

# UC San Diego

## SIO Reference

### Title

Catalog of the Benthic Invertebrate Collections of the Scripps Institution of Oceanography.  
Echinodermata

### Permalink

<https://escholarship.org/uc/item/8pn7x9w5>

### Author

Luke, Spencer R

### Publication Date

1982-06-01

CATALOG OF THE  
BENTHIC INVERTEBRATE COLLECTIONS  
OF THE  
SCRIPPS INSTITUTION OF OCEANOGRAPHY

ECHINODERMATA

Spencer R. Luke

SIO REFERENCE SERIES

SIO Reference No. 82-5

June 1982

SCRIPPS INSTITUTION OF OCEANOGRAPHY  
UNIVERSITY OF CALIFORNIA, SAN DIEGO  
LA JOLLA, CALIFORNIA 92093

## PREFACE

This is the third in a series of catalogs\* of holdings of the Benthic Invertebrate Collections of the Scripps Institution of Oceanography. While the collections date back to the earliest days of the Institution, they have expanded markedly during the past decade through gifts or donations from private and government sources. Use of the collections has also increased greatly, especially by scientists outside the Institution, and it has therefore been deemed appropriate to inform the scientific community at large of the holdings of the Benthic Invertebrate Collection of the Scripps Institution of Oceanography by this series of catalogs.

The present catalog, containing 2,747 entries, covers the Echinodermata. The arrangement is systematic and each entry includes a catalog number and relevant field data. The material can be examined here, or it may be made available by loan, gift, or exchange to qualified persons or private or government agencies.

Higher systematic categories used are as in Georges Ubaghs (1978, "Crinoidea Classification," pp. 367-371. In Raymond C. Moore and Curt Teichert, Eds., Treatise on Invertebrate Paleontology, Pt. T, Vol. 1, The University of Kansas Press and The Geological Society of America, Inc., New York. 401p.), W. K. Spencer C. W. Wright (1966, "Asterozoa Classification," pp. 37-39. In Raymond C. Moore, Ed., Treatise on Invertebrate Paleontology, Pt. U, Vol. 1, The University of Kansas Press and The Geological Society of America, Inc., New York, 366p.), Lavon McCormick and R. C. Moore (1966, "Echinoidea Classification," pp. 295-297. In Raymond C. Moore, Ed., Treatise on Invertebrate Paleontology, Pt. U, Vol. 1, The University of Kansas Press and The Geological Society of America, Inc., New York. 366p.), and Don L. Frizzell, Harriet Exline, and David L. Pawson (1966, "Holothuroidea Classification," pp. 367-695. In Raymond C. Moore, Ed., Treatise on Invertebrate Paleontology, Pt. U, Vol. 2, The University of Kansas Press and The Geological Society of America, Inc., New York. 328p.).

Many identifications of the Holothuroidea were done by the late Elisabeth Deichmann as denoted below the individual entries. Other Holothuroidea and the rest of the Echinodermata identifications were done mainly by the author, Spencer R. Luke, and should be considered as preliminary.

The catalog was prepared under the direction and encouragement of Dr. William A. Newman (Curator) for which I am most thankful.

Spencer R. Luke  
Museum Scientist

---

\*I - Decapod Crustacea and Stomatopoda, SIO Reference Series, SIO Reference No. 77-9, October 1977.  
Brachiopoda, SIO Reference Series, SIO Reference No. 78-19.

# CONTENTS

## ECHINODERMATA

Class CRINOIDEA.....	1
Subclass ARTICULATA.....	1
Order BOURGUETICRINIDA.....	1
Family Bathyocrinidae.....	1
Order COMATULIDA.....	1
Family Antedonidae.....	1
CRINOIDEA Incertae Sedis.....	1
Class STELLEROIDEA.....	2
Subclass ASTEROIDEA.....	2
Order PLATYASTERIDA.....	2
Family Luidiidae.....	2
Order PAXILLOSIDA.....	5
Family Astropectinidae.....	5
Family Gonioplectinidae.....	10
Family Porcellanasteridae.....	10
Family Benthoplectinidae.....	12
Order VALVATIDA.....	13
Family Odontasteridae.....	13
Family Goniasteridae.....	14
Family Oreasteridae.....	15
Family Ophidiasteridae.....	15
Order SPINULOSIDA.....	16
Family Solasteridae.....	16
Family Pythonasteridae.....	17
Family Pterasteridae.....	17
Family Asterinidae.....	18
Family Poraniidae.....	18
Family Echinasteridae.....	18
Family Acanthasteridae.....	20
Family Mithrodiidae.....	20
Order FORCIPULATIDA.....	20
Family Heliasteridae.....	20
Family Zoroasteridae.....	20
Family Asteriidae.....	21
Family Brisingidae.....	22
ASTEROIDEA Incertae Sedis.....	23

Subclass	OPHIUROIDEA.....	24
Order	PHRYNOPHIURIDA.....	24
	Family Ophiomyxidae.....	24
	Family Asteronychidae.....	24
	Family Asteroschematidae.....	25
	Family Gorgonocephalidae.....	25
Order	OPHIURIDA.....	25
	Family Ophiuridae.....	25
	Family Ophiroleucidae.....	31
	Family Ophiocomidae.....	31
	Family Ophionereididae.....	32
	Family Ophiodermatidae.....	33
	Family Ophiacanthidae.....	33
	Family Amphilepididae.....	36
	Family Ophiactidae.....	36
	Family Amphiuridae.....	37
	Family Ophiothricidae.....	40
	OPHIUROIDEA Incertae Sedis.....	41
Class	ECHINOIDEA.....	44
Subclass	PERISCHOECHINOIDEA.....	44
Order	CIDAROIDA.....	44
	Family Cidaridae.....	44
Subclass	EUECHINOIDEA.....	45
Order	ECHINOTHURIOIDA.....	45
	Family Echinothuriidae.....	45
Order	DIADEMATOIDA.....	45
	Family Diadematidae.....	45
	Family Aspidodiadematidae.....	46
Order	ARBACOIDA.....	46
	Family Arbaciidae.....	46
Order	TEMNOPLEUROIDA.....	46
	Family Temnopleuridae.....	46
	Family Toxopneustidae.....	47
Order	ECHINOIDA.....	48
	Family Echinometridae.....	48
	Family Strongylocentrotidae.....	48
Order	HELECTYPOIDA.....	49
	Family Echinoneidae.....	49
Order	CLYPEASTEROIDA.....	50
	Family Clypeasteridae.....	50
	Family Dendrasteridae.....	50
	Family Echinarachniidae.....	50
	Family Mellitidae.....	50

Order	HOLASTEROIDA.....	51
	Family Urechinidae.....	51
	Family Pourtalesiidae.....	51
Order	SPATANGOIDA.....	51
	Family Hemiasteridae.....	51
	Family Palaeostomatidae.....	51
	Family Schizasteridae.....	52
	Family Brissidae.....	52
	Family Spatangidae.....	53
	Family Loveniidae.....	54
	ECHINOIDEA Insertae Sedis.....	54
Class	HOLOTHUROIDEA.....	55
Subclass	DENDROCHIROTACEA.....	55
Order	DENDROCHIROTIDA.....	55
	Family Psolidae.....	55
	Family Cucumariidae.....	56
Subclass	ASPIDOCHIROTACEA.....	57
Order	ASPIDOCHIROTIDA.....	57
	Family Holothuriidae.....	57
	Family Stichopodidae.....	57
	Family Synallactidae.....	57
Order	ELASIPODIDA.....	57
	Family Deimatidae.....	57
	Family Laetmogonidae.....	58
	Family Psychropotidae.....	58
	Family Elpidiidae.....	58
Subclass	APODACEA.....	59
Order	APODIDA.....	59
	Family Synaptidae.....	59
Order	MOLPADIIDA.....	59
	Family Molpadiidae.....	59
	HOLOTHUROIDEA Insertae Sedis.....	60

Class CRINOIDEA

CRINOIDEA

Subclass ARTICULATA

Order BOURGUETICRINIDA

Family Bathycrinidae

Monachocrinus sp.

