Echinoderm Research and Diversity in Latin America

Juan José Alvarado
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Editors

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We would like to dedicate this book to the pioneers of echinoderms research in Latin American. To María Elena Caso, Irene Bernasconi, Luis Roberto Tomassi and Evelyn Zoppi de Roa.

Foreword

This is a remarkable book. First and foremost, it compiles an immense amount of literature on all aspects of echinoderm biology and ecology over an extremely broad geographical range. This will be extremely useful because much of the literature is relatively unknown to the world at large. The description of the oceanography and marine environments of each country in a comprehensive way will be of considerable interest to marine biologists in general.

One of the most interesting aspects of this book is the section devoted to the history of echinoderm studies in each country. The first reports about echinoderms were isolated and sporadic, not systematic studies. These generally did not begin until the 1850s with various foreign expeditions along the coasts of Latin America. Studies of echinoderms by workers in Latin American countries themselves did not begin to develop appreciably until the 1950s. This has changed in a dramatic way. In the latter part of the twentieth century, interest in marine biology and recognition of its importance in terms of basic science, the environment and conservation, and economics increased greatly. This led to an increase in the number of marine biologists in general and of echinoderm biologists in particular. The amount of research activity that has developed since then is impressive. Another thing that impressed me, apparent in the book, is the passion of Latin American biologists for echinoderms, their commitment to conservation, their desire to assist their countries through their efforts, and their collegiality.

Florida, USA, March 2012

John M. Lawrence
Department of Integrative Biology,
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Tampa

Foreword

Juan José Alvarado is one of those students who, from very early on, denoted a clear interest in Marine Science and at some point defined his area of interest. When he started looking at the echinoderms of Costa Rica and later, at those reported and collected from Coco Island National Park, he found what he was looking for. Since then, he has been actively carrying out research on echinoderms, and most important, he has drawn attention to the activities regarding this group that are taking place in Latin America. First, with the publication of *Research on Echinoderms in Latin America* in 2005 (Revista de Biología Tropical, Volume 53, Supplement 3: 387 p.). Then, with the creation of the Iberoamerican Echinoderm Network Red Iberoamericana de Equinodermos (RIE) in 2006. And in 2008, with the publication of another Special Issue on echinoderm research in Latin America: Revista de Biología Tropical, 56 (Suppl. 3): 360 p. Now, together with Francisco Solís-Marín from the Universidad Nacional Autónoma de México (UNAM), they have put together an outstanding compilation of echinoderm research in Iberoamerica. The dedication of this book to the pioneering Latin American echinoderm researchers is a tribute to their great work and an acknowledgment of the fruit their early and many times solitary work has borne. It is a great honor for me to write this Foreword, for I consider their work a significant step for biological research in the region..

San José, Costa Rica, March 2012

Jorge Cortés
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Preface

The Iberoamerican Echinoderms Network (Red Iberoamericana de Equinodermos) (RIE) (http://zicatela.umar.mx/~redequinos/2/) was created in August 2006 at the 12th International Echinoderms Congress in New Hampshire, United States, as an initiative to strengthen academic connections between Iberoamerican echinoderm researchers. The RIE seeks to fortify the links of researchers in the different countries of the region, being a bridge of communication and exchange of ideas. It seeks to be the platform for discussion and communication of priority projects for Latin America echinoderms. It seeks to offer the opportunity of collaborative work, to place the region among the principal research and conservation regions of the world. Likewise, the RIE intends to support students interested in echinoderm research. To enrich their formation, it will offer information about researchers who could help in their projects, courses, seminars, or symposia, as well as providing literature. The goal of the RIE is to develop workshops, congresses, special journals supplements and books, and to support the development of the knowledge of the echinoderms in Latin America.

The first effort of the RIE was the preparation and publication of a Special Issue of the Revista de Biología Tropical (International Journal of Tropical Biology and Conservation) (Alvarado, J. J. and Cortés, J. (Editors). 2005. Research on Echinoderms in Latin America, Volume 53, Supplement 3: 387 p.) (http://www.ots.ac.cr/tropiweb/intpages/suppl/sup53-3.html). This initiative was born during the 11th International Echinoderms Congress in Münich, Germany, in 2003. This Special Issue compiled 28 papers from 12 countries by 62 authors, touching topics as diverse as paleontology in the Uruguayan region and fisheries models of sea cucumbers in Baja California. The second output of the RIE was a second supplement of the Revista de Biología Tropical (Alvarado, J.J. and Cortés, J. (Editors). 2008. Research on Echinoderms in Latin America II, Volume 56, Supplement 3: 360 p.) (http://www.ots.ac.cr/tropiweb/intpages/suppl/sup56-3.html). This issue compiled 21 papers from eight countries by 46 authors in Latin America (including an invited paper from the Canary Islands). Those papers demonstrated the high degree of knowledge of some countries in topics such as diversity, ecology, aquaculture, and fisheries. It also identified countries where more efforts are needed.

The third effort was the establishment of the first Latin American Echinoderm Congress (Congreso Latinoamericano de Equinodermos-CLE) held in Puerto Madryn, Argentina, between 13 and 18 November 2011. This congress was organized by the Centro Nacional Patagónico (CENPAT), the Museo Argentino de Ciencias Naturales "Bernardino Rivadavia" (MACN), and the Universidad Nacional de la Patagonia San Juan Bosco. A total of 112 people participated in this event with 76 oral presentations and 54 Poster, covering the following themes: biogeography, biochemistry, ecology, physiology, paleontology, fisheries and aquaculture, reproduction and development, and taxonomy, systematics, and evolution.

This book represents the fourth output and the confirmation of the commitment of the RIE with the international scientific community. The book represents an extensive recompilation of information about all the research done in the region from theses, reports, books, and scientific journals. We were able to identify the strengths and weaknesses of each country and also allow the international scientific community to be able to access information that was held in reports, theses, and local papers that were written in Spanish, allowing a greater diffusion of the results and conclusions obtained. Our goal is to improve the echinoderm research on the region and with this road map establish future research in collaboration with the different laboratories and researchers that participated in this book.

Juan José Alvarado
Francisco Solís-Marín

Red Iberoamericana de Equinodermos

Acknowledgments

First of all, we thank each of the authors of the chapters that have made this compilation about Echinoderm Research and Diversity in Latin America possible, to share their knowledge and passion for such a star group. Muchas gracias!

We also would like to acknowledge the help and support of all the reviewers who with their comments and suggestions improved this book: Chris Pomory, Cynthia Lara de Castro, David Pawson, Harilaos Lessios, John Pearse, Manuel Rey Méndez, Marc Eléaume, Martin Brogger, Nieves Elvira, Pablo González, Philip Lambert, Rosa del Valle, Tim O'hara, Tom Hopkins. We wish to grant special credit to John Lawrence and Jorge Cortés who with all the patience, interest, and care reviewed each of the chapters, leaving their wisdom on every page.

We wish to grant special credit to all the students from the Laboratorio de Sistemática y Ecología de Equinodermos from the Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de Mexico, for their help with the final elaboration of the appendix: Mauricio Valdés De Anda, Julio Adrián Arriaga Ochoa, Andrea Alejandra Caballero Ochoa, Tania Pineda Enríquez, Carolina Martín Cao-Romero, Yoalli Quetzalli Hernández Díaz, Alejandra Martínez Melo, Viridiana Tapia Ramírez, Guadalupe Bribiesca Contreras, Pedro Josué Garcés Solchaga, Nancy Escandón Flores, Lucia Alejandra Hernández Herrejón and Carlos García Linares.

We appreciate the help of Monica Chavez in preparing all the figures in this book and Cindy Fernandez who always believed in this project and was a keystone for the final elaboration. JJ Alvarado is grateful to CONACYT (México) and CONICIT-MICIT (Costa Rica). Finally, we thank Marion Schnider and SPRINGER for their interest in this book.

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Chapter 13
Recent Echinoderms from Hispaniola

Alejandro Herrera-Moreno and Liliana Betancourt

13.1 Introduction

The Island of Hispaniola is the second largest in the Archipelago of the Greater Antilles. It is located between 17°36′15″N and 19°57′09″N, and 68°19′22″W and 74°41′33″W. Its geographical boundaries are the Atlantic Ocean to the north, the Caribbean Sea to the south, the Mona Channel to the East, which separates it from Puerto Rico, and in the West, the Windward Passage and the Jamaica Channel, which separate it from Cuba and Jamaica, respectively. The 76,480 km^2 of its territory is divided politically into two countries: Dominican Republic to the east and the Republic of Haiti in the west, separated by a land border of 360 km.

The Republic of Haiti has a total area of 27,750 km^2, which includes the mainland territory plus several islands and islets such as Gonave (743 km^2), Tortue (180 km^2), Vache (52 km^2), Cayemites (45 km^2) and Navassa (5.2 km^2). The Dominican Republic has an area of 48,442 km^2 of mainland in addition to several islands and islets such as Saona (117 km^2), Beata (27 km^2) and Catalina (9.6 km^2). Two oceanic banks: Christmas and Silver Banks, with areas of 70 and 150 km^2 respectively, are located to the north of Samana in the Atlantic Ocean.

The coastline of Hispaniola extends for about 3,059 km (1,288 km belong to 16 Dominican coastal provinces and 1,771 km to nine Haitian coastal provinces) containing ecosystems such as sandy beaches, rocky shores, cliffs, estuaries, coastal lagoons and mangrove forests. On the Haitian coast important mangroves areas are reported along the north and northeast coast in the Bays of Fort Liberté, l'Acul, Caracol, the Artibonite estuary and the Islands Les Cayes, Vache, Gonave and Cayemite (Ehrlich et al. 1987). Along the Dominican coast the largest areas of mangroves are found in the Bay of Samaná and Montecristi.

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The Dominican shelf has a surface area of 8,130 km^2 extending down to 200 m depth, with an average width of 7.5 km. The platform area of Haiti is estimated at 6,683 km^2 and is on average narrower. Important coastal habitats include sandy or muddy bottoms (related to the degree of terrigenous influence), commonly populated with abundant macrophytobenthos, especially seagrasses, followed by coral patches and fringing or barrier reefs. In Haiti coral reefs occur near Vache Island, all around Gonave Island in the central Bay of Port-au-Prince, on the Rochelois Bank, at Cayemites Islands, off the northern coast of the southern peninsula, and from the border with the Dominican Republic in the east to Acul Bay just west of Cape Haitien (Creary et al. 2008). Well preserved reefs are found at Navassa Island (Causey et al. 2000).

In the Dominican Republic important reef areas include the Montecristi National Park barrier reef in the north-west (where the shelf is widest), narrow high-energy reefs in the central region, and the Bávaro-Macao-Punta Cana barrier reef system at the eastern end. Samaná Bay receives many rivers and is the largest estuary of the insular Caribbean. Coastal reefs in the vicinity are poorly developed, but the Christmas and Silver Banks reef systems are about 100 km to the north. To the south, on the Caribbean coast, are the well-studied reefs of National East Park and the adjacent Saona Island. Uplifted carbonate terraces with reefs growing on narrow platforms are present in the west from Catalina Island to beyond Santo Domingo (e.g. Boca Chica and the Submarine National Park La Caleta). Conditions are not good for reefs in the south-west, except on the shallow sheltered shelf east of Cabo Beata at National Park Jaragua (Woodley et al. 2000).

13.2 Research

Echinoderm studies of the waters around Hispaniola Island have a long history. The Haitian collection of David Friedrich Weinland from 1857 (NMNH 2002) and the work on holothuroids by Emil Selenka (1867), with the record of *Actinopyga agassizi* (Selenka, 1867) in Haiti and the description of the type specimen of *Holothuria grisea* Selenka, 1867, are among the earliest contributions.

William More Gabb made collections in the Dominican Republic in 1878 and deposited several specimens of *Echinometra lucunter* (Linnaeus, 1758) in the U.S. National Museum of Natural History (Rathbun, 1886). In December 1878, during the *Blake* Expedition, the echinoid *Salenocidaris varispina* (A. Agassiz, 1880) was collected northwest of Haiti at 2,195 m depth (A. Agassiz, 1880). Dodërlein and Hartmeyer (1910) and Verrill (1915) summarized previous records of asteroids from Hispaniola. Hubert L. Clark (1919) provided the first taxonomic summary of Haitian echinoderms listing more than 20 species of all classes, except crinoids.

In the 1930s, new contributions to the knowledge of echinoderms from Hispaniola include Deichmann (1930) who summarized previous records for the Dominican Republic and Haiti in her review of the holothurians of the western part of the Atlantic Ocean. The handbook of the littoral echinoderms of Porto Rico and

the other West Indian Islands (H.L. Clark 1933) also summarized historical information about all classes of echinoderms for Hispaniola, except crinoids, with some new records. Austin H. Clark (1939) listed 19 species of shallow-water echinoderms (between 1 and 2 m depth) collected in two localities in the north of Haiti (Cape Haitien and Tortue Island) during the Smithsonian-Hartford expedition of March 1937, aboard the RV Joseph Conrad.

New collections took place during the 1930s on five expeditions: Parish-Smithsonian in 1930 to Haiti on the yacht *Esperanza*, Norcross-Bartlett in July 1931 to the southwest of Santo Domingo down to 200 m depth on the schooner *Effie Morrissey*, Johnson–Smithsonian Deep-Sea in February 1933 on the Yacht Caroline at depths from 26 to 40 m at twelve stations inside the Bay and around the Peninsula of Samaná (Bartsch 1933), RV *Stranger* in February 1933 in Port-au-Prince and the RV *Atlantis* in April 1939 dredging to 1,170 m deep at one station to the northeast of Haiti (H.L. Clark 1941). These expeditions contributed new records for Hispaniola including two deep-water asteroid species: *Persephonaster patagiatus* (Sladen, 1889) and *Phormosoma placenta sigsbei* (A. Agassiz, 1880). The expeditions of 1931 and 1933 collected the first specimens of crinoids: *Poliometra prolixa* (Sladen, 1881) and *Nemaster rubiginosa* (Pourtalés, 1869).

In the decade of 1960s two expeditions took place. The exploratory fishing vessel *Silver Bay* in October 1963 made collections at six stations between 92 and 348 m deep in the north, northeast and east of the Dominican Republic. The exploratory fishing vessel *Oregon* in June and May, 1965 and December 1969 collected between 11 and 59 m deep at four stations off the north Haitian coast and the northeast Dominican coast. During this period, Parslow and Clark (1963) summarized the zoogeographical distribution of shallow-water (less than 17 m deep) ophiuroids known for the West Indies, including 11 species from Hispaniola, updating the previous list of H.L. Clark (1919). Deichmann (1963) summarized previous records of holothuroids for Haiti. Halpern (1969) mentioned the asteorid *Litonotaster intermedius* (Perrier, 1884) found in the Windward Pass, between Cuba and Hispaniola, at a depth between 1,958 and 3,294 m (Downey 1973).

From January to July 1970 and July 1971 the most prolific expeditions carried out in Hispaniolan waters took place aboard the RV *John Elliot Pillsbury*. Collections were made at seven stations in Haiti, between 31 and 2,545 m deep, and 33 stations in Dominican Republic, between 9 and 3,109 m deep (Fig. 13.1) (Staiger and Voss 1970). Meyer et al. (1978) included the RV *John Elliot Pillsbury* collections in their zoogeographical study of western Atlantic Ocean crinoids, offering the most complete summary of this group, with 19 species listed for Dominican and Haitian waters. In her review of the Order Brisingida for the Atlantic Ocean, Downey (1986) also incorporated Haitian specimens from the Pillsbury expeditions. A.M. Clark (1987) described the type specimen of the asteorid*Henricia downeyae* A.M. Clark, 1987 from a Haitian locality, registered in the catalogue of types of the NMNH (Ahearn 1995). Two more records for Haiti from this period were the holothuroid *Psolus tuberculosus* Théel, 1886 (Miller and Pawson 1984) and the asteroid *Ceramaster grenadensis grenadensis* (Perrier, 1881) (Halpern 1970).

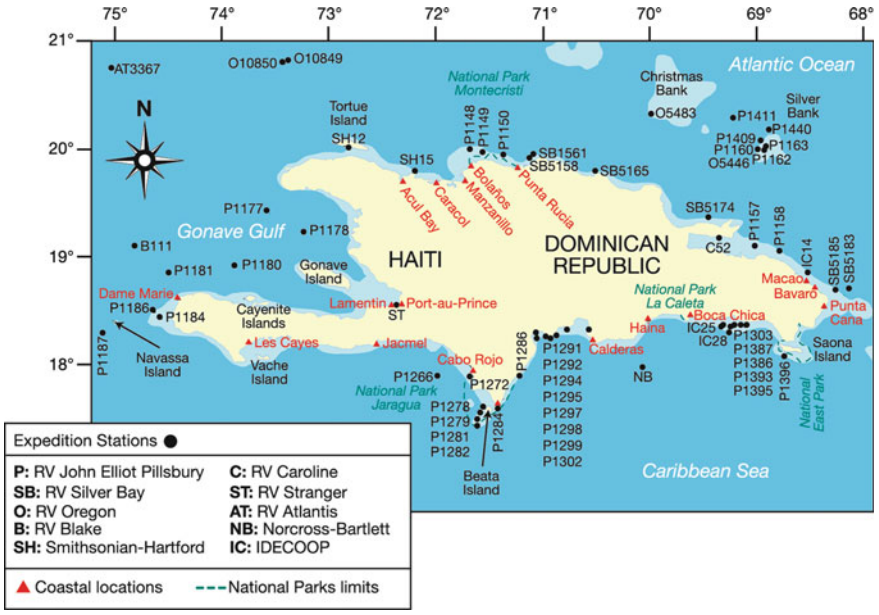

Fig. 13.1 Localities where collections of echinoderms have been made by several expeditions and national and international projects on the shelf and oceanic waters of Hispaniola

All these expeditions increased the collections of the five classes of echinoderms from Hispaniola in international museums with 541 specimens of 132 species located in the U.S. Museum of Natural History (NMNH 2002), Florida Museum of Natural History (FLMNH 2010), Museum of Comparative Zoology at Harvard University (MCZ 2010) and Museum of Natural Sciences of Berlin (ZMB 2010). The RV *John Elliot Pillsbury* expeditions had a decisive role in the enrichment of collections, particularly with deep-sea species, that at the end of the 1970s, 90 % of the crinoid, asteroid, and echinoid species known from Hispaniola were already described and deposited in different museums.

In the Dominican Republic, the creation of the Center of Marine Biology Research (CIBIMA) in 1962 promoted coastal and marine biodiversity research. Between the decades from 1970 to 1990, CIBIMA produced summarized list of echinoids and asteroids (Cicero et al. 1976), ophiuroids (Rathe 1978) and holothuroids (Briones 1983). Multiple reports were finally compiled into a preliminary study on coastal and marine biodiversity of the Dominican Republic (CIBIMA 1992). From these investigations, 242 specimens of 58 species are deposited in the National Museum of Natural History of Santo Domingo (MNHNSD 2008).

In May 1979, the Autonomous University of Santo Domingo, along with the University of Puerto Rico, implemented an expedition on board the RV *Crawford* to make inventories of the southeast Dominican reefs of La Caleta and Catalina and Saona Islands (Williams et al. 1983). Later the IDECOOP expedition

(Fig. 13.1) made collections between 142 and 270 m deep with three new records for the deep-sea Dominican echinoderms: the crinoid *Cenocrinus asterius* (Linnaeus, 1775); the ophiuroid *Astronicda isidis* Lyman, 1872 and the echinoid *Conolampas sigsbei* (A. Agassiz, 1878) (Rivas 1983). Studies carried out by researchers from East Carolina University in Montecristi reefs (Luczkovich 1991) extended the reports of Dominican crinoids with the record of *Tropiometra carinata* (Lamarck, 1816).

The information on Haitian echinoderms comes from old collections, that have already been mentioned, and some more recent studies carried out by foreign institutions. In June 1988, a detailed study at 13 stations on different ecological zones (from the reef lagoon to the frontal reef) of the Arcadines coral reefs was made by the World Wildlife Fund and the Conservation Foundation Wilcox Associates, between 0.3 and 21 m depth (Wilcox et al. 1989). Twelve species of common shallow-water echinoderms were reported. Hendler et al. (1995) summarized the echinoderms from approximately 17 old Haitian records.

With the implementation of the Hispabiota Marina Project (Herrera-Moreno and Betancourt 2012) by Programa EcoMar, Inc. in the Dominican Republic a bibliographical and taxonomic review of echinoderm species was done for the first time, with a historical and insular approach (Herrera-Moreno and Betancourt 2004). A database was created with the results of collections of echinoderms from more than 150 localities of the coastal zone, the shelf and the deep zone of Hispaniola (Fig. 13.1). This project added 60 species to the national inventory of CIBIMA (1992) confirming 123 species for Dominican coastal and marine zone. It also compiled for the first time 79 species for Haiti. A total of 156 species for Hispaniola (Appendix) is discussed in the present report.

13.3 Diversity and Distribution

The numbers of echinoderms in different taxonomic categories for the Dominican Republic, Haiti and Hispaniola are summarized in Table 13.1. There are 22 species of crinoids (18 for the Dominican Republic and eight for Haiti), subdivided into 17 genera, nine families and four orders. About five species of crinoids are found in coral reef environments at depths to 45 m deep including those which, according to Hendler et al. (1995), are more common and accessible to conventional scuba diving. The remaining species are distributed below 100 to 1,033 m deep.

The list of asteroids has 33 known species (18 for Haiti and 21 for the Dominican Republic) subdivided into 24 genera, 11 families and seven orders. Downey (1973) in her review of the asteroids in the Gulf of Mexico and the Caribbean described 95 species and noted that the asteroid fauna from Hispaniola was practically unknown. The bathymetric ranges of the asteroid species known from Hispaniola varies from 0.3 to 3,493 m deep. About eight species are distributed from the surface to 50 m deep primarily from the mangroves to the reef front, with the remaining species found below 50 m deep.

Table 13.1 Summary of the numbers of different taxonomic categories for echinofauna groups of Dominican Republic (DO), Haiti (HA) and Hispaniola (HI)

		Orders	Families	Genus	Species
Crinoidea	HA	3	4	7	8
	DO	4	9	14	18
	HI	4	9	17	22
Asteroidea	HA	7	11	16	18
	DO	4	7	14	22
	HI	7	11	24	33
Ophiuroidea	HA	2	9	12	21
	DO	2	11	15	24
	HI	2	12	20	30
Echinoidea	HA	7	12	15	21
	DO	10	16	31	41
	HI	12	17	36	50
Holothuroidea	HA	3	6	7	11
	DO	3	5	7	18
	HI	3	7	10	21
TOTAL	HA	22	42	57	79
	DO	23	48	81	123
	HI	28	57	107	156

Thirty species of ophiuroids are known for Hispaniola (21 for Haiti and 24 for the Dominican Republic), subdivided into 20 genera, 12 families and two orders. Most species of ophiuroids are distributed in water less than 30 m deep found in seagrass beds and coral reefs. Only four species were collected between 148 and 366 m deep.

