ecological and Biogeochemical Linkages		
12	Tools for Studying Biogeochemical Connectivity Among Tropical Coastal Ecosystems	425
	Thorsten Dittmar, Boris Koch and Rudolf Jaffé	
13	Tools for Studying Biological Marine Ecosystem Interactions—Natural and Artificial Tags	457
	Bronwyn M. Gillanders	
14	A Landscape Ecology Approach for the Study of Ecological Connectivity Across Tropical Marine Seascapes	493
	Rikki Grober-Dunsmore, Simon J. Pittman, Chris Caldow, Matthew S. Kendall and Thomas K. Frazer	
Part IV Management and Socio-economic Implications		
15	Relationships Between Tropical Coastal Habitats and (offshore) Fisheries	533
	Stephen J.M. Blaber	
16	Conservation and Management of Tropical Coastal Ecosystems	565
	William Gladstone	
Index		607