E 102 MV69-VI-9 W. of Patton Escarpment 31°10'N 119°36'W Dec. 18, 1969 3600-3676m 25' otter trawl R/V Melville C. Hubbs, S. Luke

Order COMATULIDA

Family Antedonidae

Flormetra serratissima (Clark)

- E 138 Holt Exped. Sta. 10 Bahia San Quintin, Baja Calif., Norte, Mex. 30°17'N 116°04'W 118m 10' ott. tr. Dec. 4, 1960 C. Boyd (P-267-60)
- E 139 P-265-60 N. of Isla Cedros, Baja Calif., Norte, Mex. 28°36.0'N 115°34.5'W 292m Dec. 3, 1960 10' ott. tr.
- E 142 SOB-1 S.W. of Punta Banda, Baja Calif., Norte, Mex. 31°38.3'N 116°51.4'W 183-458m rock dredge Feb. 12, 1960 (P-136-60)
- E 775 SIO65-113 Coronado Bank, San Diego Co. 32°40'30"N 117°27'20"W 230m diving saucer April 22, 1961 C. Hubbs
- E 891 Holt. Exp. Sta. 13 W. of Pta. Cabras, Baja Calif. Norte 31°20'N 116°39.2'W 82m 10' ott. tr. Dec. 4, 1960 (SIO60-471) C. Boyd
- E 2500 Albatross Sta. 2952 S. of Santa Cruz Channel, Calif. 33°50'00"N 119°57'00"W 104m Feb. 8, 1889 (USNM 35731)
- E 2501 N.E.L. 653 30 Mile Bank, Baja Calif., Norte, Mex. 30°41.30'N 117°46'W 378m N.E.L.
- E 2507 B-6203 Catalina Is., Calif. 238m March 22, 1962 F.H. Berry
- E 2508 Off Santa Cruz, Calif. 36°37.5'N 122°01'W dredge 119-183m coll. W.C. Austin
- E 2509 Coronado Bank, Baja Calif., Norte, Mex. Diving Saucer Dec. 22, 1964 150m A.O. Flechsig
- E 2512 Saucer Dive #335 ca. 9 mi. W. of Pt. Loma, Calif. April 6, 1965 175m A. Flechsig
- E 2516 Top of Coronado Bank, due W. of Silver Strand, Calif. Jan. 21, 1965 ca. 165m ST-908 Fager Boyd dredge
- E 2518 F-66-4 off Mission Beach, San Diego, Calif. 32°48.7'N 117°22.5'W 220m rock dredge Dec. 20, 1966 R. Ford
- E 2519 MB-37 ARV S. of Santa Cruz Is., Calif. 33°57'52"N 119°29'47"W 155-183m set #1 shrimp trap July 18, 1969 R. Green U.S.F.W.S.
- E 2520 MB-37 ARV S. of Santa Cruz Is., Calif. 34°01'50"N 119°30'00"W 128-165m set #1 shrimp trap July 17, 1969 R. Green U.S.F.W.S.
- E 2521 MB-37 ARV S. of Santa Cruz Is., Calif. 33°57'45"N 119°28'52"W 166m set #2 shrimp trap July 19, 1969 R. Green U.S.F.W.S.
- E 2524 Oceanside, Calif. 240°Mag. from Oceanside Harbor entrance to 110-128m June or July, 1969 Douglas McWha
- E 2525 Off Coronado Bank, W. of Silver Strand, Calif. on black coral 61m coll. R. Church in Deepstar donated by R. Grigg
- E 2534 M-15 OT-10 Santa Monica, Calif. 33°52.5'N 118°34'W Mar. 29, 1974 73m 25' ott. tr. R/V Agassiz T. Matsui

Incertae sedis

- E 109 TO-58-2, D-5 Salina Cruz, Golfo de Tehuantepec, Mex. 14°28.5'N 93°09.5'W 3529-3557m deep diving dredge Nov. 18, 1958 R. Parker (P-128-58) (SIO58-420)
- E 120 P-139-60 N.E. of Isla Guadalupe, Mex. 29°40.2'N 117°06.6'W-29°45.4'N 117°09.0'W 2708-2763m 30' ott. tr. Feb. 15, 1960 coll. R. Parker
- E 676 MV72-II-32 Peru-Chile Trench, off Pta. San Juan, Peru 25' ott. tr. May 10, 1972 15°45'S 76°07'W R/V T. Washington 3475m coll. S. Luke
- E 828 MV72-II-27 off Arica, Chile May 7, 1972 18°35'S 70°32'W 25' ott. tr. 768-968m R/V T. Washington S. Luke
- E 858 CRS-302 Carmarsel W. of Ulul Is., Namonuito Atoll, Caroline Is. 70-25 ft. SCUBA Feb. 12, 1967 W. Newman
- E 917 R/V Prospector 14°54.5'N 124°28.3'W 4390m dredge Aug., 1975 R. Dick
- E 1167 NAGA SS-II V362 61-252 Timor Sea 10°25.3'S 128°28.0'E shell dredge 77m Apr. 20, 1961
- E 1254 NAGA SS-II 61-0218 Timor Sea 12°03.5'S 124°03.0'E shell dredge Apr. 9, 1960 102m Cal. #50-01213
- E 1391 NAGA SS-II V-355 61-0249 Timor Sea 10°54'54"S 128°49'54"E chain bag dredge Apr. 19, 1961 34-82m CN 1053
- E 1404 NAGA SS-II V-364 61-0253 Timor Sea 10°15.9'S 128°44.3'E shell dredge Apr. 20, 1961 56m CN1057a
- E 1408 NAGA SS-II V-356 61-0250 Timor Sea 10°51.0'S 128°42.0'E shell dredge Apr. 19, 1961 34m CN1054
- E 1550 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1561 MET Sta. 133 W. of Patton Escarpment 32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981 3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 1575 Trawl #9 San Clemente Basin, Calif. 32°25.7'N 117°51'W 16' ott. tr. 1600m Sept. 5, 1974 R/V Oconostota J. Siebenaller
- E 1577 Trawl #8 San Clemente Basin, Calif. 32°27.8'N 117°52'W Sept. 5, 1974 1527-1545m 16' ott. tr. R/V Oconostota J. Siebenaller
- E 2171 RED-71 Recorder Exped., REC 14 Basilan Strait 06°50.1'N 122°19.6'E 64m Sept. 1, 1961 dredge
- E 2253 RED-67 Basilan Strait, Philippines 06°50.3'N 122°04.8'E Aug. 31, 1961 108-112m dredge Cable Ship "Recorder"
- E 2502 Top of Sea Mount 56°22'N 146°30'W Aug. 22, 1951 local time 2345 900m Isaacs
- E 2503 Capricorn Exped. Alexa Bank, N. of Fiji Basin ca. 11°40'S 175°08'E Dec. 8, 1952 J. Isaacs
- E 2505 Monsoon Exped. Jawa Trench 08°05'S 108°45'E shell dredge 128-119m Nov. 12, 1960 Rowland and Parker (P-244-60)
- E 2506 Monsoon Sta. VI-6 E. of New Zealand ca. 43°30'S 178°E Rock dredge 75-D Jan. 31, 1961 0906-1153 Russell, Menard
- E 2517 MV66-I-6 off Cabo Colnett, Baja Calif., Norte, Mex. 31°05'N 118°W 1463-1728m 40' ott. tr. Mar. 31, 1966 R/V Agassiz C. Hubbs
- E 2526 MV70-III-6 W. of Patton Escarpment 31°20'N 120°09'W 25' ott. tr. 3706-3806m Mar. 23, 1970 R/V Melville S. Luke