Fifty species of echinoids are listed (21 for Haiti and 41 for the Dominican Republic) subdivided into 36 genera (including one species identified only to the genus level), 17 families and 12 orders. Although bathymetric data are not available for all species, the collections from Hispaniola contain the more common shallow-water species from mangrove habitats, seagrass beds and coral reefs. At least about 30 species are distributed from 100 to 2,545 m depth.

The list of holothurians of Hispaniola includes 21 species (11 for Haiti and 18 for the Dominican Republic) with ten genera, seven families and three orders. Most species of holothuroid are common in shallow sedimentary environments. Three species are found between 243 and 1,400 m deep.

13.4 Ecology

In the Dominican Republic, echinoderm species are mentioned in the inventories of invertebrates of seagrass beds and coral reefs from Manzanillo to Punta Rucia in Montecristi (Luczkovich 1991; CIBIMA 1998), Puerto Plata (Herrera-Moreno and

Betancourt 2009), Samaná (Sang and Lysenko 1994; Sang 1996), Punta Cana, Bávaro (CURPOB 2000; Brandt et al. 2003), National East Park (Vega et al. 1997) and Isla Saona in La Altagracia, Catalinita in La Romana, La Caleta in Santo Domingo (Williams et al. 1983), Haina in San Cristóbal (Herrera-Moreno et al. 2009), Las Calderas Bay in Peravia (Almonte 1976), Puerto Viejo in Azua (González et al. 1978) and Jaragua National Park in Pedernales (Weil 2006). In Haiti, inventories with echinoderm species include Lamentin (Beebe 1928), Les Arcadins reefs (FoProBIM 1985; Wilcox et al. 1989) and Navassa (Miller 2003).

Due to the dramatic reduction of black sea urchin *Diadema antillarum* in the Caribbean in the 1980s, the presence of this species is always highlighted in all inventories and some abundance surveys have been done. In the Dominican reefs, Chiappone (2001) estimated an average density of *D. antillarum* of 0.03 ind 50 m^{-2} for the coral reefs in the National East Park, between 9 and 17 m depth. He also estimated 9.15 ind 50 m^{-2} in the Boca Chica reefs between 4 and 20 m depth. Brandt et al. (2003) reported a maximum density of 5.4 ind 10 m^{-2} in the reefs of Punta Cana and Bavaro with the highest average values in the deep fore-reef (1.2 ind 10 m^{-2}) in relation to the shallow areas of the back-reef (0.5 individuals/10 m^2). For Caracol Bay in Haiti, Hay (1984) reported 20 ind m^{-2}, between 3 and 10 m depth. FoProBIM (FoProBIM 1985) found densities of *D. antillarum* up to 14.5 ind 100 m^{-2} at 5 m depth in the area of Les Arcadines. More recently, abundance values from 0 to 1.5 ind 10 m^{-2} have been reported in the same area by Linton (2003).

However, ecological studies at the level of echinoderm populations or communities seem to be scarce. In the Dominican Republic, Chiappone (2001) conducted a study measuring density and size distribution for five species of echinoids (*D. antillarum*, *Echinometra viridis*, *Echinometra lucunter*, *Eucidaris tribuloides* and *Tripneustes ventricosus*) in the National East Park and Boca Chica. Tewfik et al. (2005) studied the impact of anthropogenic enrichment on the seagrass food web at two locations in southern Dominican Republic (Pedernales and Barahona), involving several species of echinoderms, categorized by them as three consumer functional groups: (a) generalists (regular urchins: *Lytechinus variegatus*, *T. ventricosus*, *D. antillarium*); (b) subsurface deposit feeders (red heart urchin *Meoma ventricosa* and sand dollars) and (c) surface deposit feeders (cushion sea star *Oreaster reticulatus* and sea cucumbers). Hay (1984) compared the activity of grazing fish and sea urchins in the Bay of Caracol in Haiti, on an overexploited coral reef including density data of *Diadema antillarum* and its rate of consumption of *Thalassia testudinum*.

13.5 Aquaculture and Fisheries

Commercial fishing of sea cucumber takes place in the Dominican Republic. According to the Dominican Council of Fisheries and Aquaculture CODOPESCA in 2002 there was an export of 57.6 MT, equivalent to 9 % of seafood exports. The

figures for years 2007, 2008 and 2009 indicate much smaller export volumes with 1.27, 2.37 and 1.37 MT, respectively. The trading company for sea cucumbers in the Dominican Republic is NETCO C x A which operates from Juan de Bolaño Beach in Montecristi with CODOPESCA permissions for exportation to the United States. There are no studies that scientifically support this exploitation. In fact, there is no information on the species being harvested, minimum sizes, close seasons or any other descriptive parameters of an organized fishery. The survival of these echinoderm populations is seriously threatened. According to Toral-Granda (2008), between 2002 and 2003, China imported 2,607 kg of dry weight of sea cucumbers from Dominican Republic and 10,680 kg of dry weight from Haiti. In Haiti, the Caribbean SeaFood Company announces online the sale of dried sea cucumbers of the species *Stichopus badionotus*.

13.6 Threats

The threats to echinoderms are not very different from those faced by other marine groups of Hispaniola. The destruction of ecosystems (mainly mangroves, seagrass beds and coral reefs) due to coastal development (human settlements, agriculture, industrial and tourist facilities and/or fishing) and tourism activities (especially diving) is the major threat that affects all groups. In addition to impacts of habitat destruction, some groups of echinoderms are exploited for commercial purposes. These include some species of sea cucumbers used for human consumption and some species of starfish and sea urchins used for sale as aquarium species (SERCM 2004). Other echinoderm species, such as the sand dollar *Mellita quinquiesperforata* and the starfish *Oreaster reticulatus* are collected for handicrafts that are sold in tourist establishments. Some fishermen also use this asteroid species as bait in net traps. No ecological studies or fisheries biology research have been done to support a sustainable exploitation of these resources.

13.7 Recommendations

It is essential to train a group of national specialists from Haiti and the Dominican Republic in the systematic of all echinoderm classes that can work closely together to better understand the echinofauna of Hispaniola. The National Museum of Natural History in Santo Domingo should be involved in the development and review of the marine collections. New investigations in structural ecology and population dynamics of echinoderms must be initiated for those species that may be subject to some kind of extractive use. For exploited species, it is also necessary to conduct fishery biology investigations for the establishment of closed seasons, protected areas from fishing and legal minimum sizes. Fishing regulations and fishery statistics are crucial for a sustainable exploitation of these species. Marine

research should continue increasing the knowledge of the echinoderms in new areas of the Dominican and Haitian platforms, including exploration of deeper zones.

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Appendix

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Table A.1 Taxonomic list of the Echinoderms of the Pacific coast of Latin America

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Class Crinoidea																		
Order Comatulida																		
Superfamily Antedonacea																		
Family Antedonidae																		
Antedon bifida (Pennant, 1777)																	x	
Anthometra adriani (Bell, 1908)	70–1674																x	
Eumorphometra fraseri John, 1938	410–687																x	
Fariometra parvula (Hartlaub, 1895)		rb	x								x							
Florometra magellanica (Bell, 1882)	20–1017	rb,sb									x					x	x	
Florometra mawsoni A. H. Clark, 1913	38–770																x	
Florometra parvula (Hartlaub, 1895)	589–1969	rb								x								
Florometra serratissima (A. H. Clark, 1907)	12–3234	rb	x								x							
Florometra tanneri (Hartlaub, 1895)	104–207	rb	x								x							
Isometra hordea John, 1938	17–490																x	
Isometra graminea John, 1938																	x	
Isometra vivipara Mortensen, 1917	79–845																x	
Promachocrinus kerguelensis Carpenter, 1880	20–2100																x	
Solanometra antarctica (Carpenter, 1888)	287–1759																x	
Family Zenometridae																		
Psathyrometra bigradata (Hartlaub, 1895)	741–823										x			x				

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Superfamily Notocrinacea																		
Family Notocrinidae																		
Notocrinus virilis Mortensen, 1917																	x	
Notocrinus mortenseni John, 1938																	x	
Superfamily Tropiometracea																		
Family Thalassometridae																		
Thalassometra agassizii (Hartlaub, 1895)	596–1429	rb								x	x			x				
Order Hyocrinida																		
Family Hyocrinidae																		
Calamocrinus diomedae A. Agassiz, 1890	717–1431										x			x				
Hyocrinus foelli (Roux & Pawson, 1999)	3030	rb	x	x														
Ptilocrinus antarcticus (Bather, 1908)	450–500	rb															x	
Class Asteroidea																		
Order Paxillosida																		
Family Astropectinidae																		
Astropecten armatus Gray, 1840	0–160	mb,rb,sb	x			x			x		x	x		x	x	x		
Astropecten armatus erinaceus Gray, 1840	11–60	rb,sb														x		
Astropecten benthophilus Ludwig, 1905	1408									x								
Astropecten brasiliensis peruvianus Verrill, 1870	6–99	mb,sb										x				x		
Astropecten exiguus Ludwig 1905	232–2136										x			x				
Astropecten fragilis Verrill, 1870	1–5	sb									x			x		x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Astropecten regalis Gray, 1840	0–204	mb,rb,sb	x						x		x	x						
Astropecten sulcatus Ludwig, 1905	95–121									x		x	x					
Astropecten verrilli de Loriol, 1899	2–488	mb,rb,sb	x			x						x					x	
Astropecten ornatissimus Fisher, 1906	278–286	rb,sb	x															
Bathybiaster loripes Sladen, 1889	80–500	sb															x	
Dipsacaster eximius Fisher, 1905	377–971	mb,sb	x													x		
Dytaster gilberti Fisher, 1905	1573–4335	mb,sb									x	x	x	x		x		
Leptychaster inermis (Ludwig, 1905)	732–1593									x	x			x	x			
Mimastrella cognata (Sladen, 1889)	10–2424	mb,rb															x	
Psilaster charcoti (Koehler, 1906)	20–3248	sb															x	
Psilaster pectinatus (Fisher, 1905)	1866										x							
Psilaster sladeni Ludwig, 1905	1485–1618														x			
Persephonaster armiger Ludwig, 1905										x								
Tethyaster canaliculatus (A. H. Clark, 1916)	23–300	rb	x								x			x		x		
Thrissacanthias penicillatus (Fisher, 1905)	55–1503	sb	x													x		
Family Goniopectinidae																		
Ctenodiscus procurator Sladen, 1889	50–1050	mb															x	
Ctenodiscus crispatus (Retzius, 1805)	10–1946	mb	x								x					x		
Luidia (Platasterias) latiradiata (Gray, 1871)	10–12	mb,sb										x						

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Luidia armata Ludwig, 1905	33–126	sb	x							x	x							
Luidia asthenosoma Fisher, 1906											x							
Luidia bellonae Lütken, 1865	4–55	rb,sb	x											x		x		
Luidia columbia (Gray, 1840)	0–220	mb,sb	x								x	x				x		
Luidia ferruginea Ludwig, 1905	280	mb									x					x		
Luidia foliolata (Grube, 1866)	3–55	mb,sb				x		x			x	x		x				
Luidia latiradiata (Gray, 1871)	1.5–12	mb,sb	x			x		x			x	x						
Luidia magellanica Leipoldt, 1895	0–40	rb,sb														x	x	
Luidia phragma H. L. Clark, 1910	1–386	sb	x								x					x		
Luidia porteri A. H. Clark, 1917	110																x	
Luidia superba A. H. Clark, 1917	3–250	mb,sb,rub	x								x	x		x	x	x		
Luidia tessellata Lütken, 1859	18	sb	x						x		x			x				
Family Porcellanasteridae																		
Eremicaster crassus (Sladen, 1883)	1570–6330	rb	x								x	x	x	x		x		
Eremicaster pacificus (Ludwig, 1905)	1463–5780	mb,sb								x	x	x	x	x	x	x		
Eremicaster vicinus Ludwig, 1907	5204–7200	mb														x		
Porcellanaster ceruleus Wyville-Thomson, 1877	1158–6035	mb								x	x					x		
Styracaster paucispinus Ludwig, 1907	4240–4337	mb														x		
Thoracaster cylindratus Sladen, 1883	2600–5303	mb												x		x		
Family Pseudarchasteridae																		
Pseudarchaster discus Sladen, 1889	117–400	mb,rb,sb															x	
Pseudarchaster pectinifer Ludwig, 1905	1180–3575	sb,rub,mb	x								x			x		x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Pseudarchaster pulcher Ludwig, 1905	700–1620	sb,rub	x											x				
Pseudarchaster pusillus Fisher, 1905	98–800	sb,rub	x															
Pseudarchaster verrilli Ludwig, 1905	999										x							
Order Notomyotida																		
Family Benthopectinidae																		
Benthopecten acanthonotus Fisher, 1905	1800–1936	rb	x															
Benthopecten cognatus (Ludwig, 1905)	3058										x							
Benthopecten pectinifer (Ludwig, 1905)	1485–2323	rb	x								x			x				
Benthopecten spinuliger (Ludwig, 1905)	1618–2323									x	x							
Calyptraster tenuissimus Bernasconi, 1966	0–732	sb															x	
Cheiraster (Luidiaster) planeta (Sladen, 1889)	350–500	sb															x	
Cheiraster (Luidiaster) californicus Ziesenhenne, 1942	488–512	mb	x															
Nearchaster aciculosus (Fisher, 1910)	466–1903	mb,sb	x	x														
Pectinaster agassizi Ludwig, 1905	790–2323	mb,rb	x							x	x	x	x			x		
Order Valvatida																		
Family Acanthasteridae																		
Acanthaster planci (Linnaeus, 1758)	0–30	cr,rb	x	x					x	x	x	x	x	x				
Family Asterinidae																		
Asterina fimbriata Perrier, 1875	0–300	mb,rb															x	
Meridiastra modesta (Verrill, 1870)	213	rb,sb	x	x							x			x	x	x		
Patiria chilensis (Lütken, 1859)	2–40	rb,kf														x	x	

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Patiria miniata Verrill, 1913	0–300	cr,rb	x	x														
Patiriella calcarata (Perrier, 1875)	0–20	rb														x		x
Patiriella exigua (Lamarck, 1816)	0–3													x				
Family Asterodiscididae																		
Amphiaster insignis Verrill, 1868	0–128	cr,mb,rb,sb	x			x					x	x	x			x		
Paulia horrida Gray, 1840	33–121	rb	x							x	x			x		x		
Family Asteropseidae																		
Asteropsis carinifera (Lamarck, 1816)	3–60	cr,rb	x						x	x	x	x	x					
Dermasterias imbricata (Grube, 1857)	2–260	rb	x															
Family Ganeriidae																		
Cycethra verrucosa (Philippi, 1857)	0–270	rb,sb														x	x	
Ganeria falklandica Gray, 1847	0–145	rb,sb															x	
Ganeria hahni Perrier, 1891	0–135	rb,sb															x	
Family Goniasteridae																		
Ceramaster grenadensis patagonicus (Sladen, 1889)	75–898													x			x	
Ceramaster patagonicus (Sladen, 1889)	10–898	rb,mb,sb	x													x	x	
Ceramaster leptoceramus (Fisher, 1905)	382–1248	mb,rb	x													x		
Cryptopeltaster lepidonotus Fisher, 1905	188–1244	sb												x			x	
Hippasteria phrygiana (Parelius, 1768)	0–400	rb															x	
Hippasteria falklandica Fisher, 1940	225–1148	rb															x	

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Hippasteria spinosa Verrill, 1909	50–512	rb	x															
Litonotaster tumidus H. L. Clark, 1920	4066–5196	mb														x		
Mediaster elegans Ludwig, 1905	1789									x		x	x					
Mediaster transfuga Ludwig, 1905	840–900	sb	x	x														
Mediaster tenellus Fisher, 1905	580–1192	sb	x															
Nymphaster diomedeae Ludwig, 1905	702–1810	mb,sb	x							x	x			x	x			
Pillsburiaster ernesti (Ludwig, 1905)	2149									x								
Family Mithrodiidae																		
Mithrodia bradleyi Verrill, 1870	0–14	cr,rb	x	x						x	x	x	x	x	x	x	x	
Family Odontasteridae																		
Acodontaster elongatus elongatus (Sladen, 1889)	8–400	rb,sb															x	
Acodontaster elongatus granuliferus (Koehler, 1912)	74–841	rb,sb															x	
Diplodontias singularis (Müller & Troschel, 1843)	0–84	rb,sb														x	x	
Odontaster meridionalis (E.A. Smith, 1876)	0–646	rb,sb															x	
Odontaster penicillatus (Philippi, 1870)	6–400	rb,sb															x	
Family Ophidiasteridae																		
Leiaster coriaceus Peters, 1852											x							
Leiaster glaber Peters, 1852	2–15	cr										x						
Leiaster teres (Verrill, 1871)	1–57	cr,rb	x								x	x	x	x				
Linckia columbiae Gray, 1840	0–100	cr,rb	x							x		x		x		x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Linckia guildingi Gray, 1840		rb									x			x	x			
Linckia multifora (Lamarck, 1816)																		x
Narcissia gracilis A.H. Clark, 1916	56–91	rb	x							x				x				
Narcissia gracilis malpeloensis Downey, 1975	20–59	cr, rb										x	x					
Ophidiaster agassizi Perrier, 1881	1–75	rb																x
Ophidiaster ludwigi de Loriol, 1900											x					x		
Pharia pyramidata (Gray, 1840)	0–130	cr,rb,sb	x	x		x			x		x	x	x	x	x	x		
Phataria mionactis Ziesenhenne, 1942															x			
Phataria unifascialis (Gray, 1840)	0–50	cr,rb,sb	x	x		x		x	x	x	x	x	x	x	x	x		
Tamaria obstipa Ziesenhenne, 1942	67–79								x	x								
Tamaria stria Downey, 1975	15–49	rb										x	x					
Family Poraniidae																		
Porania (Porania) antarctica E.A. Smith, 1876	0–900	mb,rb,sb															x	
Poraniopsis echinaster Perrier, 1891	5–450	mb,rb,sb															x	
Poraniopsis inflatus (Fisher, 1906)	48–1094										x			x				
Family Oreasteridae																		
Nidorellia armata (Gray, 1840)	0–183	cr,rb,rub	x			x		x	x	x	x	x	x	x	x	x		
Pentaceraster cumingi (Gray, 1840)	2–92	cr,rb,sb	x						x	x	x	x	x	x		x		
Family Solasteridae																		
Lophaster furcilliger Fisher, 1905	86–4200	mb,rb,rub	x								x			x		x		
Lophaster stellans Sladen, 1889	15–450	rb,sb															x	

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Paralophaster antarcticus Koehler, 1912	88–750	sb															x	
Solaster regularis Sladen, 1889	5–800	rb,sb,mb															x	
Order Velatida																		
Family Korethrasteridae																		
Peribolaster folliculatus Sladen, 1889	10–460	rb															x	
Family Pterasteridae																		
Diplopteraster semireticulatus (Sladen, 1882)	300–1500	rb,sb															x	
Diplopteraster verrucosus (Sladen, 1882)	0–470	sb															x	
Pteraster cf. diaphanus (Ludwig, 1905)	1410									x				x				
Pteraster gibber (Sladen, 1882)	7–460	rb															x	
Pteraster affinis Smith, 1876	80–130	rb															x	
Pteraster affinis lebruni Perrier, 1891	74–341	sb															x	
Hymenaster cremnodes H. L. Clark, 1920	4335	mb														x		
Hymenaster gracilis Ludwig, 1905	2418–3241											x	x	x	x			
Hymenaster pellucidus Thomson, 1873	13–3240	mb	x															
Hymenaster platyacanthus Ludwig, 1905	2487–2877										x			x	x			
Hymenaster quadrispinosus Fisher, 1905	778–3240	mb								x	x					x		
Hymenaster trias H. L. Clark, 1920	5203	mb														x		
Hymenaster violaceus Ludwig, 1905											x							

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Order Spinulosida																		
Family Echinasteridae																		
Echinaster (Echinaster) parvispinus A. H. Clark, 1916	18–28	rb	x															
Echinaster (Othilia) aculeata (Gray, 1840)	3–24	sb						x	x									
Echinaster (Othilia) spinulosus Verrill, 1869	1–55	cr,mb,rb										x						
Echinaster (Othilia) tenuispinus Verrill, 1871	0–18	rb	x															
Echinaster cribella Lütken, 1871																x		
Echinaster cylindricus Meissner, 1892																x		
Echinaster panamensis Leipoldt, 1895											x							
Henricia aspera Fisher, 1906	487–570	rb	x															
Henricia asthenactis Fisher, 1910	91–1250	rb	x															
Henricia clarki Fisher, 1910	226–2001	rb	x	x														
Henricia gracilis (Ludwing, 1905)	267–1244	rb												x				
Henricia leviuscula (Stimpson, 1857)	0–228	rb	x															
Henricia nana (Ludwig, 1905)	57–200	rb	x											x				

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Henricia obesa (Sladen, 1889)	22–940	rb												x		x	x	
Henricia seminudus (A. H. Clark, 1916)	666	rb	x	x														
Henricia studeri Perrier, 1891	0–430	rb,sb,rub														x	x	
Order Forcipulatida																		
Family Asteriidae																		
Anasterias antarctica (Lütken, 1857)	0–350	rb															x	
Anasterias pedicellaris (Köehler, 1923)	0–120	sb															x	
Anasterias spirabilis (Bell, 1881)	34–54																x	
Anasterias varium (Philippi, 1870)	0–350	rb															x	
Astrometis sertulifera (Xantus, 1860)	11–156	cr,rb	x											x		x		
Astrostole platei (Meissner, 1896)	0–20	rb																x
Astrostole paschae (H. L. Clark, 1920)		rb																x
Coronaster marchenus Ziesenhenne, 1942	52–84	cr,rb,rub	x							x				x	x			
Cosmasterias lurida (Philippi, 1858)	0–650	mb,rb,sb															x	
Diplasterias brandti (Bell, 1881)	0–500	mb,rb,sb															x	
Distolasterias robusta (Ludwig, 1905)	3334											x	x	x				