- E 2530 TEPE70-35 San Blas Is., Panama 09°35'07"N 78°44'27"W Sept. 7, 1970 0-4 ft. snorkel R/V A. Helix W. Newman, S. Luke
- E 2531 MV70-III-8 W. of Patton Escarpment 31°37'N 120°18.5'W March 23, 1970 3916-3950m 25' ott. tr. R/V Melville S. Luke
- E 2532 M-7, Sta. 3 San Clemente Basin, Calif. 32°29.7'N 118°08'W Sept. 16, 1971 1792-1866m 40' ott. tr. R/V Agassiz T. Matsui
- E 2533 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W April 20, 1973 1157-1454m 10' IKMT R/V Agassiz C. Hubbs, S. Luke
- E 2535 NAGA S-3 60-012 Gulf of Thailand 09°06'00"N 104°14'00"E Jan. 30, 1960 22m 2' bio dredge
- E 2536 NAGA S-4 60-0212 S. China Sea 15°40'00"N 109°22.9'E Feb. 27, 1960 110-198m 10' beam tr.
- E 2537 NAGA S-4 60-219 S. China Sea 15°39'00"N 111°51'00"E Feb. 29, 1960 1264m 10' beam tr.
- E 2538 NAGA S-4 60-0232 S. China Sea 13°26'15"N 109°31'10"E Mar. 3, 1960 141m 10' beam tr.
- E 2539 NAGA S-4 60-0232 S. China Sea 13°26'15"N 109°31'10"E Mar. 31, 1960 141m 10' beam tr.
- E 2540 NAGA S-4 60-0270 S. China Sea 10°23.8'N 108°53.2'E Mar. 10, 1960 49m 2' dredge Poulo Cecir de Mer
- E 2541 NAGA S-6 60-0546 S. China Sea 04°45'00"N 106°08'00"E June 22, 1960 82m 6' beam tr.
- E 2542 NAGA S-8 60-0711 S. China Sea 09°03'00"N 106°26'00"E Sept. 8, 1960 24m 2.5' dredge Poule Condore
- E 2543 NAGA S-8 60-0724 S. China Sea 15°40'35"N 108°59'00"E Sept. 12, 1960 91m 6' beam tr. Cu Lao Re
- E 2544 NAGA S-8 60-0724 S. China Sea 15°40'35"N 108°59'00"E Sept. 12, 1960 91m 6' beam tr. Cu Lao Re
- E 2545 NAGA S-8 60-0724 S. China Sea 15°40'35"N 108°59'00"E Sept. 12, 1960 91m 6' beam tr. Cu Lao Re
- E 2546 NAGA S-8 60-0724 S. China Sea 15°40'35"N 108°59'00"E Sept. 12, 1960 91m 6' beam tr. Cu Lao Re
- E 2547 NAGA S-4 60-0274 S. China Sea 10°16.0'N 107°56.5'E Mar. 10, 1960 33m 6' beam tr.
- E 2548 NAGA S-8 60-0828 Nhatrang Bay 05°28'50"N 106°37'40"E Oct. 4, 1960 55m 2.5' dredge
- E 2549 NAGA S-11 A 61-0211 Timor Sea 13°53.0'S 129°14.0'E Apr. 7, 1961 24m shell dredge
- E 2550 NAGA S-11A 61-212 Timor Sea 13°58.2'S 129°15.2'E Apr. 8, 1961 26m shell dredge
- E 2551 NAGA S-11A 61-213 Timor Sea 13°21.5'S 127°01.3'E Apr. 8, 1961 270m shell dredge
- E 2552 NAGA S-11A 61-214 Timor Sea 13°17.6'S 126°51.3'E Apr. 8, 1961 82m shell dredge
- E 2553 NAGA S-11A 61-217 Timor Sea 12°34.0'S 125°13.8'E Apr. 9, 1961 87m shell dredge
- E 2554 NAGA S-11A 61-220 Timor Sea 11°50.0'S 124°48.7'E Apr. 10, 1961 150m shell dredge
- E 2555 NAGA S-11A 61-226 Timor Sea 11°00.0'S 125°33.8'E Apr. 12, 1961 342m chain dredge
- E 2556 NAGA S-11A 61-232 Timor Sea 10°24.6'S 126°44.0'E Apr. 15, 1961 95m shell dredge (SI061-704)
- E 2557 NAGA S-11A 61-246(A) Timor Sea 10°55.8'S 129°15.5'E Apr. 19, 1961 27m shell dredge
- E 2558 NAGA S-11A 61-0256 Timor Sea 11°00.5'S 129°40.5'E Apr. 20, 1961 82m shell dredge
- E 2559 NAGA S-3 Hydro Sta. 7 Gulf of Thailand 09°09.1'N 104°13'E 18m small dredge Jan. 23, 1960 2125-2150
- E 2560 Princess Charlotte Bay, N. Queensland, Australia, 2 mi. offshore, 25 ft. depth, ott. tr. Sept. 29, 1966 R. McConnaughey
- Class STELLEROIDEA
- Subclass ASTEROIDEA
- Order PLATYASTERIDA
- Family Luidiidae
- Luidia aethenosoma Fisher
- E 216 Off Tijuana River, San Diego, Calif. 32°23.5'N 119°05.8'W July 17, 1908 92m
- Luidia cf. columbia Gray
- E 695 "EGCE" SJ San Juanito Bay, Baja Calif., Sur 26°12'N 112°28'W 4m otter trawl to 20 ft. sandy bay July 20, 1975 coll. Hemingway, Luke
- Luidia foliolata Grube
- E 324 Stright off W. of Pt. La Jolla, San Diego, Calif. Jan. 28, 1965 16' ott. tr. #1 101-183m coll. Fager ST-908
- E 369 M15-OT-2 off Encinitas, Calif. 33°01.4'N 117°18.7'W-33°02.2'N 117°19.2'W 51m 25' ott. tr. March 29, 1974 R/V Agassiz coll. Matsui
- E 370 M15 OT-6 off San Onofre, Calif. 33°16.6'N 117°32.0'W-33°15.5'N 117°30.6'W 54m 25' ott. tr. March 29, 1974 R/V Agassiz coll. Matsui, Burnett
- E 371 M15 OT-7 off San Clemente, Calif. 33°24.5'N 117°40.6'W-33°23.4'N 117°39.5'W 64m 25' ott. tr. March 29, 1974 R/V Agassiz coll. Matsui, Burnett
- E 372 M15 OT-15 off Morro Bay, Calif. 35°24.7'N 121°00.4'W-35°06.5'N 121°03.0'W 99m 25' ott. tr. April 2, 1974 R/V Agassiz coll. Matsui, Burnett
- E 373 M15 OT-16 Pismo Beach, Calif. 35°05.0'N 120°47.5'W-35°06.2'N 120°46.4'W 70m 25' ott. tr. April 2, 1974 R/V Agassiz coll. Matsui
- E 374 M15 OT-17 off Pt. Sal, Calif. 34°54.2'N 120°48.9'W-34°52.2'N 120°49.1'W 132m 25' ott. tr. April 2, 1974 R/V Agassiz coll. Matsui
- E 375 M15 OT-18 off Lompoc, Calif. 34°46.2'N 120°43.2'W April 2, 1974 70m 25' ott. tr. R/V Agassiz coll. Matsui
- E 376 CalCofi 74126/II off San Francisco, Calif. 37°13.8'N 122°31.0'W-37°15.4'N 122°31.8'W 79m 16' ott. tr. #1 Dec. 9, 1974 R/V Agassiz coll. Matsui
- E 377 CalCofi 74126/II Piedras Blancas 35°46.3'N 121°24.7'W-35°48.4'N 121°25.9'W 73m 16' ott. tr. #4 Dec. 10, 1974 R/V Agassiz coll. Matsui
- E 378 M15 OT-20 Summerland, Calif. 34°17.5'N 120°48.9'W-34°17.9'N 120°49.1'W 75m 25' ott. tr. April 2, 1974 R/V Agassiz coll. Matsui, Burnett
- E 379 M15 OT-4 off San Onofre, Calif. 33°14.5'N 117°31.1'W-33°13.1'N 117°29.6'W 91m 25' ott. tr. March 29, 1964 R/V Agassiz coll. Matsui
- E 380 M15 OT-8 N. of Dana Pt., Calif. 33°32.9'N 117°49.2'W-33°32.3'N 117°48.1'W 53-48m 40' ott. tr. March 29, 1974 R/V Agassiz coll. Matsui
- E 382 CalCofi 74126/II off San Luis Obispo 35°50.5'N 121°29.0'W-35°48.8'N 121°28.0'W 99m 16' ott. tr. #3 Dec. 10, 1974 R/V Agassiz coll. Matsui