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Evasterias troscheli (Stimpson, 1862)														x				
Leptasterias pusilla Fisher, 1930	37	rb	x															
Meyenaster gelatinosus (Meyen, 1834)	0–22	rb									x					x	x	
Pisaster brevispinus (Stimpson, 1857)	0–102	rb	x															
Pisaster giganteus (Stimpson, 1857)	0–374	rb	x															
Pisaster ochraceus (Brandt, 1835)	0–8	rb	x								x							
Rathbunaster californicus Fisher, 1906		rb	x															
Sclerasterias alexandri (Ludwig, 1905)	61–384									x	x	x	x		x			
Sclerasterias heteropaes Fisher, 1924	18–457	rb	x							x								
Family Coscinasteridae																		
Psalidaster mordax Fisher, 1940	80–600	sb															x	
Family Heliasteridae																		
Heliaster canopus Perrier, 1875	intertidal	rb																x
Heliaster cumingii (Gray, 1840)	0–14	rb						x										
Heliaster helianthus (Lamarck, 1816)	0–20	rb,sb	x													x	x	
Heliaster kubiniji Xantus, 1860	0–20	rb	x											x		x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Heliaster microbrachius Xanthus, 1860	0–20	rb	x								x					x		
Heliaster polybrachius H. L. Clark, 1907	0–20	rb	x												x	x		
Heliaster solaris A. H. Clark, 1920		rb							x									
Labidiaster radiosus Lütken, 1871	5–450	rb															x	
Family Pedicellasteridae																		
Ampheraster hyperonchus (H. L. Clark, 1913)	0–520	rb,rub	x													x		
Hydrasterias improvisus (Ludwig, 1905)	1618–2418									x								
Tarsaster cocosanus (Ludwig, 1905)	245									x					x			
Tarsaster galapagensis (Ludwig, 1905)	704													x				
Family Pycnopodiidae																		
Pycnopodia helianthoides (Brandt, 1835)	0–455	rb	x															
Family Stichasteridae																		
Allostichaster capensis (Perrier, 1875)	0–100	rb															x	
Stichaster striatus Müller & Troschel, 1840	0–80	rb,sb,kf														x	x	
Family Zoroasteridae																		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Cnemidaster nudus (Ludwig, 1905)	1366–2600	mb,rb	x											x				
Cnemidaster wyvillii Sladen, 1889											x							
Myxoderma longispinum (Ludwig, 1905)	980–2418	mb,rb	x								x				x	x		
Myxoderma platyacanthum (H. L. Clark, 1913)	395–650	mb,rb	x															
Myxoderma qawashqari (Moyana & Larrain, 1976)	0–723	sb														x	x	
Myxoderma sacculatum (Fisher, 1905)	1000–1546	mb,rb	x															
Zoroaster magnificus Ludwig, 1905	3056–3667	mb,sb									x			x		x		
Zoroaster ophiurus Fisher, 1905	695–2226	mb,sb														x		
Order Brisingida																		
Family Brisingidae																		
Astrolirus panamensis (Ludwig, 1905)	48–2418									x	x	x	x	x				
Hymenodiscus monacantha H. L. Clark, 1920	4064	mb														x		
Hymenodiscus tenella (Ludwig, 1905)	2418													x				
Family Freyellidae																		
Freyastera benthophila (Sladen, 1889)	4064–4667	mb														x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Freyella insignis Ludwig, 1905	3182–3279										x	x	x		x			
Freyella pacifica Ludwig, 1905											x							
Freyella propinqua Ludwig, 1905															x			
Freyellaster scalaris (A. H. Clark, 1916)														x				
Class Ophiuroidea																		
Order Euryalida																		
Family Asteronychidae																		
Asteronyx excavata Lütken & Mortensen, 1899	266–1236	sb	x															
Asteronyx loveni Müller & Troschel, 1842	152–2663	cr,mb,sb	x								x			x				
Asteronyx longifissus Doederlein, 1927	266–1800		x															
Astrodia plana (Lütken & Mortensen, 1899)	717–3058										x	x	x	x				
Family Asteroschematidae																		
Asteroschema rubrum (Lyman, 1882)	350–731																x	
Asteroschema sublaeve Lütken & Mortensen, 1899	1271				x						x							
Family Gorgonocephalidae																		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Astrocaneum spinosum (Lyman, 1875)	4–183	cr,mb,sb,rb	x						x		x					x		
Astrodendrum galapagensis A. H. Clark, 1916	717													x				
Astrodictyum panamense (Verrill, 1867)	23559	cr,sb	x								x	x	x	x		x		
Astrotoma agassizii Lyman, 1875	2–1180	rb															x	
Gorgonocephalus chilensis (Philippi, 1858)	4–900	rb															x	
Gorgonocephalus diomedeae Lütken & Mortensen, 1899	1271										x							
Order Ophiurida																		
Family Ophiomyxidae																		
Ophiomyxa panamensis Lütken & Mortensen, 1899	60–293	rb,sb	x							x	x			x				
Ophiomyxa vivipara Studer, 1876	15–399	rb															x	
Ophiolycus nutrix (Mortensen, 1936)	70–4538	sb															x	
Family Amphiuridae																		
Amphilepis nuda Tommasi, 1976																x		
Amphilepis patens Lyman, 1879	384–4087	mb									x			x		x		
Family Amphiuridae																		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Amphicontus minutus Hill, 1940	9–22														x	x		
Amphichondrius granulatus (Lütken & Mortensen, 1899)	280–384	mb, sb	x								x				x			
Amphichondrius laevis Ziesenhenne, 1940	4–15	cr, rb	x		x													
Amphiodia assimilis (Lütken & Mortensen, 1899)	3334										x	x	x					
Amphiodia grisea (Ljungman, 1867)	54										x				x	x		
Amphiodia occidentalis (Lyman, 1860)	0–367	mb, sb	x								x							
Amphiodia oerstedi (Lütken, 1856)	0.2–1	mb,rb				x			x		x	x						
Amphiodia platyspina Nielsen, 1932	350	rb	x								x							
Amphiodia sculptilis Ziesenhenne, 1940	4–15	rb	x					x										
Amphiodia tabogae Nielsen, 1932	0–364	rb	x						x	x	x			x				
Amphiodia urtica (Lyman, 1860)	9–80	rb,sb	x						x									
Amphiodia violacea (Lütken, 1856)									x	x	x							
Amphiodia vicina H. L. Clark, 1940	64	mb							x									
Amphipholis elevata Nielsen, 1932	0–73	sb	x								x							

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Amphipholis granulata (Lütken & Mortensen, 1899)	280–384										x							
Amphipholis laevidisca H. L. Clark, 1909																x	x	
Amphipholis pugetana (Lyman, 1860)	4–1620	sb	x						x							x		
Amphipholis puntarenae (Lütken, 1856)	0–508	mb	x															
Amphipholis squamata (Delle Chiaje, 1828)	0–1200	cr,m,mb,sb,sg,rub,rb						x	x		x	x		x		x		
Amphioplus (Amphioplus) strongyloplax (H. L. Clark, 1911)	4–1408	mb,sb	x															
Amphioplus (Amphioplus) coniortodes H. L. Clark, 1918	1207	mb	x															
Amphioplus daleus (Lyman, 1879)	2690–3219	rb	x								x							
Amphioplus philohelminthius Ziesenhenne, 1940	15–73	mb														x		
Amphioplus magellanica (Mortensen, 1936)	35–174																x	
Amphioplus textilis (Koehler, 1907)																	x	
Amphiura anomala Lyman, 1875	300–1500																	x

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Amphiura arcystata H. L. Clark, 1911	6–849	mb,rb,sb	x							x	x			x				
Amphiura eugeniae Ljungman, 1867	0–582																x	
Amphiura (Amphiura) diomedeae Lütken & Mortensen, 1899	44–3017	sb							x		x			x		x		
Amphiura (Amphiura) magellanica Ljungman, 1867	0–300																x	
Amphiura (Ophionema) hexacantha Nielsen, 1932											x							
Amphiura calbuca Mortensen, 1952	0–300																x	
Amphiura carchara H. L. Clark, 1911	1587	mb,rb,sb	x															
Amphiura gastracantha Lütken & Mortensen, 1899	1207	mb,sb	x															
Amphiura gymnogastra Lütken & Mortensen, 1899	549–2323										x			x				
Amphiura gymnopora Lütken & Mortensen, 1899	333										x							
Amphiura notacantha Lütken & Mortensen, 1899	1236	mb,sb	x															
Amphiura otteri Ljungman, 1872	80	rb	x															

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Amphiura polyacantha Lütken & Mortensen, 1899	1271										x			x				
Amphiura papillata Lütken & Mortensen, 1899	702													x				
Amphiura princeps Koehler, 1907	0–300																x	
Amphiura seminuda Lütken & Mortensen, 1899	9–4096	rb,sb	x															
Amphiura serpentina Lütken & Mortensen 1899	770–1865										x			x				
Amphiura verticillata Ljungman, 1867														x				
Microphiopholis geminata (Le Conte, 1851)	0–82	mb,rb,sb	x			x			x		x	x						
Microphiopholis platydisca (Nielsen, 1932)	0–137	mb,sb	x			x			x		x			x				
Microphiopholis puntarenae (Lütken, 1856)									x					x				
Ophiocnida californica Ziesenhenne, 1940	6–302	mb,rb,sb	x															
Ophiocnida hispida (Le Conte, 1851)	0–794	cr,rb									x					x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Ophiophragmus chilensis (Müller & Troschel, 1843)	0–40	rb,sb														x	x	
Ophiophragmus disacanthus Ziesenhenne, 1940														x				
Ophiophragmus marginatus (Lütken, 1856)	0–134	sb	x						x	x	x			x		x		
Ophiophragmus ophiactoides Ziesenhenne, 1940									x		x	x						
Ophiophragmus paucispinus Nielsen, 1932	0–134									x	x			x				
Ophiophragmus stellatus Ziesenhenne, 1940	18–73															x		
Ophiophragmus tabogensis Nielsen, 1932	0–128	sb	x						x		x			x	x			
Ophiostigma tenue Lütken, 1856	1–101	rb	x								x	x						
Triplodia abdita (A. M. Clark, 1970)										x								
Family Hemieuryalidae																		
Amphigyptis perplexa Nielsen, 1932	0–143	mb,rb,sb	x															
Ophiochondrus stelliger Lyman, 1879	73–439																x	
Sigsbeia laevis Ziesenhenne, 1940	55–64										x							

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Sigsbeia lineata Lütken & Mortensen, 1899	43–183	rb								x	x			x				
Family Ophiacanthidae																		
Subfamily Ophiacanthinae																		
Ophiacantha antarctica Koehler, 1900	90–4004	sb															x	
Ophiacantha bathybia H. L. Clark, 1911	1993	rb	x															
Ophiacantha contigua Lütken & Mortensen, 1899	1062–1644										x	x	x					
Ophiacantha cosmica Lyman, 1878	147–4840	mb,rb,sb	x								x					x	x	
Ophiacantha costata Lütken & Mortensen, 1899	733–1271	mb,sb	x								x				x			
Ophiacantha cyrena A. H. Clark, 1916	717													x				
Ophiacantha deruens Koehler, 1899																	x	
Ophiacantha diplasia H. L. Clark, 1911	9–1408	cr,mb,sb	x															
Ophiacantha frigida Koehler, 1909	1667–3914																x	
Ophiacantha hirta Lütken & Mortensen, 1899	1244–1548	mb,sb	x															
Ophiacantha inconspicua Lütken & Mortensen, 1899	702–1485										x			x				

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Ophiacantha marsupialis Lyman, 1878																		x
Ophiacantha moniliformis Lütken & Mortensen, 1899	519–1244	mb,sb	x	x														
Ophiacantha pacifica Lütken & Mortensen, 1899	2877														x			
Ophiacantha paucispina Lütken & Mortensen, 1899	2690										x							
Ophiacantha pentacrinus Lütken, 1869	434–598	sb	x															
Ophiocantha phragma Ziesenhenne, 1940	13–644	rb,sb	x							x	x	x		x				
Ophiacantha quadrispina H. L. Clark, 1917	183–549	rb												x				
Ophiacantha rhachophora H. L. Clark, 1911	115–1552	mb,rb,sb	x															
Ophiacantha rosea Lyman, 1878	32–1538	rb,sb															x	
Ophiacantha savagica Tommasi, 1976	1171–1180														x			
Ophiacantha sentosa Lyman, 1878	2067–5203	mb														x	x	
Ophiacantha similis A. H. Clark, 1916	717													x				
Ophiacantha spinifera Lütken & Mortensen, 1899	999–1865										x							

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Ophiacantha vivipara Ljungman, 1870	0–1097	rb,kf															x	
Ophiolebes mortenseni A. H. Clark, 1916	717													x				
Ophiotreta valenciennesi valenciennesi (Lyman, 1879)	549													x				
Subfamily Ophiohelinae																		
Ophiotholia spathifer (Lyman, 1879)														x				
Subfamily Ophioplinthacinae																		
Ophiomitrella chilensis Mortensen, 1952	25–300																x	
Ophiophthalmus normani (Lyman, 1879)	51–2600	mb,rb,sb	x						x									
Ophiothamnus dupla Tommasi, 1976	1171–1180														x			
Ophiurothamnus laevis (Lütken & Mortensen, 1899)	1008													x				
Subfamily Ophiotominae																		
Ophiotoma paucispina (Lütken & Mortensen, 1899)	1643–4082	mb			x					x					x	x		
Ophiolimna antarctica (Lyman, 1879)	88–2750																x	

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Family Ophiactidae																		
Hemipholis cordifera Bosc, 1802	18–34	cr	x								x							
Hemipholis gracilis Verrill, 1867	34	mb	x			x		x	x		x				x	x		
Histampica duplicata (Lyman, 1875)	125–2870	cr,mb,rb	x								x	x	x	x				
Ophiactis asperula (Philippi, 1858)	0–576	rb,kf														x	x	
Ophiactis kroeyeri Lütken, 1856	0–60	rb,sb,mb,rub				x										x	x	
Ophiactis savignyi (Müller & Troschel, 1842)	0–518	cr,m,rb,sg,rub	x	x		x		x	x	x	x	x	x	x		x		
Ophiactis simplex (Le Conte, 1851)	0–302	cr,rb	x					x	x	x	x	x	x	x		x		
Ophiactis plana Lyman, 1869												x	x	x				
Ophiactis profundi Lütken & Mortensen, 1899	1008													x				
Ophiopholis bakeri McClendon, 1909	9–1006	cr,rb	x															
Family Ophiochitonidae																		
Ophiochiton carinatus Lütken & Mortensen, 1899	589–1355	sb,rub	x								x							
Ophiochiton fastigatus Lyman, 1878	733														x			

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Family Ophiocomidae																		
Ophiocoma aethiops Lütken, 1859	0–30.5	cr,rb,sb	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
Ophiocoma alexandri Lyman, 1860	0–70	cr,rb,sb	x	x	x	x	x	x	x	x	x	x	x	x	x			
Ophiocoma dentata Müller & Troschel, 1842																		x
Ophiocoma erinaceus Müller & Troschel, 1842	8								x									
Ophiocoma longispina H. L. Clak, 1917																		x
Ophiocomella schmitti A. H. Clark, 1939	5–40	cr,rb	x									x		x				
Ophiocomella sexradia (Duncan, 1887)		cr,rb								x	x							
Ophiocomina nigra (Abildgaard, in O.F. Müller, 1789)	236–549	sb												x				
Ophiopsila californica A. H. Clark, 1921	33–201	rb	x															
Family Ophiodermatidae																		
Diopederma danianum (Verrill, 1867)	7–137	cr,mb,rb,sb	x			x			x	x	x							
Ophiocrytus granulosus Nielsen, 1932	0–79	rb,sg	x							x								
Ophioderma appressa (Say, 1825)	0–20	cr,rb							x									
Ophioderma elaps Lütken, 1856														x				

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Ophioderma panamense Lütken, 1859	0–20	cr,rb,sb	x			x		x	x	x	x	x		x	x	x		
Ophioderma pentacantha H. L. Clark, 1917	183				x									x				
Ophioderma teres (Lyman, 1860)	0–54	cr,rb,sb	x			x		x	x		x	x		x		x		
Ophioderma vansyoci Hendler, 1996	15.2–27	rb	x															
Ophioderma variegatum Lütken, 1856	0–110	mb,rb,sb	x	x				x	x	x	x			x				
Ophioderma sodipallaresi Caso, 1986	4–9	rb,sb	x															
Ophiopaepale diplax (Nielsen, 1932)	0–230	mb,sb	x						x		x							
Ophiuroconis bispinosa Ziesenhenne, 1937	4–143	sb	x	x										x				
Family Ophionereididae																		
Ophionereis albomaculata E.A. Smith, 1877	73–155									x	x			x				
Ophionereis annulata (Le Conte, 1851)	0–229	cr,rb,sb	x	x		x			x	x	x	x		x		x		
Ophionereis dubia (Müller & Troschel, 1842)											x							
Ophionereis eurybrachiplax H. L. Clark, 1911		mb								x								

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Ophionereis perplexa Ziesenhenne, 1940	0–73	cr,rb	x									x		x	x			
Ophionereis porrecta Lyman, 1860	0–30	rb												x				
Ophionereis schayeri (Müller & Troschel, 1844)																		x
Family Ophiotrichidae																		
Ophiothrix galapagensis Lütken & Mortensen, 1899	0–549	cr,mb,rb,sb	x											x				
Ophiothela gracilis Nielsen, 1932	7–9	cr,rb	x						x		x							
Ophiothela mirabilis Verrill, 1867	5–20	cr,mb,rb	x			x			x		x	x	x	x		x		
Ophiothrix magnifica Lyman, 1860	0–20	cr,mb,rb,sb												x		x		
Ophiothrix rudis Lyman, 1874	0–1	rb,cr,sb				x												
Ophiothrix spiculata Le Conte, 1851	0–2059	cr,mb,rb,sb	x			x		x	x	x	x	x		x	x	x		
Family Ophiuridae																		
Subfamily Ophiolepidinae																		
Ophiolepis crassa Nielsen, 1932	6–230	mb,rb,sb	x								x							
Ophiolepis grisea H. L. Clark, 1940	7–13	mb			x	x	x	x	x		x							
Ophiolepis pacifica Lütken, 1856	0–18	cr,rb	x						x		x							

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Ophiolepis plateia Ziesenhenne, 1940	1–12	cr,rb,sb,rub	x						x			x						
Ophiolepis variegata Lütken, 1856	1–110	cr,mb,sb	x			x			x		x	x						
Ophiomusium glabrum Lütken & Mortensen, 1899	878–5203	mb,rb,sb	x							x	x	x	x	x	x	x		
Ophiomusium diomedeae Lütken & Mortensen, 1899	702–1485													x				
Ophiomusium lymani Thomson, 1873	51–2906	mb,sb	x							x	x	x	x	x				
Ophiomusium variabile Lütken & Mortensen, 1899	267–902	mb,rb	x	x														
Ophioplocus esmarki Lyman, 1874	0–74	rb,sg	x															
Ophioplocus hancocki Ziesenhenne, 1935					x													
Ophiosphalma jolliense (McClendon, 1909)	17–1230	mb,rb,sb	x		x									x				
Ophiozonella alba (Lütken & Mortensen, 1899)	1408–2487									x				x	x			
Ophiozonella clypeata (Lyman, 1883)														x				
Ophiozonella contigua (Lütken & Mortensen, 1899)	2417–2487													x	x			
Ophiozonella falklandica Mortensen, 1936																	x	

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Subfamily Ophioleucinae																		
Ophiernus adspersus adspersus Lyman, 1883	770–1245	mb,sb	x								x					x		
Ophiernus adspersus annectens Lütken & Mortensen, 1899	770–1158													x				
Ophiernus polyporum Lütken & Mortensen, 1899	1207–1244		x															
Ophiernus seminudus Lütken & Mortensen, 1899	840–4082	mb,sb									x			x		x		
Subfamily Ophiurinae																		
Amphiophiura abcisa (Lütken & Mortensen, 1899)	245–3714	rb,sb								x	x					x		
Amphiophiura irregularis Ziesenhenne, 1940														x				
Amphiophiura obtecta (Lütken & Mortensen, 1899)	2197											x	x	x				
Amphiophiura oligopora (H. L. Clark, 1913)	1152	mb	x															
Amphiophiura paucisquama Ziesenhenne, 1940														x				
Amphiophiura superba (Lütken & Mortensen, 1899)	51–1820	mb	x															

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Amphiophiura vemae Kyte, 1987	3739–4124															x		
Gymnophiura concava Tommasi, 1976																x		
Gymnophiura mollis Lütken & Mortensen, 1899	2417–2487										x			x	x			
Ophiocten amitinum Lyman, 1878	29–920	rb,sb,kf															x	
Ophiocten hastatum Lyman, 1878	1159–2877								x	x	x	x	x	x	x			
Ophiogona doederleini (Koehler, 1901)																	x	
Ophionotus victoriae Bell, 1902	5–752	mb,rb,sb															x	
Ophiomastus bulufonica Tommasi, 1976	1171–1180														x			
Ophiomastus molinae Castillo-Alarcon, 1968	intertidal	rb															x	
Ophiomastus tuberculata Tommasi, 1976	1171–1180														x			
Ophiomisidium leurum Ziesenhenne, 1940														x				
Ophiosteira koehleri A. H. Clark, 1917	733														x			
Ophiophyllum marginatum A. H. Clark, 1916	717													x				

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Ophioplinthus divisa (Lütken & Mortensen, 1899)	2075–2487													x				
Ophioplinthus inflata (Koehler, 1897)	1484													x				
Ophioplinthus inornata (Lyman, 1878)	1485–2418													x			x	
Ophioplinthus nexila (Kyte, 1987)											x							
Ophiotypa simplex Koehler, 1897	3652–3811															x		
Ophiura (Ophiuroglypha) irrorata irrorata (Lyman, 1878)	405-5869	mb,sb	x							x	x	x	x	x	x	x		
Ophiura flagellata (Lyman, 1878)	128–2014	mb	x											x				
Ophiura leptoctenia H. L. Clark, 1911	27–3239	sb,rub	x															
Ophiura luetkenii (Lyman, 1860)	0–1097	mb,rb,sb	x	x														
Ophiura lymani (Ljungman, 1871)	30–800	rb,sb,kf															x	
Ophiura nana (Lütken & Mortensen, 1899)	1650									x								
Ophiura plana (Lütken & Mortensen, 1899)	2070–3241				x						x	x	x	x	x			

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Ophiura stenobrachia H. L. Clark, 1917	3667														x	x		
Theodoria madseni Tommasi, 1976																x		
Class Echinoidea																		
Order Cidaroida																		
Family Cidaridae																		
Austrocidaris canaliculata (A. Agassiz, 1863)	1–845	rb, sb															x	
Austrocidaris spinulosa Mortensen, 1910	13–641																x	
Centrocidaris doederleini (A. Agassiz, 1898)	87–550	sb								x	x			x		x		
Eucidaris thouarsii (Valenciennes, 1846)	0–150	cr,mb,rb,sb	x	x		x		x	x	x	x	x	x		x	x		
Eucidaris thouarsii galapagensis Doederlein, 1887	0–150	rb								x				x				
Hesperocidaris asteriscus H. L. Clark, 1948	2–183	cr,mb,rb,sb	x						x		x	x	x			x		
Hesperocidaris dubia (H. L. Clark, 1907)	55–600								x	x	x				x			
Hesperocidaris houstonianus H. Clark, 1939	45													x				
Hesperocidaris panamensis (A. Agassiz, 1898)	48–274								x	x	x				x			

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Hesperocidaris perplexa (H. L. Clark, 1907)	10–1500	rb,mb,sb	x	x							x	x			x	x		
Family Ctenocidaridae																		
Aporocidaris milleri (A. Agassiz, 1898)	300–3937	mb,rb,sb	x								x	x	x	x				
Family Histocidaridae																		
Histocidaris cobosi (A. Agassiz, 1898)	702													x				
Order Echinothurioida																		
Family Echinothuriidae																		
Araeosoma eurypatum A. Agassiz & H. L. Clark, 1909	1227													x				
Araeosoma leptaleum A. Agassiz & H. L. Clark, 1909	740–1046	rb									x			x				
Tromikosoma hispidum (A. Agassiz, 1898)	1820–3375	rb,sb	x							x	x	x	x	x	x			
Tromikosoma panamense (A. Agassiz, 1898)	2054–3374	mb,rb	x								x	x	x					
Family Kamptosomatidae																		
Kamptosoma asterias (A. Agassiz, 1881)	1020–1278	mb														x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Order Diadematoida																		
Family Aspidodiadematidae																		
Plesiodiadema globulosum (A. Agassiz, 1898)	2830–3900	mb										x	x			x		
Plesiodiadema horridum (A. Agassiz, 1898)	1625–3381									x		x	x	x	x			
Family Diadematidae																		
Astropyga pulvinata (Lamarck, 1816)	0–90	cr,mb,rb,sb	x			x		x	x	x	x	x		x	x	x		
Centrostephanus coronatus (Verrill, 1867)	0–125	cr,rb,sb	x						x	x		x	x	x	x	x		
Centrostephanus rodgersii (A. Agassiz, 1863)																	x	
Centrostephanus sylviae Fell, 1975																	x	
Diadema mexicanum A. Agassiz, 1863	0–113	mb,cr,rb,sb	x	x		x		x	x	x	x	x	x	x	x	x		
Diadema paucispinum (A. Agassiz, 1863)																		x
Diadema savignyi Michelin, 1845	1–3	rb, sb																x
Echinothrix calamaris (Pallas, 1774)	0–46	cr,rb								x								
Echinothrix diadema (Linnaeus, 1758)	3–5	cr								x								
Order Pedinoida																		
Family Pedinidae																		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Caenopedina diomedeae Mortensen, 1939	723–850				x													
Order Salenioida																		
Family Saleniidae																		
Salenocidaris miliaris (A. Agassiz, 1898)	1159–3376									x	x	x	x	x				
Order Arbacioida																		
Family Arbaciidae																		
Arbacia dufresnii (Blainville, 1825)	0–315	rb															x	
Arbacia spatuligera (Valenciennes, 1846)	0–50	sb,rb,mb														x	x	
Arbacia stellata (Blainville, 1825)	0–92	cr,mb,rb, sb	x			x		x	x		x	x	x	x	x	x		
Dialithocidaris gemmifera A. Agassiz, 1898	3193–3279										x	x						
Tetrapygus niger (Molina, 1872)	0–25	rb,sb														x	x	
Order Camarodonta																		
Family Parechinidae																		
Loxechinus albus (Molina, 1782)	0–340	rb														x	x	
Order Temnopleuroida																		
Family Temnopleuridae																		
Pseudechinus magellanicus (Philippi, 1857)	0–820	rb, kf														x	x	

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Family Toxopneustidae																		
Lytechinus anamesus H. L. Clark, 1912	1–207	cr,mb,rb,sb	x															
Lytechinus panamensis Mortensen, 1921											x							
Lytechinus pictus (Verrill, 1867)	0–300	cr,rb,mb,sb	x							x		x	x	x				
Lytechinus semituberculatus (Valenciennes in L. Agassiz, 1846)	0–134	rb,cr,sb												x	x	x		
Tripneustes depressus A. Agassiz, 1863	0–75	cr,rb,sb	x	x				x	x	x	x	x	x	x	x	x		x
Tripneustes gratilla (Linnaeus, 1758)	1–6	rb			x	x												
Toxopneustes roseus (A. Agassiz, 1863)	0–55	cr,rb,sb,mb	x			x		x	x	x	x	x	x	x	x	x		
Family Strongylocentrotidae																		
Allocentrotus fragilis Jackson, 1912	50–1200	mb,rb,sb	x															
Strongylocentrotus franciscanus (A. Agassiz, 1863)	4–84	rb,sb	x															
Strongylocentrotus purpuratus (Stimpson, 1857)	0–161	mb,rb	x															
Order Echinoida																		
Family Echinidae																		
Family Echinometridae																		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Caenocentrotus gibbosus (L. Agassiz & Desor, 1846)	0–35	rb												x	x	x		
Echinometra insularis H. L. Clark, 1912	0–50	rb,sb	x														x	x
Echinometra mathaei (Blainville, 1825)																x		
Echinometra oblonga (Blainville, 1825)	0–34	cr,rb	x	x						x				x	x			
Echinometra vanbrunti A. Agassiz, 1863	0–106	cr,rb,sb	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
Echinostrephus aciculatus A. Agassiz, 1863																		x
Order Clypeasteroida																		
Family Clypeasteridae																		
Clypeaster elongatus H. L. Clark, 1948	10	sb												x				
Clypeaster europacificus H. L. Clark, 1914	0–402	mb,sb,rb	x	x					x	x	x			x		x		
Clypeaster ochrus H. L. Clark, 1914	0–162	rb,sb	x	x					x	x	x			x				
Clypeaster reticulatus Linnaeus, 1758																		x
Clypeaster rotundus (A. Agassiz, 1863)	0–92	rb,sb,mb	x		x	x	x	x	x	x	x			x				
Clypeaster speciosus Verrill, 1870	0–128	rb,sb	x							x	x			x				
Family Dendrasteridae																		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Dendraster excentricus (Eschscholtz, 1831)	0–232	mb,rb,sb	x															
Dentraster laevis H. L. Clark, 1948	13–22	sb	x															
Dendraster mexicanus H. L. Clark, 1948	0–30	sb	x															
Dendraster vizcainoensis Grant & Hertlein, 1938	0–30	sb	x															
Family Mellitidae																		
Encope cocosi H. L. Clark, 1948	4–15	sb								x								
Encope ecuadorensis H. L. Clark, 1948	1–3	sb										x						
Encope grandis L. Agassiz, 1841	0–120	sb	x		x	x	x	x				x						
Encope insularis H. L. Clark, 1948	1–10	sb										x						
Encope irregularis H. L. Clark, 1948	0–36.6	sb									x	x						
Encope laevis H. L. Clark, 1948	0–7	sb						x	x		x	x						
Encope michelini L. Agassiz, 1841	3–90	sb							x									
Encope micropora L. Agassiz, 1841	0–82	mb,sb	x			x		x	x	x	x	x		x	x	x		
Encope micropora ecuadorensis H. L. Clark, 1948	1–5	sb										x			x			
Encope micropora insularis H. L. Clark, 1948	1–10	sb										x						

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Encope micropora irregularis H. L. Clark, 1948	1	sb										x						
Encope micropora tetrapora L. Agassiz, 1841	3	sb												x				
Encope pacifica (Verrill, 1867)	0–40	sb														x		
Encope perspectiva L. Agassiz, 1841	8–27	mb,sb	x						x		x			x				
Encope wetmorei A. H. Clark, 1946	1–45	sb	x						x		x	x						
Mellita grantii Mortensen, 1948	0–10	sb	x								x							
Mellita kanakoffi Durham, 1961	0–102.9	sb	x						x		x							
Mellita longifissa Michelin, 1858	0–60	sb	x		x	x	x	x	x		x	x			x	x		
Mellita notabilis H. L. Clark, 1947	0.5–0.9	sb	x			x		x			x							
Mellitella stokesii (L. Agassiz, 1841)	0–10	sb, mb				x			x					x	x	x		
Order Cassiduloida																		
Family Cassidulidae																		
Rhyncholampas pacificus (A. Agassiz, 1863)	6–134	rb,sb	x						x		x			x				
Order Holasteroida																		
Family Pourtalesiidae																		
Cystocrepis setigera (A. Agassiz, 1898)	3182														x			

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Pourtalesia tanneri A. Agassiz, 1898														x				
Familly Urechinidae																		
Cystechinus loveni A. Agassiz, 1898					x													
Pilematechinus rathbuni (A. Agassiz, 1898)	3374											x	x					
Urechinus naresianus A. Agassiz, 1879	755–4400										x							
Order Spatangoida																		
Family Aeropsidae																		
Aeropsis fulva (A. Agassiz, 1898)	1455–5200	mb								x	x				x	x		
Family Brissidae																		
Brissopsis columbaris A. Agassiz, 1898	589–3279	mb,sb	x								x			x				
Brissopsis pacifica (A. Agassiz, 1898)	9–237	sb,mb,rb	x						x	x	x			x		x		
Brissus agassizii Doederlein, 1885																		x
Brissus obesus Verrill, 1867	0–240	sb,cr,rb	x						x		x	x	x	x	x			
Brissus latecarinatus (Leske, 1778)														x				
Meoma frangibilis Chesher, 1970	96										x							
Meoma ventricosa grandis Gray, 1851	0–200	sb	x	x					x	x	x			x				
Metalia nobilis Verrill, 1867	0–18	sb	x								x							

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Metalia spatagus (Linnaeus, 1758)			x															
Rhabdobrissus pacificus H. L. Clark, 1940	6–137	sb,mb,sb	x							x	x							
Family Hemiasteridae																		
Hemiaster tenuis (A. Agassiz, 1898)	980–4027										x	x	x			x		
Family Loveniidae																		
Homolampas hastata A. Agassiz, 1898	1785–3376									x	x	x	x					
Lovenia cordiformis A. Agassiz, 1872	0–210	mb,sb	x							x	x			x	x	x		
Family Macropneustidae																		
Argopatagus aculeata (A. Agassiz, 1898)	1952									x								
Family Maretiidae																		
Nacospatangus oblonga (Mortensen, 1950)														x				
Family Palaeotropidae																		
Scrippsechinus fisheri Allison, Durham & Mintz, 1967	270–460															x		
Family Prenasteridae																		
Tripylus excavatus Philippi, 1845	0–130																x	
Family Schizasteridae																		
Abatus cavernosus (Philippi, 1845)	0–760																x	

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Abatus philippii Lovén, 1871	27–804																x	
Aceste ovata A. Agassiz & H. L. Clark, 1907																x		
Agassizia scrobiculata Valenciennes, 1846	0–209	mb,rb,sb	x			x		x	x		x			x	x	x		
Brisaster latifrons (A. Agassiz, 1898)	9–2817	mb,sb	x								x			x				
Brisaster moseleyi (A. Agassiz, 1881)	124–730																x	
Brisaster townsendi (A. Agassiz, 1898)																x		
Moira atropos clotho Michelin, 1855	10–40	mb,sb	x						x		x							
Schizaster rotundatus (Doederlein, 1906)														x				
Tripylaster philippii (Gray, 1851)	0–100	sb															x	
Family Spatangidae																		
Spatangus californicus H. L. Clark, 1917	10–644	mb,rb,sb	x															
Class Holothuroidea																		
Order Dendrochirotida																		
Family Cucumariidae																		
Abyssocucumis abyssorum (Théel, 1886)	3241–4000									x	x	x	x					
Abyssocucumis albatrossi Cherbonnier, 1947	1585–5690															x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Cucumaria chilensis Ludwig, 1875	32–162															x		
Cucumaria flamma Solís-Marín & Laguarda-Figueras, 1999	0–15	rb	x					x	x		x				x	x		
Cladodactyla crocea (Lesson, 1830)	0–4300	sb															x	
Heterocucumis godeffroyi (Semper, 1868)	0–379	rb,sb														x	x	
Hemioedema spectabilis (Ludwig, 1882)	14642	sb															x	
Leptopentacta nina Deichmann, 1941											x							
Leptopentacta nova Deichmann, 1941											x							
Leptopentacta panamica Deichmann, 1941											x							
Neocucumis panamensis Heding & Panning, 1954											x							
Neocucumis veleronis (Deichmann, 1941)	0–22	rb	x								x					x		
Pattalus mollis Selenka, 1868	0–45	rb														x	x	
Pentacta panamensis Verrill, 1867											x							
Pseudocnus californicus (Semper, 1868)	0–190	cr,rb,sb	x		x	x	x	x	x		x					x		
Pseudocnus dubiosus (Semper, 1868)	0–300	rb,sb							x									

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Pseudocnus dubiosus leoninus (Semper, 1868)	0–300	rb,sb														x	x	
Pseudocnus perrieri (Eckman, 1927)	0–197	rb,sb															x	
Staurocucumis abyssorum (Théel, 1886)	1587–4088	mb,rb	x												x	x		
Stereoderma laevigata Verrill, 1876																	x	
Thyonella mexicana (Deichmann, 1941)	10–35	sb,rub	x								x							
Trachythyone lechleri (Lampert, 1885)	5–238	rb															x	
Trachythyone peruana (Semper, 1868)	5–42	rb	x													x		
Family Phyllophoridae																		
Allothyone mexicana (Deichmann, 1946)											x					x		
Athyonidium chilensis (Semper, 1868)	0–13	sb,rb,kf														x	x	
Euthyonidium ovulum Deichmann, 1938									x									
Euthyonidium veleronis Deichmann, 1937	0.3					x			x									
Pentamera beebei Deichmann, 1938	73								x									
Pentamera chierchia (Ludwig, 1887)	0–78	cr,sb,rb	x			x			x		x			x		x		
Pentamera chiloensis (Ludwig, 1887)	6–124	sb														x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Pentamera zacae Deichmann, 1938	24	mb,rb,sb				x					x					x		
Phyrella aculeata (Ludwig, 1894)											x							
Thyone bidentata Deichmann, 1941	2–30	cr,rb	x			x					x				x			
Thyone neofusus Deichmann, 1941														x				
Thyone parafusus Deichmann, 1941	25–35	mb,sb	x															
Thyone strangeri Deichmann, 1941	0–12	rb	x															
Family Psolidae																		
Lissothuria hancocki (Deichmann, 1941)	1–301	rb	x															
Lissothuria mortenseni Pawson, 1967											x							
Lissothuria ornata Verrill, 1867	0–37	cr,rb	x			x		x	x	x	x							
Lissothuria veleronis (Deichmann, 1941)														x				
Neopsolidium convergens (Herouard, 1901)	15	kf															x	
Psolidium disciformis (Théel, 1886)	8–448	rb															x	
Psolidium dorsipes Ludwig, 1886	11–451	cr,mb,rb,sb	x								x					x	x	
Psolidium ekmani Deichmann, 1941											x							

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Psolidium eubullatum Deichmann, 1941											x							
Psolidium gracile Ludwig, 1894	2323										x							
Psolidium panamense Ludwig, 1894	2323										x							
Psolidium planum Deichmann, 1941	16–110															x		
Psolus antarcticus Philippi, 1857	6–1080	rb															x	
Psolus chitonoides H. L. Clark, 1901	0–247	rb	x															
Psolus digitatus Ludwig, 1894	1271										x							
Psolus diomedeae Ludwig, 1894	13–302	rb,sb	x							x	x			x				
Psolus paradubiosus Carriol & Féral, 1985	10–567	rb															x	
Psolus patagonicus Ekman, 1925	0–110	rb,kf															x	
Psolus squamatus (Koren, 1844)	7–1087	rb	x														x	
Psolus squamatus segregatus Perrier, 1905	7–207	rb															x	
Family Sclerodactylidae																		
Afrocucumis ovulum (Selenka, 1867)	0–7	rb,cr	x			x					x					x		
Apentamera lepra Deichmann, 1941	55–91	sb	x								x							

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Athyone glasselli (Deichmann, 1936)	0–6	sb	x															
Euthyonidiella zacae (Deichmann, 1938)	17–25	rb	x	x										x				
Neopentamera anexigua Deichmann, 1941	8–22	cr	x												x			
Neothyone gibber (Selenka, 1867)	0–50	cr,rb	x			x			x		x			x	x	x		
Neothyone gibbosa Deichmann, 1941	0–14	rb	x			x			x							x		
Neothyone panamensis (Ludwig, 1887)	0–8.6	rb									x					x		
Pachythyone lugubris (Deichmann, 1939)		cr,rb												x				
Pachythyone pseudolugubris Deichmann, 1941	12	cr,rb	x															
Order Dactylochirotida																		
Family Ypsilothuriidae																		
Ypsilothuria bitentaculata (Ludwig, 1893)	225–4082	mb,sb	x							x	x	x	x		x	x	x	
Order Aspidochirotida																		
Family Holothuriidae																		
Actinopyga mauritiana (Quoy & Gaimard, 1833)											x							
Holothuria (Cystipus) casoae Laguarda-Figueras & Solís-Marín, 2009	45–100	sb	x							x								

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Holothuria (Cystipus) inhabilis Selenka, 1867	1–203	cr,rb,sb	x			x				x	x	x		x		x		
Holothuria (Cystipus) rigida (Selenka, 1867)	0–22	mb,sb,rb	x			x			x		x			x				
Holothuria (Halodeima) atra (Jaeger, 1833)	5–26	mb,cr,rb,sb	x						x	x	x			x				
Holothuria (Halodeima) chilensis Semper, 1868																x		
Holothuria (Halodeima) inornata Semper, 1868	0–18	rb	x	x	x	x			x									
Holothuria (Halodeima) kefersteini (Selenka, 1867)	0–27	rb,sb,cr	x	x		x			x	x	x	x	x	x	x	x		
Holothuria (Lessonothuria) pardalis Selenka, 1867	0–306	cr,rb,mb,sb	x	x			x		x	x	x	x	x	x	x			
Holothuria (Mertensiothuria) hilla Lesson, 1830	0.3–52	cr,rb,sb	x	x					x	x	x	x	x	x				
Holothuria (Mertensiothuria) leucospilota (Brandt, 1835)	1–17	rb,sb	x	x						x	x	x	x	x				
Holothuria (Platyperona) difficilis Semper, 1868	0–100	mb,rb,sb,cr	x	x	x	x	x	x	x	x	x	x		x				
Holothuria (Platyperona) parvula (Selenka, 1867)	1–4											x	x					

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Holothuria (Selenkothuria) carere Honey-Escandón & Solís-Marín, 2011	0–6	rb	x											x				
Holothuria (Selenkothuria) lubrica Selenka, 1867	0–55	cr,rb,sb,mb	x	x		x			x		x	x		x		x		
Holothuria (Selenkothuria) portovallartensis Caso, 1954	0–59	cr,rb	x						x		x	x		x	x	x		
Holothuria (Selenkothuria) theeli Deichmann, 1938	0–55	rb	x							x	x			x		x		
Holothuria (Semperothuria) cinerascens (Brandt, 1835)																		x
Holothuria (Semperothuria) imitans Ludwig, 1875	0–22	rb,sb,cr	x	x				x	x	x	x	x		x	x	x		
Holothuria (Semperothuria) languens Selenka, 1867	0–91	rb,mb,sb	x						x		x			x				
Holothuria (Stauropora) pluricuriosa Deichmann, 1937	0–130	rb,cr,sb	x	x						x		x	x	x	x			
Holothuria (Theelothuria) paraprinceps Deichmann, 1937	0–64	cr,rb,sb	x							x	x							

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Holothuria (Thymiosycia) arenicola Semper, 1868	1–121	rb,sb,cr	x	x					x	x	x	x		x	x	x		
Holothuria (Thymiosycia) impatiens (Forskaal, 1775)	0–67	cr,rb,sb	x	x		x			x	x	x	x	x	x		x		
Holothuria (Vaneyothuria) zacae Deichmann, 1937	77–250	mb,rb,sb	x								x	x	x	x	x	x		
Labidodemas americanum Deichmann, 1938	0.5–16	rb,cr,sb	x	x		x			x	x	x			x				
Labidodemas maccullochi (Deichmann, 1958)	1–18	rb,sb,cr	x						x		x	x		x				
Family Stichopodidae																		
Apostichopus parvimensis (H. L. Clark, 1913)	0–36	mb,rb,sb	x															
Isostichopus fuscus (Ludwig, 1875)	0–61	cr,rb,mb,sb	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
Parastichopus californicus (Stimpson, 1857)	1–180	mb,rb	x															
Stichopus horrens Selenka, 1867	0–20	cr,rb,sb								x		x	x	x				
Stichopus monotuberculatus (Quoy & Gaimard, 1833)																		x
Family Synallactidae																		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Bathyplotes moseleyi (Théel, 1886)	24–690	mb,rb														x	x	
Bathyplotes natans (M. Sars, 1868) Östergren, 1896	1644											x	x					
Bathyplotes patagiatus Fisher, 1907	1644											x						
Capheira sulcata Ludwig, 1893	2877–4334	mb													x	x		
Meseres macdonaldi Ludwig, 1894	1644											x	x					
Meseres torvus (Théel, 1886)																	x	
Mesothuria (Mesothuria) multipes Ludwig, 1894	725–4064	mb								x	x			x		x		
Mesothuria (Zygothuria) lactea (Théel, 1886)																x		
Molpadiodemas atlanticus (R. Perrier, 1898)																x		
Molpadiodemas neovillosus O'Loughlin & Ahearn, 2005	2487–3667														x			
Molpadiodemas ustulatus O'Loughlin & Ahearn, 2005																x		
Molpadiodemas villosus (Théel, 1886)	3667														x			
Molpadiodemas violaceus (Théel, 1886)																x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Paelopatides confundens Théel, 1886	1571–4070	mb													x	x		
Paelopatides suspecta Ludwig, 1894	2323										x							
Pseudostichopus macdonaldi (Ludwig, 1894)	2149									x								
Pseudostichopus mollis Théel, 1886	100–5203	mb,sb								x	x	x	x	x		x		
Pseudostichopus peripatus (Sluiter, 1901)	1158–3667										x			x	x			
Synallactes aenigma Ludwig, 1894	2418–4334	mb,sb									x	x	x		x	x		
Synallactes alexandri Ludwig, 1894	589–1008										x			x				
Synallactes triplax A. H. Clark, 1920	549													x				
Synallactes virgulasolida Massin & Hendrickx, 2010	1030	mb	x															
Order Elasipodida																		
Family Deimatidae																		
Deima validum pacificum Ludwig, 1894	1618–2487	mb,sb								x				x	x	x		
Oneirophanta mutabilis affinis Ludwig, 1894	3241										x	x	x					
Oneirophanta mutabilis mutabilis Théel, 1879	3241–3670	mb										x	x			x		
Oneirophanta setigera (Ludwig, 1893)	3667–4088														x			

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Family Elpidiidae																		
Achlyonice ecalcarea Théel, 1879	1608–3587	mb,sb	x															
Amperima naresi (Théel, 1882)	2010–7130	mb														x		
Amperima vitjazi Gebruk, 1988																	x	
Elpidia atakama Belyaev, 1971	7720	mb														x		
Elpidia chilensis Belyaev, 1971	2710–4600	mb														x		
Peniagone anamesa (A. H. Clark, 1920)																x		
Peniagone diaphana (Théel, 1882)	4140–4160	mb														x		
Peniagone elongata (Théel, 1879)	4140–4160	mb														x		
Peniagone gracilis (Ludwig, 1894)	2487–4160	mb												x		x		
Peniagone intermedia Ludwig, 1893	2418–3667	mb													x	x		
Peniagone papillata Hansen, 1975											x							
Peniagone vitrea Théel, 1882	1160–4507	mb								x	x	x	x		x	x		
Scotoplanes clarki Hansen, 1975	3570–5107	mb	x													x		
Scotoplanes globosa Théel, 1879	545–6770	mb														x		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Family Laetmogonidae																		
Laetmogone theeli Ludwig, 1893	2418														x			
Laetmogone violacea Théel, 1879	466–5083																x	
Pannychia moseleyi Théel, 1882	199–2599	mb,sb	x								x			x		x		
Family Pelagothuridae																		
Enypniastes eximia Théel, 1882	4140–4160	pelagic														x		
Pelagothuria natatrix Ludwig, 1893	0–4505	pelagic								x	x	x	x	x	x	x		
Family Psychropotidae																		
Benthodytes incerta Ludwig, 1893	2418													x				
Benthodytes sanguinolenta Théel, 1882	978–2323	mb	x							x	x	x		x		x		
Benthodytes typica Théel, 1882	1158–4700	mb									x			x		x		
Psychronaetes hanseni Pawson, 1983	3852–4189	mb														x		
Psychropotes depressa (Théel, 1882)											x							
Psychropotes longicauda Théel, 1882	3334–4160	mb									x	x	x		x	x		
Psychropotes verrucosa (Ludwig, 1894)	2418–4160	mb									x			x	x	x		
Order Molpadiida																		