- E 383 Cruise 52 Sta. 35 USFWS BCF 39°42.6'N  
123°52'W ott. tr. July 15, 1970 1615-1700  
95m coll. Hartman
- E 384 CalCofi 74126/II Piedras Blancas 35°43.3'N  
121°44.1'W-35°35.8'N 121°44.8'W 914m 16'  
otter trawl Dec. 10, 1974 R/V Agassiz coll.  
Matsui
- E 385 CalCofi 74126/II off San Francisco  
37°07.6'N 122°22.6'W-37°08.6'N 122°23.0'W  
37m 16' otter trawl #2 Dec. 9, 1974 R/V  
Agassiz coll. Matsui
- E 386 About 3/4 mi. W. of Torrey Pines, San  
Diego, Calif. 75-100 ft. July 30, 1917 D-54
- E 1481 Student cruise off Pt. Loma, Calif.  
32°35.5'N 117°20'W Nov. 15, 1980 91-101m  
otter trawl 'E.B. Scripps' A. Fleminger
- E 2257 B6203-4 Monterey Bay, Calif. Mar. 8, 1962  
trawl #TR-48 F.H. Berry (SI063-809)
- Luidia ludwigi Fisher  
E 210 off San Diego, Calif. July 30, 1906 32°51'N  
117°20'W rocky 73m
- E 338 SL53 SeaLab off Scripps Pier, Scripps  
Canyon on South transect ca. 56m Oct. 5,  
1965 coll. R. Grigg
- E 341 SeaLab 09 off Scripps Pier in Scripps  
Canyon Oct. 1, 1965 coll. R. Grigg 67m
- E 360 MV68-I-65 E. of Angel de La Guarda, Gulf  
29°19.9'N 113°10.4'W-29°20.4'N 113°12.0'W  
265-284m 25' otter trawl Jan. 20, 1968 R/V  
T. Washington coll. C. Hubbs
- E 367 M-15 OT-5 off San Onofre, Calif. 33°17.0'N  
117°31.2'W-33°16.2'N 117°30.0'W 27m 25'  
otter trawl March 29, 1974 R/V Agassiz  
coll. Matsui, Burnett
- E 368 H48-215,-222 S. Coronado Is., Mex. 32°25'N  
117°13'W-32°20'N 117°08'W 15-55m pipe stem  
dredge Aug. 11, 1948 'E.W. Scripps' coll.  
C. Hubbs
- E 397 Baja 69-15 Baja Calif., Sur, Mexico  
27°28.3'N 114°51.0'W Feb. 24, 1969 110m  
pipe dredge w/chain bag R/V Oconostota
- E 546 H52-205 S.W. of Pt. Canoas, Baja Calif.  
29°20'N 115°02'W pipe stem dredge 40m  
Sept. 6, 1952 R/V 'Orca' coll. K.S. Norris
- E 2226 P-211-60 Gulf of Calif., Mexico 29°54.3'N  
113°03.2'W Mar. 30, 1960 110-108m 10' ott.  
tr.
- Luidia phragma Clark  
E 357 Mag Bay C-3 Bahia Magdalena, N.W. end Isla  
Magdalena 24°43.7'N 112°08.3'W hand  
collected on sand beach at low tide 60'  
beach seine Jan. 29, 1964 (SI064-71)
- E 358 SI064-873 Bahia Magdalena 24°38.2'N  
111°56.4'W-24°39.1'N 111°57.2'W 11m otter  
trawl TR #120 Nov. 11, 1964 R/V Black-  
Douglas B6411-10
- E 359 Pt. Abreojos, Baja Calif., Sur, Mexico ca.  
26°40'N 113°35'W Aug. 25, 1957 9-15m
- E 393 B6212-16 TR-72 Bahia Magdalena 24°36.8'N  
111°58.4'W-24°37.4'N 111°59.1'W 21m 16'  
otter trawl Dec. 5, 1962 coll. F.H. Berry  
(SI062-716)
- E 395 CalCofi 6008B SI060-386 N. end of Margarita  
Is., Bahia Magdalena, Mex. ca. 24°30'N  
112°W Aug. 23, 1960 9m 10' otter trawl  
coll. F.H. Berry
- E 2211 P-190-60 Gulf of Calif. Mexico 28°24.6'N  
111°48.0'W Mar. 25, 1960 13m shell dredge  
Curray & R. Parker
- E 2213 P-197-60 Gulf of Calif., Mexico 28°43.8'N  
112°09.1'W Mar. 27, 1960 24m rock dredge  
Curray & R. Parker
- E 2214 P-182-60 Gulf of Calif., Mexico 28°29'N  
112°W Mar. 24, 1960 18m 10' ott. tr. Curray  
& R. Parker
- E 2216 P-171-60 Gulf of Calif., Mexico 28°19.3'N  
111°42.3'W Mar. 22, 1960 42m shell dredge  
Curray & R. Parker
- E 2217 P-172-60 Gulf of Calif., Mexico 28°23.3'N  
111°39.8'W Mar. 22, 1960 13m shell dredge  
Curray & R. Parker
- E 2219 P-183-60 Gulf of Calif., Mexico 28°30.8'N  
111°53.6'W Mar. 24, 1960 18m shell dredge  
Curray & R. Parker
- E 2221 P-196-60 Gulf of Calif., Mexico 28°45.8'N  
112°04.4'W Mar. 27, 1960 24m shell dredge  
Curray & R. Parker
- E 2240 P-181-60 Gulf of Calif., Mexico 28°30.0'N  
111°59.5'W March 24, 1960 16m shell dredge  
R. Parker & Curray
- E 2758 5409-P Bahia Magdalena, Baja Calif., Sur,  
Mex. Sept., 1954 Al Stover
- Luidia sp.  
E 44 SI070-253 MB-6904-6 TR #151 29°58.0'N  
112°50.5'W-30°00.0'N 112°53.6'W 91m 17 ft.  
otter trawl April 26, 1969 6 1/2 mi. N.W.  
of Cabo Lobos coll. Moser
- E 47 MB-6904-4 TR #149 28°47.0'N 112°10.0'W  
28°49.7'N 112°10.6'W 25m 17 ft. otter trawl  
April 25, 1969 6 1/2 mi E. of S. end of  
Tiburon Is. coll. Moser
- E 387 Vermillion Sea BII-33 off Pta. Piaxtla,  
Sinaloa, Mex. 23°35.2'N 106°53.5'W 44-48m  
40' otter trawl May 13, 1959 coll.  
R. Parker P-95-59
- E 389 Vermillion Sea BII-39 off San Blas, Mex.  
21°50'N 106°09.4'W-21°52.2'N 106°12.2'W 55m  
40' otter trawl May 18, 1959 coll.  
R. Parker (P-97-59)
- E 398 6108-73 off Nayarit, Mexico 22°08'N  
105°44'W Aug. 24, 1961 20m 16' otter trawl  
coll. DeWitt
- E 399 6108-B-72 off Nayarit, Mexico 22°04.8'N  
105°42.5'W 22°06.8'N 105°42.2'W 15m 16'  
otter trawl Aug. 24, 1961 coll. DeWitt &  
Perkins
- E 400 6108B-36 Banderas Bay, Mexico 20°41'N  
105°22'W-20°42'N 105°21'W 36-40m 16' otter  
trawl Aug. 19, 1961 coll. F.H. Berry
- E 401 6108 B-71 off Nayarit, Mexico 22°02.5'N  
105°43.5'W-22°03.8'N 105°43.2'W 20-21m 16'  
otter trawl Aug. 24, 1961 coll. DeWitt
- E 402 6108 B-37 Banderas Bay, Mexico 20°41'N  
105°20'W-20°40'N 105°19'W 6-9m 10' otter  
trawl Aug. 19, 1961 coll. F.H. Berry
- E 403 MV73-I-38 Golfo de Tehuantepec, Mex.  
15°30.0'N 93°22.0'W 15°31.0'N 93°23.1'W 22m  
40' otter trawl April 10, 1973 R/V Agassiz  
coll. C. Hubbs, S. Luke
- E 404 MV73-I-39 Golfode Tehuantepec, Mex.  
14°42.0'N 92°54.1'W-14°44.0'N 92°56.0'W 55m  
40' otter trawl April 10, 1973 R/V Agassiz  
C. Hubbs, S. Luke
- E 405 MV73-I-47 Champerico, Guatamala 13°50.0'N  
92°01.7'W 31°52.5'N 92°02.3'W 113-106m 40'  
otter trawl April 13, 1973 R/V Agassiz  
coll. C. Hubbs, S. Luke
- E 406 RR65-39 N.W. of Monserrate, Baja Calif.  
25°40.6'N 111°05.3'W 25°44.3'N 111°05.6'W  
170-192m 40' otter trawl July 11, 1965 R/V  
Horizon coll. R. Rosenblatt
- E 407 MV73-I-73 Cabo Blanco, Costa Rica 09°46.6'N  
85°25.0'W-09°47.5'N 85°26.7'W 60m 25' otter  
trawl April 18, 1973 R/V Agassiz coll.  
C. Hubbs, S. Luke