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Family Caudinidae																		
Ceraplectana trachyderma H. L. Clark, 1908	5203	mb														x		
Hedingia californica (Ludwig, 1894)	85–2850	sb,mb	x													x		
Paracaudina chilensis chilensis (Müller, 1850)	0–990	mb,sb							x								x	
Family Molpadiidae																		
Molpadia antarctica (Théel, 1886)	80–1218	mb,sb															x	
Molpadia intermedia (Ludwig, 1894)	53–2972	mb	x								x					x		
Molpadia granulata (Ludwig, 1894)	2690–5869	mb									x					x		
Molpadia musculus Risso, 1826	37–6134	mb,sb	x							x	x	x	x	x	x	x	x	
Molpadia spinosa (Ludwig, 1893)	3279										x							
Order Apodida																		
Family Chiridotidae																		
Chiridota aponocrita A. H. Clark, 1920	9–137	cr,rb,sb	x								x							
Chiridota pacifica Heding, 1928										x								
Chiridota pisanii Ludwig, 1886	0–228	mb,sb															x	
Chiridota rigida Semper, 1868	2–9	cr,rb,sb	x															

(continued)

Table A.1 (continued)

	Depth (m)	Habitat	MEX	REV	GUA	SAL	HON	NIC	CRC	COC	PAN	COL	MAL	GAL	ECU	PER	CHL	PAS
Taeniogyrus contortus (Ludwig, 1875)	0–560	mb,sb,kf															x	
Trochodota purpurea (Lesson, 1830)	0–36	rb,sb															x	
Family Myriotrochidae																		
Myriotrochus giganteus A. H. Clark, 1920	3667	mb													x	x		
Myriotrochus (Oligotrochus) bathybius A. H. Clark, 1920	3667	mb														x		
Family Synaptidae																		
Anapta fallax Lampert, 1889	0–350	sb															x	
Epitomapta tabogae Heding, 1928	0–10		x								x							
Euapta godeffroyi (Semper, 1868)	0–79	cr,rb,sb	x						x		x	x		x				
Polyplectana oculata Heding, 1928											x							
Protankyra abyssicola (Théel, 1886)																x		
Protankyra brychia (Verrill, 1885)	3900–4000										x	x	x			x		
Protankyra pacifica (Ludwig, 1894)	870–4990	mb									x	x				x		

Habitat classification: *cr* Coral Reefs, *m* mangroves, *mb* muddy bottom, *rb* rocky bottom, *sb* sandy bottom, *sg* seagrass, *rub* rubble bottom, *kf* kelp forest. Countries abbreviation: *MEX* Mexico, *REV* Revillagigedo Archipelago, *GUA* Guatemala, *SAL* El Salvador, *HON* Honduras, *NIC* Nicaragua, *CRC* Costa Rica, *COC* Cocos Island, *PAN* Panama, *COL* Colombia, *MAL* Malpelo Island, *GAL* Galapagos Archipelago, *ECU* Ecuador, *PER* Perú, *CHL* Chile, *PAS* Eastern Islands

Table A.2 Taxonomic list of the Echinoderms of the Atlantic Ocean and Caribbean Sea of Latin America and the Canary Islands

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Class Crinoidea																					
Order Comatulida																					
Family Antedonidae																					
Antedon bifida (Pennant, 1777)	0–400	rb,rub									x										x
Antedon nutingi (A. H. Clark, 1936)	364–429	rb															x				
Caryometra alope A. H. Clark, 1940	475–640	rb															x				
Caryometra atlantidis A. H. Clark, 1940	366–530	mb								x							x				
Caryometra lisa A. H. Clark, 1940	702	rb															x				
Caryometra monilicirra A. H. Clark, 1940																	x				
Caryometra spinosa A. H. Clark, 1940																	x				
Caryometra tenuipes (A. H. Clark, 1908)	386	rb															x			x	
Coccometra guttata A. H. Clark, 1918	288–480	mb,rb,rub	x							x							x				
Coccometra hagenii (Pourtalès, 1867)	14–1046	rb,rub	x														x				
Coccometra nigrolineata A. H. Clark, 1918	40–987	cr,rb,rub	x							x							x			x	
Comatonia cristata (Hartlaub, 1912)	50–396	cr,rb	x																		
Ctenantedon kinziei Meyer, 1972	Sep-49	cr		x					x	x											
Hypalometra defecta (Carpenter, 1888)	46–400	cr,mb,rb	x						x	x	x						x		x		
Isometra vivipara Mortensen, 1917	79–350	mb,sb,rub													x	x					
Leptometra celtica (M'Andrew & Barrett, 1858)																					x
Phrixometra nutrix (Mortensen, 1918)	137–150	mb,rb,sb													x	x					

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Poliometra prolixa (Sladen, 1881)	219																		x		
Trichometra cubensis (Pourtalès, 1869)	210–4829	mb,rb	x				x			x								x			
Zenometra columnaris (Carpenter, 1881)	309–1033	mb,rb	x															x			
Family Pentametrocrinidae																					
Pentametrocrinus atlanticus (Perrier, 1883)	860–1674	mb,sb																			x
Superfamily Comasteracea																					
Family Comasteridae																					
Comactinia echinoptera (Müller, 1840)	2–1033	cr,rb,sb,sg,rub	x		x	x	x	x	x	x	x	x	x				x	x	x	x	
Comactinia meridionalis meridionalis (L. Agassiz, 1865)	3–1033	cr,rb,sb	x			x	x		x	x	x	x					x	x	x	x	
Comactinia meridionalis hartlaubi Messing, 1978	58–373	cr,rb								x									x	x	
Comissia venustus (A. H. Clark, 1909)	24–479	cr,mb,rb,rub							x	x	x						x			x	
Davidaster discoideus (Carpenter, 1888)	0–640	cr,br,rub	x	x	x	x	x	x	x	x							x		x	x	
Davidaster rubiginosus (Pourtalès, 1869)	0–334	cr,rb	x	x		x		x	x	x	x		x				x	x	x	x	
Leptonemaster venustus A. H. Clark, 1909	55–777	mb				x												x	x		
Nemaster grandis A. H. Clark, 1909	3–124	cr,rb				x	x		x	x	x								x		
Neocomatella alata (Pourtalès, 1878)	10–560	cr,br	x								x						x		x		
Neocomatella europaea A. H. Clark, 1913	466–960	rb,rub																			x
Neocomatella pulchella (Pourtalès, 1878)	3–695	cr,br	x				x		x	x			x				x				
Family Colobometridae																					
Analcidometra armata (Pourtalès, 1869)	3–155	cr	x	x		x		x	x	x	x						x		x	x	

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Analcidometra caribbea (A. H. Clark, 1908)	23–26								x												
Family Charitometridae																					
Crinometra brevipinna brevipinna (Pourtalès, 1867)	69–795	cr,rb	x				x			x	x						x		x	x	
Crinometra brevipinna concinna A. H. Clark, 1909	201–367	rb															x				
Crinometra brevipinna diadema (Hartlaub, 1912)	320–457	rb															x				
Crinometra brevipinna granulifera (Pourtalès, 1878)	185–475	rb															x				
Crinometra brevipinna margaritacea A. H. Clark, 1909	320–457	rb															x				
Crinometra brevipinna pulchra A. H. Clark, 1909	484–567	rb															x				
Family Thalassometridae																					
Horaeometra duplex (Carpenter, 1888)	159–567	rb	x														x			x	
Stylometra spinifera (Carpenter, 1881)	69–658	cr,rb,sb,rub	x	x		x				x	x						x		x	x	
Family Tropiometridae																					
Tropiometra carinata (Lamarck, 1816)	0–84	cr,rb,rub								x	x		x						x		
Family Atelecrinidae																					
Atelecrinus balanoides Carpenter, 1881	512–2890	mb,rb,sb	x							x	x		x				x				
Family Bathycrinidae																					
Bathycrinus gracilis Wyville-Thomson, 1877																					x
Monachocrinus caribbeus (A. H. Clark, 1908)	684–1574	mb,rb	x								x						x				
Family Bourgueticrinidae																					
Conocrinus lofotensis (Sars, 1868)													x								
Democrinus conifer (A. H. Clark, 1909)	155–1750	cr,mb,rb				x	x		x	x			x				x	x			

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Democrinus brevis (A. H. Clark, 1909)	374–1574	mb							x		x										
Democrinus rawsoni (Pourtalès, 1874)	70–650	mb,rb	x				x		x								x		x		
Family Septocrinidae																					
Rouxicrinus vestitus Mironov & Pawson, 2010	421–887	mb								x											
Order Isocrinida																					
Family Isocrinidae																					
Endoxocrinus (Diplocrinus) wyvillethomsoni (Jeffreys, 1870)																					x
Endoxocrinus parrae (Gervais, 1835)	154–971	cr,mb,rb	x			x				x							x	x		x	
Endoxocrinus prionodes (H. L. Clark, 1941)	80.7	rb															x				
Isocrinus blakei (Carpenter, 1884)	220–1200	cr,rb,rub	x														x				
Neocrinus decorus Thomson, 1864	154–1219	mb,rb,rub	x			x					x						x		x	x	
Family Isselicrinidae																					
Cenocrinus asterius (Linnaeus, 1767)	170–412	cr,mb,rb	x														x		x		
Order Cyrtocrinida																					
Family Holopodidae																					
Holopus rangii Orbigny, 1837	9–700	rb	x														x		x		
Class Asteroidea																					
Order Paxillosida																					
Family Astropectinidae																					
Astropecten acutiradiatus Tortonese, 1956	35–66	sb									x		x								
Astropecten alligator Perrier, 1881	22–576	cr,mb,sb,rub	x			x	x			x	x		x						x		
Astropecten americanus Verrill, 1880	110–641	mb,sb,rub	x				x			x	x										

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Astropecten antillensis Lütken, 1860	3–278	mb,sb,rub	x							x	x		x				x				
Astropecten aranciacus (Linnaeus, 1758)	1–180	sb,rub																			x
Astropecten articulatus Say, 1825	0–256	mb,sb	x	x	x	x	x	x	x	x	x	x	x				x		x	x	
Astropecten brasiliensis Müller & Troschel, 1842	2–60	sb									x		x	x	x						
Astropecten brasiliensis riensis Doederlein, 1917	18–66	sb									x										
Astropecten caribemexicanensis Caso, 1990	51.3	rub	x																		
Astropecten cingulatus Sladen, 1883	16–1350	mb,sb,rub	x				x	x	x	x	x		x	x						x	
Astropecten comptus Verrill, 1915	18–130	sb,rub	x														x				
Astropecten duplicatus Gray, 1840	0–550	mb,sb,sg,rub	x	x		x	x			x	x		x				x		x	x	
Astropecten hermatophilus Sladen, 1883	15–1500																				x
Astropecten irregularis (Pennant, 1777)	10–1000	mb,sb,rub																			x
Astropecten marginatus Gray, 1840	0.5–130	mb,sb,rub	x					x		x	x	x	x						x	x	
Astropecten nitidus Verrill, 1915	11–686	mb,sb,rub	x			x	x			x									x		
Astropecten spiniphorus Madsen, 1950	45												x								
Astropectinides mesactus (Sladen, 1883)	80–165														x						
Bathybiaster loripes Sladen, 1889	80–500	mb,sb											x		x	x					
Blakiaster conicus Perrier, 1881	55–366	sb	x			x											x		x		
Dipsacaster antillensis Halpern, 1968	113–3627	cr								x											

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Dytaster grandis nobilis Sladen, 1889	3305–4846														x						
Dytaster insignis Perrier, 1884	2209–3654	sb	x																		
Leptychaster kerguelenensis E. A. Smith, 1876	27–183														x	x					
Lonchotaster tartareus Sladen, 1889	4390																				x
Persephonaster echinulatus H. L. Clark, 1941	196–720	cr,mb,sb	x			x	x		x	x	x						x			x	
Persephonaster leptactis H. L. Clark, 1941	2928–3294																x				
Persephonaster patagiatus (Sladen, 1889)	733–2165	mb,sb	x				x		x	x	x						x	x			
Plutonaster agassizi agassizi Verrill, 1880	70–3110	cr,mb,sb	x							x							x				
Plutonaster bifrons (Wyville-Thomson, 1873)	800–2970												x				x				
Plutonaster efflorescens (Perrier, 1884)	666–2061	mb,sb	x								x									x	
Psilaster andromeda florae (Verrill, 1878)	1409–1629	mb,sb									x										
Psilaster cassiope Sladen, 1889	151–1680	mb,sb	x							x	x		x				x				
Psilaster herwigi (Bernasconi, 1972)	100–800												x		x						
Tethyaster grandis (Verrill, 1899)	24–139	mb,sb	x							x	x								x		
Tethyaster subinermis (Philippi, 1837)	50–1400	mb																			x
Tethyaster vestitus vestitus (Say, 1825)	5–306	mb,sb	x						x	x		x	x							x	
Family Ctenodiscidae																					
Ctenodiscus australis Lütken, 1871	70–4605	sb,rub											x		x	x					

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ctenodiscus crispatus (Retzius, 1805)	1415–1865								x												
Family Goniopectinidae																					
Goniopecten demonstrans Perrier, 1881	300–1250	mb,sb	x	x					x	x	x										
Prionaster elegans Verrill, 1899	208–535	mb,sb	x				x			x			x				x				
Family Luidiidae																					
Luidia alternata alternata (Say, 1825)	0–1500	m,mb,sb	x			x			x	x	x	x	x	x	x		x		x	x	
Luidia bardabensis Perrier, 1881	60–430	mb,rb,sb	x				x			x	x		x						x		
Luidia ciliaris (Philippi, 1837)	1–400	sb																			x
Luidia clathrata (Say, 1825)	0–175	mb,rb,sb,rub	x	x		x	x		x	x	x		x				x	x	x	x	
Luidia heterozona barimae John & A. M. Clark, 1954	16–90	mb,sb	x							x	x	x	x								
Luidia lawrencei Hopkins & Knott, 2010	0–175	mb								x											
Luidia ludwigi scotti Bell, 1917	33–157	mb,rb,sb								x	x		x		x						
Luidia patriae Bernasconi, 1941	100–126	mb,sb													x						
Luidia sagamina aciculata Mortensen, 1933	71–83	sb	x																		
Luidia sarsi Düben & Koren, 1845																					x
Luidia sarsi elegans Perrier, 1875	60–365	mb,sb	x							x											
Luidia senegalensis (Lamarck, 1816)	0–73	mb,sb	x			x	x	x	x	x	x	x	x				x	x	x	x	
Family Porcellanasteridae																					
Eremicaster vicinus Ludwig, 1907	3950–7250	mb,rub													x						
Styracaster horridus Sladen, 1883	3410–5062	sb									x										
Thoracaster cylindratus Sladen, 1883	2540–5990	mb,sb	x								x										x

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Family Pseudarchasteridae																					
Pseudarchaster discus Sladen, 1889	140–283														x	x					
Pseudarchaster gracilis gracilis (Sladen, 1889)	170–2940	mb,sb	x		x	x	x			x	x						x	x	x		
Pseudarchaster parelii (Düben & Koven, 1846)	265–869																x				
Order Notomyotida																					
Family Benthopectinidae																					
Benthopecten simplex simplex (Perrier, 1881)	1175–3713	mb,sb,rb	x															x			
Benthopecten spinosus Verrill, 1884	1857–1958	mb															x				
Cheiraster (Barbadosaster) echinulatus (Perrier, 1875)	130–5062	cr,mb,sb,rb	x	x			x			x	x						x		x	x	
Cheiraster (Cheiraster) ludwigi Fisher, 1913	1266	sb,rb	x																		
Cheiraster (Cheiraster) planus Verrill, 1915	226–1339	mb,sb,rb	x			x				x			x								
Cheiraster (Cheiraster) sepitus (Verrill, 1885)	485–5062	mb,sb								x	x		x				x				
Cheiraster (Christopheraster) blakei A. M. Clark, 1981	250–1958	mb,sb,rb	x	x		x				x			x				x				
Cheiraster (Christopheraster) mirabilis (Perrier, 1881)	380–1470	mb,sb,rb	x				x			x							x			x	
Cheiraster (Luidiaster) planeta (Sladen, 1889)	370–500	mb													x	x					
Gaussaster antarcticus (Sladen, 1889)	3305	mb													x						
Pectinaster gracilis Verrill, 1915	576					x															
Order Valvatida																					
Family Asterinidae																					
Allopatiria ocellifera (Gray, 1847)	30–200	mb,rub																			x

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Asterina fimbriata Perrier, 1875	0–250	mb,sb,rub													x	x					
Asterina gibbosa (Pennant, 1777)	0–130	rb,rub																			x
Asterina stellifera (Moebius, 1859)	0–50	mb,sb,rub											x	x	x						
Asterinides folium (Lütken, 1860)	0–256	cr,rb,sb,rub	x	x					x	x	x		x							x	
Asterinides hartmeyeri (Doederlein, 1910)	0–1	rb	x														x			x	
Asterinides pompom (A. M. Clark, 1983)	3–6	rb	x						x												
Asterinopsis pilosa (Perrier, 1881)	11–256	mb,sb	x								x										
Tremaster mirabilis Verrill, 1880	150–1060	rb,rub													x	x	x				
Stegnaster wesseli (Perrier, 1875)	0–183	cr,rb,sb,rub	x							x	x									x	
Family Asteropseidae																					
Poraniella echinulata (Perrier, 1881)	3–339	cr,rb		x				x	x								x			x	
Family Chaetasteridae																					
Chaetaster nodosus Perrier, 1875	30–1140	mb,rb,sb									x	x	x				x				x
Family Ganeriidae																					
Cycethra verrucosa (Philippi, 1857)	0–500	sb,rub											x		x	x					
Ganeria falklandica Gray, 1847	0–135	sb,rub													x	x					
Perknaster sladeni (Perrier, 1891)	120–500														x	x					
Vemaster sudatlanticus Bernasconi, 1965	5055–5208														x						
Family Goniasteridae																					
Anthenoides piercei Perrier, 1881	20–844	mb,sb	x	x			x			x	x		x				x		x	x	
Apollonaster yucatanensis Halpern, 1970	1097–1175	mb,sb	x								x										

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Astroceramus brachyactis H. L. Clark, 1941	420–1067	mb,sb	x								x						x				
Ceramaster grenadensis (Perrier, 1881)	70–3109	mb,sb	x			x	x				x		x				x				
Ceramaster grenadensis grenadensis (Perrier, 1881)	200–3109	mb																x	x		x
Ceramaster grenadensis patagonicus (Sladen, 1889)	106–192														x	x					
Circeaster americanus (A. H. Clark, 1916)	500–1450	mb,sb					x			x	x						x				
Cladaster rudis Verrill, 1899	150–900	mb,sb	x																		
Diplasiaster productus (A. H. Clark, 1917)	78–567	mb,sb	x																		
Floriaster maya Downey, 1980	933–1024	mb,sb	x																		
Goniaster tessellatus (Lamarck, 1816)	16–155	cr,mb,sb,rb	x							x	x		x								
Hippasteria falklandica Fisher, 1940	251–225														x	x					
Hippasteria phrygiana argentinensis Bernasconi, 1961	108–162														x						
Litonotaster intermedius (Perrier, 1884)	1958–3530	mb,rb,sb	x							x							x		x	x	
Mediaster bairdi (Verrill, 1882)	640–1590	sb,rb	x										x								
Mediaster pedicellaris (Perrier, 1881)	197–580	mb,rb,sb	x										x				x				
Nymphaster arenatus (Perrier, 1881)	60–3000	mb,sb	x			x	x		x	x	x		x				x	x		x	x
Paragonaster grandis H. L. Clark, 1941	257–540	sb	x														x				
Paragonaster subtilis (Perrier, 1881)	1845–4700	rb,sb	x																		
Pawsonaster parvus (Perrier, 1881)	30–600	mb,rb,sb	x							x	x		x								

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Peltaster placenta (Müller & Trochel, 1842)	10–1107	mb,sb									x				x		x	x			x
Plinthaster dentatus (Perrier, 1884)	60–2910	mb,rb,sb	x			x	x		x	x	x		x				x				
Rosaster alexandri (Perrier, 1881)	60–2940	cr,mb,sb	x				x			x	x		x				x				
Tessellaster notabilis H. L. Clark, 1941	329–575	mb,sb	x														x				
Tosia parva (Perrier, 1881)	100–600												x		x				x		
Family Leilasteridae																					
Leilaster radians (Perrier, 1881)	102–293	sb,rub	x										x							x	
Family Mithrodiidae																					
Mithrodia clavigera (Lamarck, 1816)	0–157	cr,rb,sb	x				x						x				x				
Familia Odontasteridae																					
Acodontaster elongatus granuliferus (Koehler, 1912)	40–840	sb,rub													x	x					
Diplodontias singularis (Müller & Troschel, 1843)	0–84	rb,sb													x						
Odontaster penicillatus (Philippi, 1870)	8–350	mb,sb,rub													x	x					
Odontaster hispidus Verrill, 1880	50–1160	mb,sb	x														x				
Family Ophidiasteridae																					
Copidaster cavernicola Solís-Marín & Laguarda-Figueras, 2010	13–18	mb	x																		
Copidaster lymani A. H. Clark, 1948	0–34	cr,mb,rb	x	x					x								x				
Hacelia attenuata (Gray, 1840)	1–150	sb,rub																			x
Hacelia superba H. L. Clark, 1921	91–200	rb	x																		x
Linckia bouvieri Perrier, 1875	0–380	cr,rb	x														x				
Linckia guildingi Gray, 1840	0–298	cr,sg,rb,sb	x	x	x			x	x	x	x		x				x	x	x	x	