- E 391 Vermillion Sea BII-39 off San Blas, Mex.  
21°50'N 106°09.4'W-21°52.2'N 106°12.2'W 55m  
40' otter trawl May 18, 1959 coll.  
R. Parker (P-97-59)
- E 392 Vermillion Sea BII-39 off San Blas, Mex.  
21°50'N 106°09.4'W-21°52.2'N 106°12.2'W 55m  
40' otter trawl May 18, 1959 coll.  
R. Parker (P-97-59)
- E 538 MV 71-I-1 Isla de Guadalupe, Mexico  
28°51.5'N 118°16.0'W-118°16.5'W 95-81m 6'  
Sigsbee trawl May 18, 1971 R/V Agassiz  
coll. C. Hubbs, S. Luke
- E 653 MV67-II-12 off Monterey, Calif. 36°54.0'N  
122°06.5'W-36°52.0'N 122°04.4'W 68m 41'  
otter trawl June 12, 1967 R/V T. Washington  
coll. C. Hubbs (SI067-107)
- E 654 MV67-II-13 outside Monterey Bay, Calif.  
36°50.7'N 122°07.3'W-36°48.3'N 122°03.5'W  
99-101m 41' otter trawl June 12, 1967 R/V  
T. Washington coll. C. Hubbs (SI067-108)
- E 706 6108B-51 Banderas Bay, Jalisco, Mexico  
20°41'N 105°22'W Aug. 21, 1961 46-55m 10'  
otter trawl coll. F.H. Berry
- E 761 H51-32 S. side of Bahia Todos Santos, Baja  
Calif. ca. 31°45'N 116°40'W 70-59m Feb. 2,  
1951 coll. C. Hubbs on 'Orca'
- E 764 MV68-I-74 off Isla San Pedro Martir, Baja  
Calif., Norte 28°19.8'N 112°10'W 293-307m  
25' otter trawl Jan. 21, 1968 R/V  
T. Washington C. Hubbs
- E 772 El Golfo II BT-162 Golfo de Tehuantepec,  
Mexico 15°48.5'N 95°58'W 55m 20' otter  
trawl June 6, 1965 T. Matsui
- E 783 Off Coal Oil Point, Goleta, Calif. ca.  
34°40'N 119°50'W 165-201m beam trawl  
June 4, 1954
- E 804 El Golfo II BT-161 OT #2 Golfo de  
Tehuantepec, Mexico 15°47'N 96°59'W 30m 20'  
otter trawl June 6, 1965 T. Matsui
- E 815 MV72-II off Mejillones Bay, Chile 22.8°S  
70.5°W bought from Chilean fishing boat  
April 27, 1972 ca. 5m R/V T. Washington  
S. Luke
- E 889 Holt Exp. sta. #13 13 mi. W. of Pta.  
Cabras, Baja Calif., Norte 31°20'N  
116°39.2'W 82m 10' otter trawl Dec. 4, 1960  
(SI060-471) C. Boyd
- E 990 MV68-I-59 N.W. of Angel de la Guarda, Golfo  
de Calif. 29°41'N 113°56'W 566-644m 40'  
otter trawl Jan. 18, 1968 R/V T. Washington  
C. Hubbs
- E 978 Holt Exped. Sta. #10 Bahia San Quintin,  
Baja Calif., Norte 30°17'N 116°04'W 118m  
10' otter trawl Dec. 4, 1960 C. Boyd
- E 950 SI062-522 off Bahia San Quintin, Baja  
Calif., Norte 30°13'N 116°05'W 183m 16'  
otter trawl April 1, 1962 B6203-18 Perkins
- E 1110 TEPF78-12 off Salina Cruz, Oaxaca, Mex.  
15°59.5'N 95°09'W Apr. 6, 1978 16' otter  
trawl 42-40m R/V A. Helix W. Newman,  
S. Luke
- E 1112 TEPF78-13 Salina Cruz, Oaxaca, Mex.  
16°00.0'N 95°10.2'W 16' otter trawl 42m  
Apr. 6, 1978 R/V A. Helix W. Newman,  
S. Luke
- E 1875 P-164-60 off Estero de Tastiota, Sonora,  
Mex. 28°14.5'N 111°47.5'W Mar. 21, 1960  
75-64m 10' ott. tr.
- E 1886 P-195-60 S. of Isla Tiburon, Gulf of  
Calif., Mex. 28°50.5'N 112°11.0'W Mar. 27,  
1960 22m shell dredge
- E 2224 P-157-60 off San Blas, Nayarit, Mex.  
21°46.4'N 105°45.2'W Mar. 9, 1960 13-22m  
10' ott. tr.
- E 2227 P-201-60 Gulf of Calif., Mexico 28°30.0'N  
112°22.0'W March 27, 1960 230m shell dredge  
R. Parker, Curray
- E 2231 P-159-60 Islas Tres Marias, Mexico  
22°30.8'N 106°01.2'W Mar. 11, 1960 46-57m  
10' ott. tr. R. Parker
- E 2241 P-191-60 off Bahia Kino, Sonora, Mexico  
28°41.0'N 112°06.0'W Mar. 25, 1960 35-26m  
10' ott. tr. R. Parker & Curray

## Gen. Indet.

- E 327 Stright off W. of Pt. La Jolla, San Diego,  
Calif. Jan. 28, 1965 16' otter trawl #1  
101-183m coll. Forger ST-908
- E 1055 MV73-I-2 N.E. of Isla Maria Madre, Mexico  
22°00'N 106°16'N 82-88m 25' otter trawl  
Mar. 30, 1973 R/V Agassiz C. Hubbs
- E 1169 NAGA S3 60-0102 Gulf of Thailand 12°33'00"N  
100°44'00"E 6' Beam T. Jan. 19, 1960 27m  
Cat. #53-00346
- E 1177 NAGA S3 60-0137 Gulf of Thailand 08°25'30"N  
100°44'40"E 6' Beam T. Jan. 26, 1960 27m  
Cat. #53-00359
- E 1179 NAGA S3 60-0175 Gulf of Thailand 12°04'30"N  
100°46'00"E 6' Beam T. Jan. 30, 1960 27m  
Cat. #53-00372
- E 1191 NAGA S9 60-0833 Nhatrang Bay 06°14'50"N  
105°47'10"E 6' Beam T. Oct. 5, 1960 49m  
Cat. #53-00422
- E 1192 NAGA S9 60-0853 Gulf of Thailand 10°04'10"N  
100°19'10"E 6' Beam Nov. 10, 1960 55m Cat.  
#53-00929
- E 1193 NAGA S9A 60-1052 Gulf of Thailand  
11°59'24"N 102°11'06"E 7' Beam T. Dec. 10,  
1960 26m Cat. #53-01512
- E 1197 NAGA S9A 60-1085 Gulf of Thailand  
12°19'15"N 100°43'40"E 16' otter trawl  
Dec. 13, 1960 29m Cat. #53-00916
- E 1198 NAGA S9A 60-1091 Gulf of Thailand  
12°17'28"N 100°18'40"E 16' otter trawl  
Dec. 13, 1960 29m Cat. #53-01045
- E 1232 NAGA S9 60-0845 Gulf of Thailand 12°54'30"N  
100°26'30"E 6' Beam T. Nov. 9, 1960 20m  
Cert. #53-00506
- E 1257 NAGA S3 60-0110 Gulf of Thailand 06°22'15"N  
102°14'00"E 6' Beam T. Jan. 22, 1960 27m  
Cat. #53-00348
- E 1267 NAGA S5 60-0363 Gulf of Thailand 08°39'45"N  
100°14'45"E 6' Beam T. Apr. 27, 1960 17m  
Cat. #53-00436
- E 1276 NAGA S2 59-0131 Gulf of Thailand 13°01'45"N  
100°50'30"E 40' otter tr. Dec. 15, 1959  
11 ft. Cat. #53-00458
- E 1278 NAGA S3 60-0104 Gulf of Thailand 09°37'00"N  
100°21'00"E 6' Beam T. Jan. 20, 1960 26m-  
31m Cat. #53-00342
- E 1284 NAGA 55 60-0316 Gulf of Thailand 09°46'15"N  
100°10'30"E 6' Beam T. Apr. 22, 1960 25m  
Cat. #53-00489
- E 1297 NAGA S9 60-0845 Gulf of Thailand 12°54'30"N  
100°26'30"E 6' Beam T. Nov. 9, 1960 20m  
Cat. #53-00-437
- E 1411 NAGA S9A 60-1062 Gulf of Thailand  
11°21'48"N 100°14'50"E 16' otter tr.  
Dec. 11, 1960 37m CN611a
- E 1422 NAGA SB 60-0711 South China Sea 09°03'00"N  
106°26'00"E 2.5' dredge Mar. 8, 1960 25m  
Cert. #53-00404

## Order PAXILLOSIDA

## Family Astropectinidae

Astropecten braziliensis armatus Doderlein

- E 169 Off Scripps Pier, La Jolla, Calif. 10m sand Hopkins & Crozier
- E 394 B6212-16 Bahia Magdalena, Baja Calif., Sur, Mex. 24°37'N 111°59'W Dec. 5, 1962 21m 16' otter trawler TR-22 F.H. Berry (SI062-716)
- E 396 CalCofi 6008B N. end of Isla Margarita, Baja Calif., Sur, Mex. ca. 24°30'N 112°W 10m 10' otter trawler Aug. 23, 1960 F.H. Berry (SI060-386)
- E 519 SI064-873 Bahia Magdalena, Baja Calif., Sur, Mex. 24°38.7'N 111°57'W Nov. 11, 1964 11m TR-120 otter trawl R/V B. Douglas B-6411-10
- E 531 Mag Bay A-6 off Santo Domingo, Baja Calif., Sur, Mex. 25°39.5'N 112°07.6'W 13m 6' midwater tr. Jan. 28, 1964 C. Hubbs
- E 544 MV 65-I-29 off Bahia Asuncion, Baja Calif., Sur, Mex. 27°02'N 114°22'W June 2, 1965 104-113m 45' otter trawler R/V Horizon C. Hubbs (SI065-212)

Astropecten verrilli (Fisher)

- E 45 SI052-165 Playa Maria Bay, Baja Calif., Norte, Mex. Sept. 1, 1952 try net to 35 ft. 'Orca' K.S. Morris
- E 168 Cod Hole, La Jolla, Calif. 85 ft. sand bottom Hopkins and Crozier

Astropecten sp.