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Linckia nodosa Perrier, 1875	0–475	cr,rb,sb	x								x	x	x				x				
Narcissia canariensis (d'Orbigny, 1839)	37–155	rb	x																		x
Narcissia trigonaria Sladen, 1889	37–750	cr,rb,sb	x						x	x	x	x	x								
Ophidiaster alexandri Verrill, 1915	52–585												x				x				
Ophidiaster bayeri A. H. Clark, 1948	intertidal	rub	x																		
Ophidiaster guildingii Gray, 1840	0–330	cr,rb	x	x					x	x							x		x	x	
Ophidiaster ophidianus (Lamarck, 1816)	0–105	rb																			x
Tamaria floridae (Perrier, 1881)	50–600	rb,sb	x	x																	
Tamaria halperni Downey, 1971	180–510	cr,rb,sb	x							x								x			
Family Oreasteridae																					
Oreaster reticulatus (Linnaeus, 1758)	0–1500	cr,m,rb,sb,sg,rub	x	x	x	x	x	x	x	x	x		x				x	x	x	x	x
Family Poraniidae																					
Marginaster pectinatus Perrier, 1881	166–450	cr,mb,rb,rub	x							x			x				x				
Porania (Porania) antarctica magellanica Studer, 1876	18–320	sb,rub													x	x					
Porania (Porania) pulvillus insignis Verrill, 1895	35–680	rb	x																		
Poraniopsis echinaster Perrier, 1891	30–420	sb,rub													x						
Poraniopsis mira (de Loriol, 1904)	0–500												x		x						
Family Solasteridae																					
Laetmaster spectabilis (Perrier, 1881)	1521	rb	x																		
Lophaster verrilli A. H. Clark, 1938	6–1100	mb,rb,sb,rub	x							x			x				x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Solaster caribbaeus Verrill, 1915	64–869	mb,rb	x														x				
Order Velatida																					
Family Caymanostellidae																					
Caymanostella spinimarginata Belyaev, 1978	3109–3493	mb																x			
Family Korethrasteridae																					
Peribolaster folliculatus Sladen, 1889	81–133														x	x					
Remaster gourdoni Koehler, 1912	10–540														x	x					
Remaster palmatus (Perrier, 1881)	296–585	mb,rb,sb	x	x									x				x				
Family Myxasteridae																					
Pythonaster murrayi Sladen, 1889	3477														x						
Family Pterasteridae																					
Calyptraster coa Sladen, 1882	260–930												x								
Calyptraster personatus (Perrier, 1885)	2151–6560	mb,rb	x							x								x			
Diplopteraster clarki Bernasconi, 1937	82–177														x						
Diplopteraster verrucosus (Sladen, 1882)	74–270														x						
Hymenaster anomalus Sladen, 1882	1984–2606	rb	x																		
Hymenaster pellucidus Thomson, 1873	1784–3294	sb									x						x				
Hymenaster pergamentaceus Sladen, 1882	4846	sb									x				x						
Hymenaster regalis Verrill, 1895	1857																x				
Hymenaster rex Perrier, 1885	1139–2285	rb	x			x															
Pteraster abyssorum (Verrill, 1895)	576–3740	rb	x			x															

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Pteraster acicula (Downey, 1970)	196–3713	cr,mb							x	x							x				
Pteraster affinis lebruni Perrier, 1891	74–341														x	x					
Pteraster caribbaeus Perrier, 1881	275–825	mb,sb,rub	x														x				
Pteraster gibber (Sladen, 1882)	27–500														x	x					
Pteraster militarioides militarioides H. L. Clark, 1941	271–466	mb								x							x				
Pteraster militarioides stoibe H. L. Clark, 1941	777	mb															x				
Pteraster militaris (Müller, 1776)	549–594						x														
Pteraster personatus Sladen, 1891	480–1780	mb								x											
Pteraster rugosus H. L. Clark, 1941	91–466	mb,sb								x	x						x				
Pteraster stellifer Sladen, 1882	79–2804														x	x					
Order Spinulosida																					
Family Echinasteridae																					
Echinaster (Echinaster) modestus Perrier, 1881	60–475	mb,rb,sb	x	x			x				x		x				x		x		
Echinaster (Echinaster) sepositus (Retzius, 1783)	2–250	rb,sg,rub																			
Echinaster (Othilia) brasiliensis Müller & Troschel, 1842	0–360	mb,rb,sb,sg				x			x	x			x		x		x				
Echinaster (Othilia) echinophorus (Lamarck, 1816)	0–55	cr,m,mb,rb,sb,rub	x				x		x	x	x		x				x			x	
Echinaster (Othilia) guyanensis A. M. Clark, 1987	13–119	mb,sb			x	x	x		x	x	x	x	x					x	x		
Echinaster (Othilia) sentus (Say, 1825)	0–175	cr,rb,sb,sg,rub	x	x		x				x	x						x	x		x	
Echinaster (Othilia) serpentarius Müller & Troschel, 1842	10–200	cr,mb,sb	x							x											

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Echinaster (Othilia) spinulosus Verrill, 1869	1–238	cr,mb,sb,rb	x	x		x	x		x	x											
Henricia antillarum (Perrier, 1881)	192–1390	sb,rub	x			x	x				x		x				x				
Henricia downeyae A. M. Clark, 1987	342–1037	sb,rub	x															x			
Henricia obesa (Sladen, 1889)	22–210	sb,rub													x	x					
Henricia sanguinolenta (O. F. Müller, 1776)	0–200																				x
Henricia sexradiata (Perrier, 1881)	29–366	sb,rub	x														x				
Henricia studeri (Perrier, 1891)	74–430	sb,rub													x	x					
Order Forcipulatida																					
Family Asteriidae																					
Anasterias antarctica (Lütken, 1857)	1–183	rub,rb													x	x					
Anasterias minuta Perrier, 1875	0–100														x						
Anasterias pedicellaris (Koehler, 1923)	0–120														x	x					
Anasterias spirabilis (Bell, 1881)	34–54														x						
Asterias forbesi (Desor, 1848)	0–619	rb,rub	x										x				x				
Coscinasterias linearis (Perrier, 1881)	366	rb	x																		
Coscinasterias tenuispina (Lamarck, 1816)	0–165	rb,sb,rub	x										x				x				x
Cosmasterias lurida (Philippi, 1858)	0–650	mb,sb													x	x					
Diplasterias brandti (Bell, 1881)	0–450	sb,mb,rub													x	x					
Lethasterias australis Fisher, 1923	81–155														x	x					
Lysasterias perrieri (Studer, 1885)	0–320														x						
Marthasterias glacialis (Linnaeus, 1758)	0–180	rb																			x

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Neosmilaster steineni (Studer, 1885)															x	x					
Perissasterias polyacantha H. L. Clark, 1923	96–760	mb,sb													x						
Psalidaster mordax Fisher, 1940	80–600														x	x					
Sclerasterias contorta (Perrier, 1881)	384–607										x		x								
Sclerasterias tanneri (Verrill, 1895)						x															
Stephanasterias albula (Stimpson, 1853)	33–2300	cr,sg	x							x							x				
Coronaster briareus (Verrill, 1882)	50–700	cr,rb	x							x	x		x				x				
Family Heliasteridae																					
Labidiaster radiosus Lütken, 1871	5–200	sb,rub													x	x					
Family Pedicellasteridae																					
Ampheraster alaminos Downey, 1971	256–3089	sb	x																		
Pedicellaster pourtalesii Perrier, 1881	338–466	mb	x				x										x				
Family Stichasteridae																					
Allostichaster hartti (Rathbun, 1879)	147–380												x								
Smilasterias triremis Sladen, 1889	0–2707														x	x					
Family Zoroasteridae																					
Cnemidaster sigsbeei (Perrier, 1894)	365–735	mb,sb								x	x										
Doraster constellatus Downey, 1970	345–914	mb,rb,sb	x			x			x	x	x		x								
Mammaster sigsbeei (Perrier, 1880)	430–613	mb				x											x				
Zoroaster fulgens Thomson, 1873	220–3000	mb,rb,sb	x						x	x	x		x				x	x			

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Order Brisingida																					
Family Brisingidae																					
Brisinga costata Verrill, 1884	630–1903	cr,mb,rb	x								x							x			
Hymenodiscus coronata (G. O. Sars, 1872)	100–2904	mb																			x
Hymenodiscus verticillata (Sladen, 1889)	640	rb															x				
Midgardia xandaros Downey, 1972	366–460	sb	x			x															
Novodinia americana (Verrill, 1880)	408–576	mb								x											
Novodinia antillensis (A. H. Clark, 1934)	366–2700	mb,sb	x							x			x								
Novodinia pandina (Sladen, 1889)	54–990	rb	x														x				
Stegnobrisinga splendens H. L. Clark, 1926	402–933					x					x										
Family Freyellidae																					
Colpaster scutigerula Sladen, 1889	930–2790	mb				x															x
Freyastera mexicana (A. H. Clark, 1939)	2683–5110	rb	x																		
Freyastera tuberculata (Sladen, 1889)	3360–5620																				x
Freyella elegans (Verrill, 1884)	2928–3294																x				
Freyella microspina Verrill, 1894	1848																x				
Class Ophiuroidea																					
Order Euryalida																					
Family Asteronychidae																					
Asteronyx loveni Müller & Troschel, 1842	265–2499	cr,rb,sb	x								x		x				x				
Astrodia tenuispina (Verrill, 1884)	512–935												x				x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Family Asteroschematidae																					
Asteroschema arenosum Lyman, 1878	677–1555												x				x				
Asteroschema brachiatum Lyman, 1879	108–783	cr	x														x				
Asteroschema elongatum Koehler, 1914	42–708	cr,rb,sb	x														x				
Asteroschema intectum Lyman, 1878	238–475	cr,sb	x														x				
Asteroschema laeve (Lyman, 1875)	42–539	cr	x								x						x		x		
Asteroschema oligactes (Pallas, 1788)	124–521	cr								x							x				
Asteroschema tenue Lyman, 1875	66–180																x				
Ophiocreas lumbricus Lyman, 1869	15–600									x			x								
Ophiocreas oedipus Lyman, 1879	1061–2228	cr	x																		
Ophiocreas spinulosus Lyman, 1883	227–576	cr	x														x				
Family Gorgonocephalidae																					
Asteroporpa annulata Lütken, 1856	15–397	cr,rb,sb,rub	x							x	x		x				x	x	x	x	
Asteroporpa pulchra H. L. Clark, 1915	320–475																x				
Astracme mucronatus (Lyman, 1869)	70–521	cr	x														x				
Astrocaneum herrerai (H. L. Clark, 1918)	0–25	cr	x																		
Astrochele lymani Verrill, 1878	0–300												x								
Astrocyclus caecilia (Lütken, 1856)	20–677	cr,rb,sb	x										x				x				
Astrocnida isidis (Duchassaing, 1850)	20–180	cr								x									x		

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Astrogomphus vallatus Lyman, 1869	60–800	cr,rb	x										x				x				
Astropartus mediterraneus (Risso, 1826)	32–265	mb,rb,sb																			x
Astrophyton muricatum (Lamarck, 1816)	0–508	cr,rb,sb,sg,rub	x	x	x	x	x	x	x	x	x	x	x				x	x	x	x	x
Astrotoma agassizii Lyman, 1875	74–1000													x	x	x					
Gorgonocephalus chilensis (Philippi, 1858)	0–500												x	x	x	x					
Schizostella bifurcata A. H. Clark, 1952	12–46	cr		x																x	
Order Ophiurida																					
Family Ophiomyxidae																					
Ophioblenna antillensis Lütken, 1859	1–24	cr,rb	x	x					x								x			x	
Ophiobrachion uncinatus Lyman, 1883	457	mb															x				
Ophiobyrsa perrieri Lyman, 1883	527																x				
Ophiobyrsa serpens Lyman, 1883	51–126	cr,rb	x	x													x				
Astrogeron supinus (Lyman, 1883)	530–1143																x				
Ophioleptoplax brasiliana Tommasi & Abreu, 1974	15–520												x								
Ophiomyxa brevicauda Verrill, 1899	23–360	mb															x				
Ophiomyxa flaccida (Say, 1825)	0–1500	cr,rb,sb,sg	x	x	x	x			x	x	x		x				x	x	x	x	
Ophiomyxa pentagona (Lamarck, 1816)	0–1060	mb,rb,sb,sg,rub																			x
Ophiomyxa stimpsonii (Lyman, 1875)	108–472	mb								x											
Ophiomyxa tumida Lyman, 1883	23–601	cr,mb,rb,sb	x							x			x				x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiomyxa vivipara Studer, 1876	0–183												x		x	x					
Ophiophrixus quadrispinosus (Koehler, 1914)	265–510																x				
Ophioprium cervicornis (Lyman, 1883)													x								
Ophiosciasma attenuatum Lyman, 1878	130–540												x								
Ophioscolex disacanthus H. L. Clark, 1915	342–549	rb, mb															x			x	
Ophioscolex glacialis Müller & Troschel, 1842	50–2727												x								
Ophioscolex nutrix (Mortensen, 1936)													x		x	x					
Ophioscolex serratus H. L. Clark, 1900	166	sb															x				
Ophiosyzygus disacanthus H. L. Clark, 1911	127–278	cr,mb								x											
Family Amphilepididae																					
Amphilepis norvegica (Ljungman, 1865)	100–2900	mb																			x
Amphilepis sanmatiensis Bernasconi & D'Agostino, 1975	1–145												x		x						
Amphilepis teodorae Tommasi & Abreu, 1974													x								
Family Amphiuridae																					
Amphilimna mirabilis (H. L. Clark, 1941)	200–550	mb								x			x				x				
Amphilimna olivacea (Lyman, 1869)	15–600	mb,rb,sb	x						x	x	x	x	x								
Amphiodia atra (Stimpson, 1852)	1.5–100	sb									x	x	x								
Amphiodia guillermosoberoni Caso, 1979	0.9–3.4	sb	x																		

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Amphiodia habilis Albuquerque, Campos-Creasey & Guille, 2001	34												x								
Amphiodia planispina (von Martens, 1867)	0–578	mb,sb,sg,rub							x	x			x	x	x		x			x	
Amphiodia pulchella (Lyman, 1869)	0–370	cr,mb,rb,sb,sg	x	x					x				x	x	x		x			x	
Amphiodia trychna H. L. Clark, 1918	1–160	m,sb,sg,rub	x	x					x		x		x				x			x	
Amphiodia violacea (Lütken, 1856)				x																	
Amphioplus (Amphioplus) abditus (Verrill, 1871)	6–587	mb,sb	x						x		x		x								
Amphioplus (Amphioplus) brasiliensis Tommasi, 1970													x								
Amphioplus (Amphioplus) coniortodes H. L. Clark, 1918	0–1207	cr,mb,rb,sg	x								x						x				
Amphioplus (Amphioplus) sepultus Hendler, 1995	0–82	cr,mb,rb,sg	x														x				
Amphioplus (Amphioplus) thrombodes H. L. Clark, 1918	0.3–0.6	mb,sg															x				
Amphioplus (Unioplus) incisus (Lyman, 1883)	1639								x				x								
Amphioplus albidus (Ljungman, 1867)	1–500	mb,rb,sb											x	x	x						
Amphioplus daleus (Lyman, 1879)													x								
Amphioplus lucyae Tommasi, 1971	5–600	sb											x	x							
Amphioplus mathildae Tommasi & Abreu, 1974	0–120												x								
Amphioplus peregrinator (Koehler, 1912)																x					
Amphioplus tumidus (Lyman, 1878)	70–578	mb								x											

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Amphipholis gracillima (Stimpson, 1852)	0–63	mb,sb	x	x													x				
Amphipholis januarii Ljungman, 1867	1–311	cr,mb,rb,sg,rub	x	x									x				x			x	
Amphipholis pachybactera H. L. Clark, 1918											x										
Amphipholis squamata (Delle Chiaje, 1828)	0–1962	cr,m,rb,sb,sg,rub	x	x	x	x			x	x	x		x	x	x		x			x	x
Amphipholis subtilis (Ljungman, 1867)	0–1330												x								
Amphiura (Amphiura) callida Albuquerque, Campos-Creasey & Guille, 2001	50												x								
Amphiura (Amphiura) correcta Koehler, 1907													x								
Amphiura (Amphiura) grandisquama Lyman, 1869																					x
Amphiura (Amphiura) magellanica Ljungman, 1867	0–400													x	x	x					
Amphiura (Amphiura) rosea Tommasi & Oliveira, 1976													x								
Amphiura (Ophionema) intricata Lütken, 1869	1–600												x								
Amphiura algida Koehler, 1911													x								
Amphiura belgicae Koehler, 1900															x	x					
Amphiura chiajei Forbes, 1843	5–1200																				x
Amphiura complanata Ljungman, 1867	0–810												x	x							
Amphiura crassipes Ljungman, 1867	0–60	mb,sb											x	x	x						
Amphiura deichmanni Tommasi, 1965													x								
Amphiura diducta Koehler, 1914																	x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Amphiura eugeniae Ljungman, 1867	0–800	mb												x	x	x					
Amphiura fibulata Koehler, 1913	2–810	cr,rb,sb,sg,rub	x	x									x				x				
Amphiura flexuosa Ljungman, 1867	0–50	rub											x	x							
Amphiura iraciae Tommasi & Oliveira, 1976													x								
Amphiura joubini Koehler, 1912	5–3834	rub											x	x	x						
Amphiura kinbergi Ljungman, 1872	3–300												x								
Amphiura latispina Ljungman, 1867	10–50												x		x						
Amphiura muelleri Marktanner-Turneretscher, 1887	134–600												x								
Amphiura otteri Ljungman, 1872	198–3200	mb,sb								x		x	x				x				x
Amphiura palmeri Lyman, 1882	5–479	cr,rb	x								x		x							x	
Amphiura princeps Koehler, 1907	0–107	mb,sb											x	x	x	x					
Amphiura rathbuni Koehler, 1914	29–502	mb								x	x										
Amphiura scabriuscula (Lütken, 1859)	0–26								x											x	
Amphiura semiermis Lyman, 1869	82–1448	mb											x							x	
Amphiura stimpsonii Lütken, 1859	0–2844	cr,rb,sb,rub	x	x									x				x	x		x	
Microphiopholis atra (Stimpson, 1852)	1–38	mb								x	x		x								
Microphiopholis gracillima (Stimpson, 1854)	0–26	mb							x		x		x							x	
Microphiopholis subtilis (Ljungman, 1867)													x								

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Nudamphiura carvalhoi Tommasi, 1965	15–117												x								
Ophiocnida loveni (Ljungman, 1867)	7–48												x								
Ophiocnida scabra Lyman, 1879	1100												x								
Ophiocnida scabriuscula (Lütken, 1859)	0–70	cr,rb,sg	x										x				x				
Ophionephthys limicola Lütken, 1869	1–12	cr,m,sb,mb		x					x				x				x				
Ophiophragmus chilensis (Müller & Troschel, 1843)	0–112														x	x					
Ophiophragmus cubanus (A. H. Clark, 1917)	1–36	m,mb,sg		x									x				x				
Ophiophragmus filograneus (Lyman, 1875)	0–3			x									x								
Ophiophragmus luetkeni (Ljungman, 1872)	0–50												x								
Ophiophragmus moorei Thomas, 1965	1–2	rb	x																		
Ophiophragmus pulcher H. L. Clark, 1918	0.5–33	cr,m,mb,sg,rub	x	x					x		x		x				x			x	
Ophiophragmus riisei (Lütken, 1859)	1–311	cr,mb,sb	x						x	x	x		x					x			
Ophiophragmus septus (Lütken, 1859)	0.3–116	cr,m,mb,sb	x	x					x	x			x				x			x	
Ophiophragmus wurdemani (Lyman, 1860)	2–11	cr,sb	x								x		x								
Ophiostigma isocanthum (Say, 1825)	0–223	cr,mb,sg,sb,rub	x	x				x	x	x	x		x				x			x	
Ophiostigma siva Hendler, 1995	0.5–99	cr,rb	x	x					x											x	
Family Hemieuryalidae																					
Hemieuryale pustulata Von Martens, 1867	128–148			x					x										x		

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiochondrella squamosa (Lyman, 1883)	604																x				
Ophiochondrus convolutus Lyman, 1869	165–720	cr								x							x				
Ophiochondrus crassispinus Lyman, 1883	420																x				
Ophiochondrus gracilis Verrill, 1899	198–468																x				
Ophiochondrus stelliger Lyman, 1879	144–1080														x	x					
Sigsbeia conifera Koehler, 1914	4–450	mb	x	x					x								x				
Sigsbeia murrhina Lyman, 1878	16–706	cr,mb	x	x													x			x	
Family Ophiacanthidae																					
Subfamily Ophiacanthinae																					
Ophiacantha abyssicola G. O. Sars, 1871	35–351	mb,rub																			x
Ophiacantha affinis Koehler, 1914	366–420																x				
Ophiacantha aristata Koehler, 1895	822–1700												x								
Ophiacantha aspera Lyman, 1878	320																x				
Ophiacantha bidentata (Retzius, 1805)	32–4730	cr,mb,rb	x							x											x
Ophiacantha brasiliensis Tommasi & Abreu, 1974	145–380												x								
Ophiacantha cervicornis Lyman, 1883	366–539																x				
Ophiacantha crassidens Verrill, 1885	980–3120	mb	x																		
Ophiacantha densispina Mortensen, 1936																x					
Ophiacantha echinulata Lyman, 1878	304–1958	mb,rb,sb								x	x						x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiacantha ensifera (Verrill, 1899)	198–468																x				
Ophiacantha mesembria H. L. Clark, 1915	252–1125	mb								x							x				
Ophiacantha metallacta H. L. Clark, 1915	295–763	mb	x										x								
Ophiacantha pentacrinus Lütken, 1869	320–1249										x		x				x				
Ophiacantha rosea Lyman, 1878	402–1538	mb,rb	x																		
Ophiacantha scutata Lyman, 1878	521–549																x				
Ophiacantha sertata (Lyman, 1869)	183–618	cr,rb	x																		
Ophiacantha stellata Lyman, 1875	183																x				
Ophiacantha setosa (Retzius, 1805)	40–1480	sb																			x
Ophiacantha vivipara Ljungman, 1870	0–1097												x	x	x	x					
Ophiacanthella troscheli (Lyman, 1878)	185–238	cr,rb,sb	x																		
Ophialcaea nuttingii Verrill, 1899	366																x				
Ophiotreta lineolata (Lyman, 1883)	347–521																x				
Ophiotreta mixta (Lyman, 1878)	338–442																x				
Ophiotreta sertata (Lyman, 1869)	293–567	mb								x							x				
Ophiotreta valenciennesi valenciennesi (Lyman, 1879)	200–1440																				x
Ophiotreta valenciennesi rufescens (Koehler, 1896)	155–1440	mb								x											