- E 208 Off San Diego, Calif. June 21, 1906 32°51.5'N 117°17'W 82m
- E 219 Off Point Loma-record uncertain 32°38'N 117°14'W Nov. 3, 1907
- E 265 Ventura, Calif. 3-4 mi. W. of Santa Clara river mouth 22-44m otter trawler Aug. 18-19, 1961 'El Capitan' coll. J. Copp SI061-499
- E 325 Slight off W. of Pt. La Jolla, San Diego, Calif. Jan. 28, 1965 16' otter trawler #1 101-183m coll. Fager ST-908
- E 339 Sea Lab site off Scripps Pier in Scripps Canyon Sept. 28, 1965 coll. R. Grigg and T. Clarke
- E 340 Sea Lab 09 off Scripps Pier in Scripps Canyon Oct. 1, 1965 coll. R. Grigg 67m
- E 342 SL44 Sea Lab off Scripps Pier in Scripps Canyon Sept. 21, 1965
- E 361 MV68-I-65 E. of Angel de La Guarda, Gulf 29°19.9'N 113°10.4'W-29°20.4'N 113°12.0'W 265-284m 25' otter trawler Jan. 20, 1968 R/V T. Washington coll. C. Hubbs
- E 381 CalCofi 74126/II Piedras Blancas 35°46.3'N 121°24.7'W-35°48.5'N 121°25.9'W 73m 16' otter trawler #4 Dec. 10, 1974 R/V Agassiz coll. Matsui
- E 388 Vermillion Sea BII-33 off Pt. Piactla, Sinaloa, Mex. 23°35.2'N 106°53.5'W 44-48m 40' otter trawler May 13, 1959 coll. R. Parker P-59-59
- E 390 Vermillion Sea BII-39 off San Blas, Mex. 21°50'N 106°09.4'W-21°52.2'N 106°12.2'W 55m 40' otter trawler May 18, 1959 coll. R. Parker (P-97-59)
- E 492 Scripps Canyon, La Jolla, Calif. straight off SIO Pier, East Wall 61m Sept. 22, 1957 coll. C. Limbaugh
- E 493 Dredge sample off SIO pier 1000 ft. from end of Pier La Jolla, Calif. 18m curve July 12, 1916

- E 494 Off San Diego, Calif. 32°40.1'N 118°19.7'W July 1, 1909
- E 495 About 3/4 mi. W. of Torrey Pines, San Diego, Calif. July 30, 1917 23-30m D-54
- E 496 40 mi. bank off San Diego, Calif. 32°43'N-118°12'W March 22, 1938 102m? 'E.W. Scripps' coll. Shepard
- E 497 Off San Diego, Calif. 31/2-1/4 mi. S.W. of La Jolla, June 25, 1908 32°50.7'N 117°21.5'W 91-183m
- E 498 SI065-84 La Jolla Submarine canyon, San Diego, Calif. Mar. 29, 1965 35-40m diving saucer and chemfish coll. C. Hubbs
- E 499 China Point, San Diego, Calif. 32°23.5'N 119°05.8'W 88m July 17, 1908
- E 500 M15 OT-9 Long Beach, Calif. 33°53.3'N 118°09.2'W-118°07.6'W 49m 40' otter trawl March 29, 1974 R/V Agassiz coll. Matsui, Burnett
- E 501 M15 OT-5 off San Onofre, Calif. 33°17.0'N 117°31.2'W-33°16.2'N 117°30.0'W 27m 25' otter trawl March 29, 1974 R/V Agassiz coll. Matsui
- E 502 M15 OT-15 Morro Bay, Calif. 35°24.7'N 121°00.4'W-35°06.5'N 121°03.0'W 99m 25' otter trawl April 2, 1974 R/V Agassiz coll. T. Matsui
- E 503 M15 OT-10 Santa Monica, Calif. 33°52.0'N 118°33.2'W-33°52.8'N 118°34.5'W 73m 25' otter trawl March 29, 1974 R/V Agassiz coll. T. Matsui
- E 504 M15 OT-7 off San Clemente, Calif. 33°24.5'N 117°40.6'W-33°23.4'N 117°39.5'W 64m 25' otter trawl March 29, 1974 R/V Agassiz coll. T. Matsui
- E 505 M15 OT-17 Punta Sal, Calif. 34°54.2'N 120°48.9'W-34°52.2'N 120°49.1'W 132m 25' otter trawl April 2, 1974 R/V Agassiz coll. T. Matsui
- E 506 M15 OT-6 off San Onofre, Calif. 33°16.6'N 117°32.0'W-33°15.5'N 117°30.6'W 54m 25' otter trawl March 29, 1974 R/V Agassiz coll. T. Matsui
- E 507 H48-215-222 S. Coronado Is. Mex. 32°25'N 117°13'W 32°20'N 117°08'W 15-55m pipe stem dredge Aug. 11, 1948 'E.W. Scripps' coll. C. Hubbs
- E 509 China Pt. San Diego, Calif. July 17, 1908 32°23.7'N 119°06.0'W 92m
- E 510 3.5 to 4.5 mi. W.S.W. of La Jolla, Calif. June 25, 1908 183-275m
- E 511 SIOM 59-75-2 Bahia Todos Santos, Baja Calif., Norte, S. side of Bay 48m dredge Feb. 6, 1957 coll. C. Hubbs
- E 512 H49-35 off S. Coronado Is. 32°25.5'N 117°13.9'W 32°24.9'N 117°14.9'W 29-23m CAS dredge April 23, 1949 coll. C. Hubbs on 'Orca'
- E 513 1.6 mi. W. of Pt. Colnett, Baja Calif. 30°58'N 116°22'W Aug. 28, 1960 40m otter trawl
- E 514 6108B-50 Banderas Bay, Mexico 20°40.3'N 105°21.8'W 20°42.5'N 105°22.6'W 21-25m 10' otter trawl Aug. 21, 1961 coll. F.H. Berry
- E 515 MV73-I-40 Golfode Tehuantepec, Mex. 14°44.8'N 93°00.0'W 14°41.2'N 93°02.0'W 82-88m 40' otter trawl April 10, 1973 R/V Agassiz coll. C. Hubbs, S. Luke
- E 516 H48-229 Baja Calif., Bahia Descanso E. of Sugar Loaf Rock, pipe dredge 20-26m Aug. 13, 1948 'E.W. Scripps' coll. C. Hubbs
- E 518 Baja 69-13, Baja Calif., Sur 27°12.0'N 114°31.2'W Feb. 23, 1969 44m dredge-pipe w/chain bag R/V Oconostota