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Subfamily Ophiohelinae																					
Ophiomyces frutectosus Lyman, 1869	151–410	mb								x											
Ophiomyces mirabilis Lyman, 1869	270–560	rb	x																		
Subfamily Ophioplinthacinae																					
Ophiocamax austera Verrill, 1899	198–1045																x				
Ophiocamax fasciculata Lyman, 1883	208–979	mb,rb,sb				x	x		x	x	x						x		x		
Ophiocamax hystrix Lyman, 1878	171–695	mb								x							x				
Ophiomitra ornata Verrill, 1899	201																x				
Ophiomitra robusta Koehler, 1914	395																x				
Ophiomitra valida Lyman, 1869	131–608	cr								x							x				
Ophiomitrella clavigera (Ljungman, 1865)	250–1500																				x
Ophiomitrella conferta (Koehler, 1922)															x	x					
Ophiomitrella cordifera Koehler, 1909													x								
Ophiomitrella glabra (H. L. Clark, 1901)		cr		x															x		
Ophiomitrella ingrata Koehler, 1908															x						
Ophiomitrella laevipellis (Lyman, 1883)	155–507	cr								x							x				
Ophioplinthaca carduus (Lyman, 1878)	796	mb	x																		
Ophioplinthaca chelys (Wyville-Thomson, 1878)	795–3305										x										x
Ophioplinthaca dipsacos (Lyman, 1878)	777																x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiothamnus exigua (Lyman, 1878)	439																x				
Subfamily Ophiotominae																					
Ophiolimna littoralis Koehler, 1913	0–63																x				
Ophiopristis hirsuta (Lyman, 1875)	147–830	cr								x											
Ophiotoma gracilis (Koehler, 1914)	490–1236	mb								x											
Family Ophiactidae				x																	
Hemipholis cordifera Bosc, 1802	0–520	cr,mb,rb,sb,rub	x						x				x	x			x			x	
Histampica duplicata (Lyman, 1875)	125–2870	cr,mb								x	x		x								
Histampica rugosa (H. L. Clark, 1941)	1125–1281																x				
Ophiactis abyssicola (M. Sars, 1861)	125–4000	mb,rb																			x
Ophiactis algicola H. L. Clark, 1933	0–24	cr	x	x					x												
Ophiactis asperula (Philippi, 1858)	0–310													x	x	x					
Ophiactis balli (W. Thompson, 1840)	30–1765	rb																			x
Ophiactis brasiliensis Manso, 1988	1.5–163												x								
Ophiactis dispar Verrill, 1899	62								x												
Ophiactis ljungmani Marktanner-Turneretscher, 1887																		x			
Ophiactis loricata Lyman, 1869	198	mb																		x	
Ophiactis lymani Ljungman, 1872	0–600	rb											x								
Ophiactis muelleri Lütken, 1856	14–67	sb							x		x		x				x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiactis quinqueradia Ljungman, 1871	0–640	cr,mb,rb,sb,sg	x	x					x	x			x				x		x	x	
Ophiactis rubropoda Singletary, 1973	2–32	cr	x																		
Ophiactis savignyi (Müller & Troschel, 1842)	0–1500	cr,m,rb,sb,sg,rub	x	x		x		x	x	x	x		x				x	x	x	x	x
Ophiactis virens (M. Sars, 1857)	0–90	rb																			x
Family Ophiochitonidae																					
Ophiochiton ternispinus Lyman, 1883	377–3550	mb,rb	x							x			x				x				
Ophioplax clarimundae Tommasi, 1970													x								
Ophioplax ljungmani Lyman, 1875	22–471	cr								x							x			x	
Ophioplax pardalis H. L. Clark, 1941	347																x				
Ophioplax spinulifera H. L. Clark, 1941	274–420																x				
Family Ophiocomidae																					
Ophiocoma echinata (Lamarck, 1816)	0–183	cr,m,rb,sb,sg,rub	x	x	x	x	x	x	x	x	x		x				x	x	x	x	
Ophiocoma paucigranulata Devaney, 1974	0–455	cr,rb	x	x				x													
Ophiocoma pumila Lütken, 1859	0–368	cr,rb,sg	x	x		x			x	x	x		x				x	x	x	x	x
Ophiocoma riisei Lütken, 1859	1–2	cr									x							x			
Ophiocoma wendtii Müller & Troschel, 1842	0–384	cr,m,rb,sg,rub	x	x		x		x	x	x			x				x	x	x	x	
Ophiocomella ophiactoides (H. L. Clark, 1901)	0–70	cr,rb,sb,sg,rub	x	x					x	x	x		x							x	
Ophiocomella sexradia (Duncan, 1887)													x								
Ophiocomina nigra (Abildgaard, in O.F. Müller, 1789)	0–400	sb,rub																			x

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiopsila aranea Forbes, 1843	0–185	sg,rub																			x
Ophiopsila fulva Lyman, 1878	29–320	cr								x							x				
Ophiopsila guineensis Koehler, 1914	18–110																				x
Ophiopsila hartmeyeri Koehler, 1913	1–183	cr,rb,sb	x					x		x	x	x	x				x				
Ophiopsila maculata (Verrill, 1899)	41–3000												x				x				
Ophiopsila riisei Lütken, 1859	0–366	cr,m,rb,sg	x	x					x	x	x		x				x		x	x	
Ophiopsila vittata H. L. Clark, 1918	4–15	cr,rb	x	x					x												
Family Ophiodermatidae																					
Bathypectinura heros (Lyman, 1879)	276–3150	mb,sb	x			x	x		x	x			x				x				
Ophiorachnella angulata (Lyman, 1883)																	x				
Ophiarachnella petersi (Lyman, 1878)	320–475																x				
Ophioconis forbesi (Heller, 1863)	20–200	rb																			x
Ophioconis miliaria Lyman, 1878	444–759																x				
Ophioderma anitae Hotchkiss, 1982		cr,sb		x																	
Ophioderma appressa (Say, 1825)	0–580	cr,rb,sg,rub	x	x		x		x	x	x	x		x				x	x	x	x	x
Ophioderma besnardi Tommasi, 1970	0–600												x								
Ophioderma brevicaudum Lütken, 1856	0–64	cr,rb,sb,sg	x	x					x	x	x						x	x	x	x	
Ophioderma brevispinum (Say, 1825)	1–223	cr,m,mb,rb,sb,sg,rub	x	x				x	x	x	x		x				x	x	x	x	
Ophioderma cinereum Müller & Troschel, 1842	0–1719	cr,m,sb,sg	x	x		x		x	x	x	x		x				x	x	x	x	

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophioderma divae Tommasi, 1971													x								
Ophioderma ensiferum Hendler & Miller, 1984	10–30	cr,rb	x	x													x				
Ophioderma guttatum Lütken, 1859	0–30	cr,rb,rub	x	x						x							x				
Ophioderma januarii Lütken, 1856	0–1500	cr	x										x								
Ophioderma longicaudum (Retzius, 1805)	0–200	sg,rub																			x
Ophioderma phoenium H. L. Clark, 1918	1–14	cr,rb,sb	x	x					x								x			x	
Ophioderma rubicundum Lütken, 1856	0–360	cr,sg,rb,sb,rub	x	x					x	x	x						x		x	x	
Ophioderma squamosissimum Lütken, 1856	3–85	cr,rb	x	x													x			x	
Ophiopaepale goesiana Ljungman, 1872	101–436	cr,mb,sb								x	x						x				
Ophiurochaeta littoralis (Koehler, 1913)	1–110	cr,sb		x																	
Family Ophionereididae																					
Ophionereis dolabriformis John & A. M. Clark, 1954	10–93	cr,mb								x			x								
Ophionereis olivacea H. L. Clark, 1901	0–500	cr,m,sb	x	x					x	x	x		x				x			x	
Ophionereis reticulata (Say, 1825)	0–1500	cr,m,rb,sb,sg,rub	x	x		x		x	x	x	x		x				x	x	x	x	
Ophionereis sexradia Mortensen, 1936	18–130																				x
Ophionereis squamulosa Koehler, 1913	0.5–110	cr,sb,rb,sg,rub	x	x					x				x				x	x		x	
Ophionereis vittata Hendler, 1995	10–126	cr	x	x					x								x				
Family Ophiotrichidae																					
Ophiothela danae Verrill, 1869													x								

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiotrichoides lymani Ludwig, 1882													x								
Ophiothrix (Ophiothrix) ailsae Tommasi, 1970													x								
Ophiothrix (Ophiothrix) trindadensis Tommasi, 1970													x								
Ophiothrix angulata (Say, 1825)	0.5–540	cr,m,mb,rb,sb,sg,rub	x		x				x	x	x		x	x			x	x	x	x	
Ophiothrix angulata violacea (Müller & Troschel, 1842)													x								
Ophiothrix brachyactis H. L. Clark, 1915	1–6	cr,rb,rub	x								x		x				x			x	
Ophiothrix cimar Hendler, 2005	0–10	cr,sg						x	x												
Ophiothrix fragilis (Abildgaard, 1789)	0–1250	rb,sg,rub																			x
Ophiothrix lineata Lyman, 1860	0–74	cr,rb	x		x			x	x	x							x				
Ophiothrix luetkeni Wyville-Thomson, 1873	50–500	rb,sb,rub																			x
Ophiothrix maculata Ljungman, 1872	114–410																				x
Ophiothrix oerstedii Lütken, 1856	0–31	cr,sb,mb,sg,rb,rub	x		x				x	x	x						x	x	x	x	
Ophiothrix pallida Ljungman, 1871	183						x														
Ophiothrix platyactis H. L. Clark, 1939	41	rb	x																		
Ophiothrix rathbuni Ludwig, 1882	8–600												x								
Ophiothrix stri Hendler, 2005	0–10	cr						x	x												
Ophiothrix suensonii Lütken, 1856	0–1000	cr,m,mb,rb,sb	x		x			x	x	x	x		x				x	x	x	x	
Ophiothrix synoecina Schoppe, 1996	0–5	rb								x											

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Family Ophiuridae																					
Subfamily Ophiolepidinae																					
Amphipholizona delicata H. L. Clark, 1915	15–600	mb								x			x								
Ophiolepis ailsae Hendler & Turner, 1987	156–353																x				
Ophiolepis elegans Lütkens, 1859	1–329	cr,m,mb,rb,sb,sg,rub	x			x			x	x	x		x				x			x	
Ophiolepis gemma Hendler & Turner, 1987	2–139	cr,rb,sb	x	x													x				
Ophiolepis impressa Lütken, 1859	0–1500	cr,rb,sb,sg,rub	x	x		x		x	x	x	x		x				x		x	x	
Ophiolepis kieri Hendler, 1979	2–8	sg							x				x				x				
Ophiolepis paucispina (Say, 1825)	0–37	cr,m,rb,sb,sg,rub	x	x					x	x			x				x	x		x	x
Ophiolepis pawsoni Hendler, 1988	24.4			x																	
Ophiolipus agassizii Lyman, 1878	146–310	rb	x																		
Ophiomidas dubius (Lyman, 1878)	158–272																x				
Ophiomusium acuferum Lyman, 1875	76–575	cr,mb,rb	x							x			x				x				
Ophiomusium anaelisae Tommasi & Abreu, 1974	180–260												x								
Ophiomusium constrictum Mortensen, 1936															x						
Ophiomusium eburneum Lyman, 1869	35–3477	cr,mb,sb	x							x			x				x				
Ophiomusium leptobrachium H. L. Clark, 1941	1249–1518	sb									x						x				
Ophiomusium lütkeni Lyman, 1878	190–278	rb,sb	x																		
Ophiomusium lymani Thomson, 1873	62–4700	mb,rb,sb,rub	x							x							x				x

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiomusium microporum H. L. Clark, 1941	347–530																x				
Ophiomusium moniliforme H. L. Clark, 1941	1125																x				
Ophiomusium planum Lyman, 1879	368–4062	rb,sb	x																		
Ophiomusium sculptum Verrill, 1899	475																x				
Ophiomusium serratum Lyman, 1878	520–3103	rb,sb	x																		x
Ophiomusium stellatum Verrill, 1899	356–521																x				
Ophiomusium testudo Lyman, 1875	60–914	cr,rb,sb	x							x							x				
Ophiomusium validum Ljungman, 1872	108–2732	cr,mb								x							x				x
Ophioplocus januarii (Lütken, 1856)	0–180	rb,sb,rub											x	x	x						
Ophiosphalma armigerum (Lyman, 1878)	262–4024	rb,sb	x										x				x				
Ophiosphalma dyscritum H. L. Clark, 1941	512–713																x				
Ophiosphalma monoplax H. L. Clark, 1915	376–746																x				
Ophiothyreus goesii Ljungman, 1872	144–540	cr					x			x							x				
Ophiozonella clypeata (Lyman, 1883)	158–272																x				
Ophiozonella falklandica Mortensen, 1936															x	x					
Ophiozonella granulifera H. L. Clark, 1941	1006–1098	rb,sb	x														x				
Ophiozonella marmorea Lyman, 1883	484–1385																x				
Ophiozonella molesta (Koehler, 1904)	2115																				x

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiozonella nivea (Lyman, 1875)	70–1249	rb,sb	x								x						x				
Ophiozonella tessellata (Lyman, 1879)	320–475																x				
Subfamily Ophioleucinae																					
Ophiostriatus striatus (Mortensen, 1933)	270–3500												x								
Ophiernus adspersus adspersus Lyman, 1883	68–3650	mb,rb	x							x							x				
Ophioleuce depressum (Lyman, 1869)	585																x				
Ophiopyren longispinus Lyman, 1878	329																x				
Ophiostriatus atlanticus (Mortensen, 1933)	296–396	mb								x											
Subfamily Ophiurinae																					
Amphiophiura metabula H. L. Clark, 1915	274–1830	mb,sb	x							x							x				
Amphiophiura oedignatha H. L. Clark, 1915	284–944	mb	x							x							x				
Amphiophiura ornata (Lyman, 1878)													x								
Anthophiura ingolfi Fasmer, 1930	21–1200	cr	x																		
Ophiambix devaneyi Paterson, 1985	146–494	mb								x											
Ophiocten amitinum Lyman, 1878	46–545													x	x	x					
Ophiomastus meridionalis (Lyman, 1879)															x						
Ophiomastus satelitae Tommasi & Abreu, 1974	115–600												x								
Ophiomastus secundus Lyman, 1878	108–2035	mb,sb								x	x						x				
Ophiomisidium pulchellum (Wyville-Thomson, 1878)	11–3061	cr,rb,sb	x										x								x

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiomisidium speciosum Koehler, 1914	880–1636	mb	x										x								
Ophiomisidium tommasii Borges, Monteiro & Amaral, 2006	250–808												x								
Ophiopleura inermis (Lyman, 1878)	1786																				x
Ophioplinthus abyssorum (Lyman, 1883)	338–366																x				
Ophioplinthus inornata (Lyman, 1878)	54–3384														x	x					
Ophioplinthus martensi (Studer, 1885)															x						
Ophiophycis mirabilis Koehler, 1901													x								
Ophiura acervata (Lyman, 1869)	20–1900	cr,mb,rb,sb	x							x	x	x	x				x				
Ophiura carinifera (Koehler, 1901)	400													x							
Ophiura carnea Lütken, 1858	40–1260	mb,sb																			x
Ophiura clemens (Koehler, 1904)													x								
Ophiura falcifera (Lyman, 1869)	73–1037	mb								x							x				
Ophiura fallax Cherbonnier, 1959	20–842	mb,sb	x										x								
Ophiura grubei Heller, 1863	10–350	mb,sb,rub																			x
Ophiura (Ophiuroglypha) irrorata concreta (Koehler, 1901)	600–4315	mb,sb																			x
Ophiura (Ophiuroglypha) irrorata irrorata (Lyman, 1878)													x								
Ophiura ljungmani (Lyman, 1878)	46–6398	mb,rb,sb	x										x								x
Ophiura lymani (Ljungman, 1871)	0–463													x	x	x					

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ophiura ophiura (Linnaeus, 1758)	0–300	mb,sb																			x
Ophiura sarsi (Lütken, 1855)	82–827	mb	x																		
Ophiura scomba Paterson, 1985	358–3943	rb,sb	x																		
Ophiura tenera (Lyman, 1883)	158–500	mb								x											
Ophiuraster perissus H.L. Clark, 1939													x								
Class Echinoidea																					
Order Cidaroida																					
Family Cidaridae																					
Austrocidaris canaliculata (A. Agassiz, 1863)	1–424														x	x					
Austrocidaris lorioli (Mortensen, 1903)	160–1081														x						
Austrocidaris spinulosa Mortensen, 1910	124–641														x	x					
Calocidaris micans (Mortensen, 1903)	33–624	mb,rb,sb	x														x				
Cidaris abyssicola (A. Agassiz, 1869)	225–375	mb,rb,sb	x																		
Cidaris blakei (A. Agassiz, 1878)	270–720	mb,rb															x				x
Cidaris cidaris (Linnaeus, 1758)	50–2000	mb															x				x
Cidaris rugosa (H. L. Clark, 1907)	40–540	mb,rb,sb	x	x							x		x								
Eucidaris tribuloides tribuloides (Lamarck, 1816)	0–1500	cr,rb,sb,sg,rub	x	x	x	x	x	x	x	x	x		x				x	x	x	x	
Histocidaris nuttingi Mortensen, 1926	225–740	mb,rb,sb	x														x				
Histocidaris purpurata (Wyville-Thomson, 1872)	300–1800																				x
Histocidaris sharreri (A. Agassiz, 1880)	200 – 740	rb,sb	x														x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Stereocidaris ingolfiana Mortensen, 1903	300–1745	mb,rb,sb	x														x				
Stylocidaris affinis (Philippi, 1845)	22–1000	cr,mb,rb,sb,rub	x				x		x	x	x		x				x				x
Stylocidaris lineata Mortensen, 1910	20–1717	cr,mb,rb,sb,rub	x			x	x			x	x		x				x		x		
Tretocidaris bartletti (A. Agassiz, 1880)	48–1089	mb,rb,sb	x			x				x	x	x	x						x		
Family Rhabdicidaridae																					
Porocidaris purpurata (Wyville-Thomson, 1872)	640–782	rb,sb	x				x														
Order Echinothurioida																					
Family Echinothuriidae																					
Araeosoma belli Mortensen, 1903	130–1020	mb,sb	x				x			x	x						x		x		
Araeosoma fenestratum (Thomson, 1872)	16–1180	mb,rb,sb	x							x							x		x		x
Calveriosoma hystrix (Wyville-Thomson, 1872)	360–2545	mb,sb	x															x			x
Hygrosoma petersii (A. Agassiz, 1880)	200–3700	mb,sb	x														x		x		
Phormosoma placenta placenta Thomson, 1872	50–3700	mb,sb	x			x	x		x	x	x							x			x
Phormosoma placenta sigsbei A. Agassiz, 1880	200–1800	mb															x	x			
Sperosoma grimaldii Koehler, 1897	300–2300																				x
Order Diadematoida																					
Family Aspidodiadematidae																					
Aspidodiadema jacobyi A. Agassiz, 1880	170–720	cr,mb,rb	x	x			x			x							x		x		
Aspidodiadema tonsum A. Agassiz, 1879	180–925												x								
Plesiodiadema antillarum (A. Agassiz, 1880)	684–3111	mb,rb,sb	x								x		x				x	x			x
Family Diadematidae																					
Astropyga magnifica A. H. Clark, 1934	5–89	cr,rb,sb,sg,rub	x						x	x	x						x		x	x	

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Astropyga nuptialis Tommasi, 1958	1–20												x								
Centrostephanus besnardi Bernasconi, 1955													x								
Centrostephanus longispinus (Philippi, 1845)	10–1000	cr,mb,rb,sb,rub	x							x											x
Centrostephanus longispinus rubicingulus H. L. Clark, 1921	33–842	sb,rub									x						x		x		
Diadema antillarum antillarum (Philippi, 1845)	0–800	cr,m,rb,sb,sg,rub	x	x	x	x	x	x	x	x	x		x				x	x	x	x	x
Diadema ascensionis Mortensen, 1909	1–400												x								
Order Pedinoida																					
Family Pedinidae																					
Caenopedina cubensis A. Agassiz, 1869	220–1200	mb,rb,sb	x	x													x				x
Order Salenioida																					
Family Saleniidae																					
Salenia goesiana Lovén, 1874	90–842	rb															x		x		
Salenocidaris profundi (Duncan, 1877)	200–3700	mb,rb,sb	x														x	x			
Salenocidaris varispina A. Agassiz, 1869	250–3015	mb,rb,sb	x								x		x				x	x			x
Order Arbacioida																					
Family Arbaciidae																					
Arbacia dufresnii (Blainville, 1825)	0–340	rb,rub												x	x	x					
Arbacia lixula (Linnaeus, 1758)	0–50	rb,sb											x								x
Arbacia punctulata (Lamarck, 1816)	0–225	cr,rb,sb,sg,rub	x	x					x	x	x						x		x		
Coelopleurus floridanus A. Agassiz, 1871	60–2380	cr,mb,rb,sb	x	x					x	x	x						x		x		x
Habrocidaris scutata (A. Agassiz, 1880)	920–1400																x				
Podocidaris sculpta A. Agassiz, 1869	8–780	cr,mb,rb,sb	x														x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Order Camarodonta																					
Family Parechinidae																					
Loxechinus albus (Molina, 1782)	30–340	rb,rub													x	x					
Paracentrotus gaimardi (Blainville, 1825)	1–5												x								
Paracentrotus lividus (Lamarck, 1816)	0–80	rb,sg																			x
Psammechinus microtuberculatus (Blainville, 1825)																					x
Order Temnopleuroida																					
Family Temnopleuridae																					
Genocidaris maculata A. Agassiz, 1869	12–500	cr,mb,rb,sb	x							x	x										x
Pseudechinus magellanicus (Philippi, 1857)	1–361	rb,rub												x	x	x					
Trigonocidaris albida A. Agassiz, 1869	70–720	cr,rb,sb	x							x									x		
Family Toxopneustidae																					
Lytechinus callipeplus H. L. Clark, 1912	22–357	rb,sb	x							x											
Lytechinus euerces H. L. Clark, 1912	40–777	mb,rb,sb	x	x														x	x		
Lytechinus variegatus carolinus A. Agassiz, 1863	0–250	rb,sb,rub,sg															x				
Lytechinus variegatus variegatus (Lamarck, 1816)	0–580	cr,mb,rb,sb,sg,rub	x	x	x	x		x	x	x	x		x				x	x	x	x	
Lytechinus williamsi Chesher, 1968	3–256	cr,rb,sb,sg,rub	x	x					x	x							x	x	x		
Pseudoboletia occidentalis H. L. Clark, 1921	69–155										x										
Sphaerechinus granularis (Lamarck, 1816)	3–100	rb																			x
Toxopneustes pileolus (Lamarck, 1816)	0–35	cr,mb,rb,sb	x																		

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Tripneustes ventricosus (Lamarck, 1816)	0–842	cr,rb,sb,sg,rub	x	x		x		x	x	x	x		x				x	x	x	x	
Order Echinoida																					
Family Echinidae																					
Echinus esculentus Linneaeus, 1758	10–289	rb	x																		
Echinus tylodes H. L. Clark, 1912	350–760	sb	x																		
Gracilechinus gracilis (A. Agassiz, 1869)	69–457	mb,rb,sb	x								x						x				
Sterechinus agassizii Mortensen, 1910	24–470														x	x					
Sterechinus neumayeri (Meissner, 1900)	13–250															x					
Family Echinometridae																					
Echinometra lucunter lucunter (Linnaeus, 1758)	0–45	cr,rb,sg,rub	x	x	x	x	x	x	x	x	x		x				x	x	x	x	
Echinometra viridis A. Agassiz, 1863	0–40	cr,m,rb,sb,sg,rub	x	x	x	x		x	x	x	x						x	x	x	x	
Order Holectypoida																					
Family Echinoneidae																					
Echinoneus cyclostomus Leske, 1778	0.5–585	cr,mb,rb,sb,sg,rub	x	x		x		x	x	x	x						x	x	x		
Order Clypeasteroida																					
Family Clypeasteridae																					
Clypeaster aloysioi (Brito, 1959)													x								
Clypeaster chesheri Serafy, 1970	18–101	cr,mb,sb	x			x			x	x									x		
Clypeaster cyclopilus H. L. Clark, 1941	69–460	sb									x						x				
Clypeaster euclastus H. L. Clark, 1941	36–530	cr,mb,sb				x				x	x	x					x		x		
Clypeaster lamprus H. L. Clark, 1914	78–450	cr,mb,sb				x	x			x	x		x						x		

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Clypeaster luetkeni Mortensen, 1948	9–55	sb								x								x			
Clypeaster oliveirai Krau, 1952	50	sb											x								
Clypeaster prostratus Ravenel, 1848	15–75	sb	x			x				x	x										
Clypeaster ravenelii A. Agassiz, 1869	20–278	mb,sb	x							x			x								
Clypeaster rosaceus (Linnaeus, 1758)	0–285	sb,sg	x	x		x			x	x	x		x				x	x	x	x	
Clypeaster speciosus Verrill, 1870								x													
Clypeaster subdepressus (Gray, 1825)	1–210	mb,rb,sb,sg,rub	x	x					x	x	x		x				x		x		
Family Echinocyamidae																					
Echinocyamus grandiporus Mortensen, 1907	99–2500	mb,sb	x							x			x				x				
Echinocyamus macrostomus Mortensen, 1907	170–2286	sb	x														x				
Echinocyamus pusillus (Müller, 1776)	0–1250	sb,rub																			x
Family Mellitidae																					
Encope aberrans Martens, 1867	13–32	sb	x																		
Encope emarginata (Leske, 1778)	0–60	mb,sb		x	x				x	x	x		x	x	x						
Encope michelini L. Agassiz, 1841	0–240	sb,sg	x								x						x				
Leodia sexiesperforata (Leske, 1778)	0–180	sb,sg,rub	x	x		x		x	x	x	x		x	x			x		x	x	
Mellita quinquiesperforata (Leske, 1778)	0–180	mb,sb,rub	x			x	x	x	x	x			x	x			x		x	x	
Mellita quinquiesperforata latiambulacra (H. L. Clark, 1840)	0–10	sb									x										
Mellita tenuis H. L. Clark, 1940	0–3	sb,rub	x																		
Order Cassiduloida																					
Family Cassidulidae																					

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Cassidulus caribaearum Lamarck, 1801	0.5–197	sb	x	x					x										x		
Cassidulus infidus Mortensen, 1948	3.5												x								
Cassidulus mitis Krau, 1954	1–45												x								
Eurhodia relicta Mooi, 1990	69–155										x										
Family Echinolampadidae																					
Conolampas sigsbei (A. Agassiz, 1878)	130–800	mb,rb,sb	x			x	x										x		x		
Echinolampas depressa Gray, 1851	37–366	sb	x								x						x				
Order Holasteroida																					
Family Pourtalesiidae																					
Pourtalesia miranda A. Agassiz, 1869	450–5850																x				
Order Spatangoida																					
Family Asterostomatidae																					
Archaeopneustes hystrix (A. Agassiz, 1880)	22–1610	mb				x	x			x							x				
Family Brissidae																					
Anabrissus damesi (A. Agassiz, 1881)	640												x								
Brissopsis alta Mortensen, 1907	181–329	mb,sb	x																		
Brissopsis atlantica Mortensen, 1907	18–641	mb,sb	x			x	x	x	x	x	x		x				x				
Brissopsis atlantica mediterranea Mortensen, 1913	37–3200	mb								x	x							x			x
Brissopsis elongata elongata Mortensen, 1907	3–270	mb,sb		x		x			x	x	x	x							x	x	
Brissus unicolor (Leske, 1778)	0–250	mb,rb,sb,rub	x	x		x		x	x	x	x						x	x	x	x	x
Linopneustes longispinus (A. Agassiz, 1878)	55–720	mb				x	x			x							x		x		
Meoma ventricosa ventricosa (Lamarck, 1816)	0.3–293	cr,mb,sb,rb,sg,rub	x	x	x	x	x	x	x	x	x		x				x	x	x	x	
Neopneustes micrasteroides (A. Agassiz, 1878)	148–330																x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Palaeobrissus hilgardi A. Agassiz, 1880	150–1025	mb								x									x		
Paleopneustes cristatus A. Agassiz, 1873	69–805	cr,mb,rb,sb				x				x	x						x		x		
Paleopneustes josephinae Lovén, 1872	350–436																x				
Paleopneustes tholoformis Chesher, 1968	90–525	cr,mb								x									x		
Plagiobrissus grandis (Gmelin, 1788)	1–210	sb,sg	x	x					x	x	x		x				x		x	x	
Plethotaenia angularis Chesher, 1968	567–570	mb,sb	x																		
Plethotaenia spatangoides (A. Agassiz, 1883)	117–619	mb,sb	x				x										x				
Rhabdobrissus costae (Gasco, 1876)	25–200	mb,sb																			x
Rhynobrissus cuneus Cooke, 1957	0–10	sb	x																		
Family Hemiasteridae																					
Holanthus expergitus (Lovén, 1874)	380–4833	mb,sb									x						x				x
Family Loveniidae																					
Echinocardium cordatum (Pennant, 1777)	0–230	sb											x								x
Family Maretiidae																					
Homolampas fragilis (A. Agassiz, 1869)	350–3550	mb,sb	x							x	x		x				x				
Homolampas lovenioides Mortensen, 1948	910												x								
Family Prenasteridae																					
Tripylus excavatus Philippi, 1845	50–113														x	x					
Family Schizasteridae																					
Abatus agassizii (Pfeffer, 1889)	75–970															x					
Abatus cavernosus (Philippi, 1845)	1–676	mb,sb													x	x					
Abatus philippii Lovén, 1871	71–225														x	x					

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Aceste bellidifera Thomson, 1877	116–5220	sb									x						x				x
Agassizia excentrica A. Agassiz, 1869	27–900	cr,mb,sb	x	x			x		x	x	x	x	x				x		x	x	
Brisaster fragilis (Düben & Koren, 1846)					x																
Brisaster moseleyi (A. Agassiz, 1881)	401–1100															x					
Hypselaster limicolus (A. Agassiz, 1878)	27–340	mb,sb	x			x				x											
Moira atropos clotho Michelin, 1855	0–445	mb,rb,sb	x	x		x			x	x	x		x				x		x	x	
Ova canaliferus (Lamarck, 1816)	9–100	mb,sb																			x
Tripylaster philippii (Gray, 1851)	13–595														x	x					
Schizaster doederleini (Chesher, 1972)	9–220	mb,sb	x	x		x	x		x			x					x		x		
Schizaster floridiensis (Chesher, 1972)	12–65	sb		x		x			x		x	x	x						x		
Schizaster orbignyanus A. Agassiz, 1880	22–500	mb,sb								x	x	x					x				
Family Spatangidae																					
Spatangus purpureus (Müller, 1776)	15–900	mb,sb,rub																			x
Class Holothuroidea																					
Order Dendrochirotida																					
Family Cucumariidae																					
Aslia lefevrei (Barrois, 1882)	6–25	rb																			x
Cladodactyla crocea (Lesson, 1830)	0–4300	mb,rb,sb,rub													x	x					
surinamensis (Semper, 1868)	0–5	rb,sg							x	x	x		x				x		x	x	
Cucumaria manoelina Tommasi, 1971													x								

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Duasmodactyla seguroensis (Deichmann, 1930)	0–50	cr,rb,sb,sg	x								x		x							x	
Euthyonacta solida (Deichmann, 1930)	1.5–183	rb,sb	x								x										
Hemioedema spectabilis (Ludwig, 1882)	2–160	mb,sb													x						
Heterocucumis godeffroyi (Semper, 1868)	0–379	sb,rub													x						
Heterocucumis steineni (Ludwig, 1898)	0–400	rb													x	x					
Leptopentacta deichmannae Domantay, 1958	17–37	mb,sb,rub								x		x									
Neocnus incubans Cherbonnier, 1972	0–5	rb																			x
Ocnus braziliensis (Verrill, 1868)	0–2												x								
Ocnus pygmaeus (Théel, 1886)	0–72	cr,rb,sb,rub	x								x		x							x	
Ocnus suspectus (Ludwig, 1874)	0–1874	rb,sg	x	x					x	x	x						x			x	
Paracolochirus mysticus (Deichmann, 1930)	69–155										x										
Pawsonia saxicola (Brady & Robertson, 1871)	4–130	rb																			x
Pentacta pygmaea (Théel, 1886)	0.6–1.7										x		x								
Pseudocnus dubiosus leoninus (Semper, 1868)	0–340	mb,rb,sb													x	x					
Pseudocnus cornutus (Cherbonnier, 1941)	135–189														x	x					
Pseudocnus perrieri (Ekman, 1927)	0–197	mb,rb,sb												x	x	x					
Pseudrotasfer microincubator Bohn, 2007	271–290														x						
Stereoderma unisemita (Stimpson, 1851)	31.1–40.2												x								
Thyonella gemmata (Pourtalès, 1851)	0–64	cr,rb,sb,mb,sg	x						x								x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Thyonella pervicax (Théel, 1886)	9–67	rb,sb	x						x				x								
Thyonella sabanillaensis (Deichmann, 1930)	2–30	sb								x	x		x								
Trachythyone crassipeda Cherbonnier, 1961													x								
Trachythyone lechleri (Lampert, 1885)	0–30														x						
Trachythyone parva (Ludwig, 1874)	0–180	mb,rb,sb													x	x					
Trachythyone peruana (Semper, 1868)	90–159														x	x					
Family Phyllophoridae																					
Havelockia inermis (Heller, 1868)	0.5–60								x		x										
Neothyonidium parvum (Ludwig, 1881)	0–3	sg							x		x		x							x	
Pentamera chiloensis (Ludwig, 1887)	0–111	sb,rub													x						
Pentamera pulcherrima Ayres, 1854	0–60	mb								x	x		x								
Phyllophorus (Urodemella) occidentalis (Ludwig, 1875)	0–99	cr,rb,sg	x						x		x		x				x			x	
Stolus cognatus (Lampert, 1885)	0–38	mb,rb,sb,sg	x						x	x	x		x				x				
Thyone cognata (Lampert, 1885)											x							x			
Thyone deichmannae Madsen, 1941	6–366	sg															x				
Thyone fusus (Müller, 1776)	5–615	mb,sb,rub																			x
Thyone montoucheti Tommasi, 1971													x								
Thyone pawsoni Tommasi, 1972	6–51	sb								x	x		x								
Thyone pseudofusus Deichmann, 1930	0.5–46	rb,sb,sg,rub	x	x					x	x	x		x								
Thyone tanyspeira Pawson & Miller, 1988	51–170	mb				x				x											
Family Psolidae																					

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Lissothuria antillensis Pawson, 1967	1–17	cr,rb	x	x							x										
Lissothuria braziliensis (Théel, 1886)	0–2										x		x								
Neopsolidium convergens (Herouard, 1901)	0–20	rb													x	x					
Psolidium dorsipes Ludwig, 1886	0–483	rb													x	x					
Psolus antarcticus Philippi, 1857	35–1080	rb													x						
Psolus marcusi Tommasi, 1971	95	rb													x						
Psolus patagonicus Ekman, 1925	0–430	rb											x		x	x					
Psolus squamatus (Koren, 1844)	7–207	rb,rub													x	x					
Psolus tuberculosus Théel, 1886	73–243										x							x			
Psolus victoriae Tommasi, 1971													x								
Family Sclerodactylidae																					
Euthyonidiella dentata Cherbonnier, 1961											x		x								
Euthyonidiella destichada (Deichmann, 1930)	0–7	mb,rb,sb,sg		x					x		x						x			x	
Euthyonidiella trita (Sluiter, 1910)	0–100	rb	x								x									x	
Pseudothyone belli (Ludwig, 1886)	0–37	mb,rb,sb,sg	x	x					x		x		x							x	
Sclerodactyla briareus (Lesueur, 1824)	15										x										
Order Dactylochirotida																					
Family Ypsilothuriidae																					
Echinocucumis asperrima (Théel, 1886)	43–723																x				
Echinocucumis hispida (Barret, 1856)	50–1000																x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Ypsilothuria talismani talismani Perrier, 1886	270–2684	mb								x							x				
Order Aspidochirotida																					
Family Holothuriidae																					
Actinopyga agassizii (Selenka, 1867)	0–54	cr,rb,sg,rub	x	x	x	x		x	x	x							x	x	x	x	
Holothuria (Cystipus) cubana Ludwig, 1875	0–8	cr,mb,rb,sb	x	x					x	x	x						x		x	x	
Holothuria (Cystipus) occidentalis Ludwig, 1875	0–457	mb,sb	x			x				x	x	x					x		x		
Holothuria (Cystipus) pseudofossor Deichmann, 1930	3–370	cr,mb,sb,rub	x	x						x	x		x				x		x		
Holothuria (Halodeima) floridana Pourtalès, 1851	0–10	cr,m,rb,sb,sg,rub	x	x		x			x	x							x	x	x	x	
Holothuria (Halodeima) grisea Selenka, 1867	0–30	cr,mb,rb,sb,sg	x	x					x	x	x		x				x	x	x	x	
Holothuria (Halodeima) mexicana Ludwig, 1875	0–183	cr,m,mb,rb,sb,sg	x	x	x	x	x	x	x	x	x						x	x	x	x	
Holothuria (Holothuria) dakarensis Panning, 1939	0–15	mb,sb																			x
Holothuria (Holothuria) helleri Marenzeller, 1878	15	sb,rub																			x
Holothuria (Holothuria) mammata Grube, 1840	1–77	rb																			x
Holothuria (Holothuria) tubulosa Gmelin, 1788	0–30	mb,sb,sg																			x
Holothuria (Platyperona) parvula (Selenka, 1867)	0–8	cr,m,mb,rb,sb,rub	x							x	x		x						x	x	
Holothuria (Platyperona) rowei Pawson & Gust, 1981				x																	
Holothuria (Platyperona) sanctori Delle Chiaje, 1823	0–30	rb																			x
Holothuria (Panningothuria) forskali Delle Chiaje, 1823	3–193	rb																			x
Holothuria (Roweothuria) arguinensis Koehler & Vaney, 1906	0–30	rb																			x
Holothuria (Roweothuria) polii Delle Chiaje, 1823	0–250	mb,sb,sg																			x

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Holothuria (Semperothuria) surinamensis Ludwig, 1875	0–42	cr,m,mb,rb,sb,sg,rub	x	x						x	x		x				x		x	x	
Holothuria (Selenkothuria) glaberrima Selenka, 1867	0–42	mb,rb,sb	x			x			x	x	x						x	x	x	x	
Holothuria (Theelothuria) princeps Selenka, 1867	0–402	cr,mb,rb,sb,sg	x							x	x						x		x	x	
Holothuria (Thymiosycia) arenicola Semper, 1868	0–121	cr,m,mb,sb,sg	x	x	x	x			x	x	x		x				x		x	x	
Holothuria (Thymiosycia) impatiens (Forskaal, 1775)	0–27.4	cr,mb,rb,sb,sg	x	x					x	x	x						x			x	
Holothuria (Thymiosycia) rathbunii Lampert, 1885																				x	
Holothuria (Thymiosycia) thomasi Pawson & Caycedo, 1980	0–30	cr	x	x		x			x	x							x	x	x	x	
Holothuria (Vaneyothuria) lentiginosa von Marenzeller, 1892	20–466	mb,rb,sb	x										x				x				x
Holothuria (Vaneyothuria) lentiginosa enodis Miller & Pawson, 1979	69–466	cr,mb								x											
Family Stichopodidae																					
Astichopus multifidus (Sluiter, 1910)	1–162	cr,rb,sb,sg	x						x	x							x		x	x	
Eostichopus arnesoni Cutress & Miller, 1982	36	sb			x															x	
Eostichopus regalis (Cuvier, 1817)	5–800	mb,sb,sg,rub															x				x
Isostichopus badionotus (Selenka, 1867)	0–274	cr,mb,rb,sb,sg	x	x		x			x	x	x		x				x	x	x	x	
Isostichopus macroparentheses (H. L. Clark, 1922)	0–18	rb	x	x																	
Parastichopus tremulus (Gunnerus, 1767)	20–1960	mb,sb																			x
Family Synallactidae																					
Amphigymnas bahamensis Deichman, 1930	439–900	mb	x							x							x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Bathyplotes bigelowi Deichmann, 1940	402–585	mb															x				
Bathyplotes natans (M. Sars, 1868) Östergren, 1896	210–1600	cr,mb	x							x											
Bathyplotes pourtalesi (Théel, 1886)	134–2919	mb								x							x				x
Hansenothuria benti Miller & Pawson, 1989	548–903	cr,sb	x																		
Meseres atlanticus (R. Perrier, 1902)											x										
Meseres occultatus (von Marenzeller, 1893)	232–2180	mb								x											
Mesothuria connectens (Perrier, 1898)	1975–2515																				x
Mesothuria gargantua Deichmann, 1930	180–720	mb															x				
Mesothuria intestinalis (Ascanius, 1805)	18–1445	mb	x																		x
Mesothuria (Zygothuria) lactea (Théel, 1886)	484–5100	mb	x							x	x						x				
Mesothuria maroccana Perrier, 1902	914–5062	mb									x						x				
Mesothuria (Mesothuria) rugosa Herouard, 1912	151–3890	mb								x											
Mesothuria (Penichrothuria) verrilli (Théel, 1886)	699–4060	mb								x			x				x				x
Molpadiodemas depressus (Herouard, 1902)	1353–5690												x								
Paelopatides gigantea (Verrill, 1884)	1100–4060																				x
Pseudostichopus occultatus Merenzeller, 1893	232	mb,sb															x				
Pseudostichopus peripatus (Sluiter, 1901)	3411–3459										x										
Scotothuria herringi Hansen, 1978																					x
Synallactes crucifera Perrier, 1898	1000–3476	mb									x						x				

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Order Elasipodida																					
Family Deimatidae																					
Deima validum validum Théel, 1879	914–2780	mb									x		x				x				
Orphnurgus asper Théel, 1882	600–1049	mb															x				
Family Elpidiidae																					
Peniagone purpurea (Théel, 1882)	2800–3000																				x
Family Pelagothuridae																					
Enypniastes eximia Théel, 1882	461–689									x											
Family Psychropotidae																					
Benthodytes lingua Perrier, 1896	540–2200	mb															x				x
Benthodytes sanguinolenta Théel, 1882	914–3100	mb	x			x				x											
Benthodytes typica Théel, 1882	315–5046	mb									x						x	x			x
Benthodytes valdiviae Hansen, 1975																					x
Psychropotes depressa (Théel, 1882)	955–4060	mb															x				x
Psychropotes longicauda Théel, 1882	2210–5000																				x
Psychropotes scotiae (Vaney, 1908)																	x				
Psychropotes semperiana Théel, 1882	1143–5600										x										x
Order Molpadiida																					
Family Caudinidae																					
Acaudina molpadioides (Semper, 1867)	3545–3635	mb	x																		
Paracaudina chilensis chilensis (Müller, 1850)	0–990	mb,sb,rub											x	x	x						
Family Molpadiidae																					

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Molpadia barbouri Deichman, 1940	440–1529	mb								x							x				
Molpadia blakei (Théel, 1886)	3482–3518	mb								x	x										
Molpadia cubana Deichmann, 1940	24–1464	mb							x	x							x				
Molpadia eltaninae Pawson, 1977	20–855														x	x					
Molpadia musculus Risso, 1826	35–5205	mb	x							x			x		x	x	x				x
Molpadia oolitica (Pourtalès, 1851)	42–1440	mb								x											
Molpadia parva (Théel, 1886)	125–2844	mb	x						x	x							x				
Order Apodida																					
Family Chiridotidae																					
Chiridota marenzelleri R. Perrier, 1904	40–159	mb,rub												x	x						
Chiridota rotifera (Pourtalès, 1851)	0–360	cr,rb,sb,sg	x	x							x		x				x		x	x	
Taeniogyrus contortus (Ludwig, 1875)	82–200	mb,sb													x	x					
Trochodota purpurea (Lesson, 1830)	0–100	sb,rub													x	x					
Family Synaptidae																					
Anapta fallax Lampert, 1889	0–350	sb,rub													x	x					
Epitomapta roseola (Verrill, 1874)	1.5–40	rb,sb	x	x					x												
Eupatinapta acanthia (A. H. Clark, 1899)	10.7								x												
Euapta lappa (Müller, 1850)	0–256	cr,rb,sb,sg	x	x				x	x	x	x						x	x	x	x	x
Leptosynapta brasiliensis Freire & Grohmann, 1989	1–4												x								
Leptosynapta imswe Pawson, 1976	0–2			x																	
Leptosynapta inhaerens (Müller, 1776)	0–173	mb																			x

(continued)

Table A.2 (continued)

	Depth (m)	Habitat	MEX	BEL	GUA	HON	NIC	CRC	PAN	COL	VENc	VENa	BRA	URG	ARG	MAV	CUB	HAI	RDO	PRI	CAN
Leptosynapta multigranula H. L. Clark, 1924	0.5–2.9	sb	x	x																	
Leptosynapta nannoplax Pawson, 1976				x																	
Leptosynapta parvipatina H. L. Clark, 1924	9–12								x												
Leptosynapta roseogradia Pawson, 1976	0.5			x																	
Leptosynapta tenuis (Ayres, 1851)	0.5–167		x								x										
Protankyra benedeni (Ludwig, 1881)	5–100										x		x								
Protankyra brychia (Verrill, 1885)													x								
Protankyra ramiurna Heding, 1928	0–18	mb,rb,sb,sg	x																	x	
Synaptula hydriformis (Lesueur, 1824)	0–10	cr,m,sb,sg	x	x		x	x	x	x	x	x		x				x			x	
Synaptula secreta Ancona-Lopez, 1957	1–10												x								

Habitat classification: *cr* Coral Reefs, *m* mangroves, *mb* muddy bottom, *rb* rocky bottom, *sb* sandy bottom, *sg* seagrass, *rub* rubble bottom. Countries abbreviation: *MEX* Mexico, *BEL* Belize, *GUA* Guatemala, *HON* Honduras, *NIC* Nicaragua, *CRC* Costa Rica, *PAN* Panama, *COL* Colombia, *VENc* Venezuela Caribbean, *VENa* Venezuela Atlantic, *BRA* Brazil, *URG* Uruguay, *ARG* Argentina, *MAV* Malvinas Islands, *CUB* Cuba, *HAI* Haiti, *RDO* Dominican Republic, *PRI* Puerto Rico, *CAN* Canary Islands

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