- E 520 MV73-I-67 N. Nicaragua 12°41.2'N 87°43'W-12°43.0'N 87°46.6'W 59-53m 40' otter trawl April 17, 1973 R/V Agassiz coll. C. Hubbs, S. Luke
- E 521 MV73-I-65 Golfo de Fonseca 13°06.5'N 87°57.6'W-13°05.1'N 87°59.5'W 24-29m 40' otter trawl April 17, 1973 R/V Agassiz coll. C. Hubbs, S. Luke
- E 522 M15 OT-18 off Lompoc, Calif. 34°46.2'N 120°43.2'W April 2, 1974 70m 25' otter trawl R/V Agassiz coll. T. Matsui
- E 523 M15 OT-16 Pismo Beach, Calif. 35°05.0'N 120°47.5'W-35°06.2'N 120°46.4'W 70m 25' otter trawl April 2, 1974 R/V Agassiz coll. T. Matsui
- E 524 M15 OT-4 off San Onofre, Calif. 33°14.5'N 117°31.1'W-33°13.1'N 117°29.6'W 91m 25' otter trawl March 29, 1974 R/V Agassiz coll. T. Matsui
- E 525 M15 OT-2 off Encinitas, Calif. 33°01.4'N 117°18.7'W-33°02.2'N 117°19.2'W 51m 25' otter trawl March 29, 1974 R/V Agassiz coll. T. Matsui
- E 526 MV73-I-20 Pta. Lizardo, Mexico 18°05.0'N 102°57.5'W 18°06.0'N 102°59.8'W 46-49m 40' otter trawl April 4, 1973 R/V Agassiz coll. C. Hubbs, S. Luke
- E 527 M15 OT-8 N. of Dana Point, Calif. 33°32.9'N 117°49.2'W 33°32.3'N 117°48.1'W 53-48m 40' otter trawl March 29, 1974 R/V Agassiz coll. T. Matsui
- E 529 SI064-888 2.6 mi. W. of Punta Pequana, Baja Calif. 26°13.8'N 112°31.6'W 37-40m otter trawl Nov. 16, 1964 R/V Black Douglas
- E 530 H-6105 sta. #1 above Cabo Colnett, Baja Calif. 31°06.2'N 116°33.8'W June 5, 1961 104-110m Micky's Monster dredge 0652-0813 P.S.T. coll. D. Brown
- E 532 MV68-I-28 Isla Espiritu Santo, La Paz 24°23.1'N 110°21.5'W 24°23.7'N 110°22.6'W 59-77m 40' otter trawl Jan. 28, 1968 R/V T. Washington coll. C. Hubbs
- E 534 MV68-I-60 N.W. of Angel de La Guarda 29°39.5'N 113°55.5'W-29°43.5'N 113°59.0'W 567-603m 40' otter trawl Jan. 18, 1968 R/V T. Washington C. Hubbs
- E 535 MV71-I-33 W. of Isla Cedros, Baja, 28°20.0'N 115°21.6-28°22.5'N 115°19.0'W 221-203m 25' otter trawl May 27, 1971 R/V Agassiz coll. C. Hubbs, S. Luke
- E 536 Baja 69-25 Baja Calif., Norte, Mex. 29°09.0'N 115°30.'W Feb. 26, 1969 549m dredge-pipe stem w/chain R/V Oconostota
- E 537 MV71-I-1 Isla de Guadalupe, Mexico 28°51.5'N 118°16.0'W-118°16.5'W 95-81m 6' Sigsbee trawl May 18, 1971 R/V Agassiz coll. C. Hubbs, S. Luke
- E 539 Baja 69-16, Baja Calif., Sur, Mexico 27°32.5'N 114°52.7'W Feb. 24, 1969 102m pipe and chain rock dredge R/V Oconostota
- E 540 Baja 69-26, Baja Calif., Norte, Mexico 29°10.5'N 115°27.7'W Feb. 26, 1969 110m dredge-pipe w/chain bag R/V Oconostota
- E 541 Baja 69-22, Baja Calif., Mexico 28°17.6'N 115°30.7'W Feb. 25, 1969 146m dredge w/chain bag R/V Oconostota
- E 542 MV73-I-66 Golfo de Fonseca, El Salvador 13°07.0'N 88°07.0'W 13°06.5'N 88°05.0'W 18m 40' otter trawl April 17, 1973 R/V Agassiz coll. C. Hubbs, S. Luke
- E 545 H52-205 S.W. of Pt. Canoas, Baja Calif. 29°20'N 115°02'W pipe stem dredge 40m Sept. 6, 1952 R/V Orca coll. K.S. Norris
- E 548 MV68-I-34 Bahia Santa Inez, Gulf 26°56.9'N 111°55.7'W-26°55.2'N 111°55.2'W 42-49m otter trawl Jan. 14, 1968 R/V T. Washington coll. C. Hubbs
- E 550 MV68-I-35 Bahia Santa Inez, Gulf 26°55.3'N 111°57.0'W-26°56.7'N 111°58.0'W 37m otter trawl Jan. 14, 1968 R/V T. Washington coll. C. Hubbs
- E 551 Baja 69-19 Baja Calif., Norte, Mex. 28°00.0'N 15°29.5'W Feb. 24, 196 112m dredge-pipe with chain bag R/V Oconostota
- E 556 H48-314 S. Coronado Is. on E. side about midway between saddle & S. edge 18m small mollusk dredge Dec. 5, 1948 'Orca' coll. J.W. Sefton
- E 558 H52-7 off mouth of Tijuana River 32°33'N 117°12'W deep diving dredge 36m Feb. 26-27, 1952 coll. J. Isaacs
- E 560 H49-167a,b,c E. end of Coronado Is. ca. 32°24.2'N 117°12.0'W CAS pipe dredge 27-31m Nov. 27, 1949 'Orca' coll. C. Hubbs sand
- E 563 H52-9 Baja Calif., Norte, Mex. 32°37'N 117°37'W-32°17'N 117°37'W 1244m deep water dredge Feb. 26, 1952 coll. J. Isaacs R/V Horizon
- E 565 H52-8 off Tijuana River Mouth 32°31'N 117°12'W 38m Feb. 26, 1952 deepwater dredge coll. J. Isaacs R/V Horizon
- E 567 SI059-301 along N. side of Pta. Banda, Bahia Todos Santos, Ensenada 6-9m 16' otter trawl Aug. 7, 1959 coll. R. Rosenblatt
- E 569 Mag Bay C-11 ca. 3 mi. from shore, N. of Boca de Soledad, N. of Is. St. Magdalena 25°18.0'N 112°11.0'W 22-24m otter trawl Feb. 1, 1964 (SI064-79) coll. B.J. Zahuranec
- E 570 #J494 off Padre Island, Gulf of Mexico 43m otter trawl June 10, 1956
- E 571 6111 B-4 TR#31 S.W. tip of Cedros Is. 28°08.8'N 115°27.3'W-27°07.2'N 115°29.5'W 83-119m 16' otter trawl Nov. 15, 1961 coll. F.H. Berry (SI062-92)
- E 573 SI062-236 S. arm of Bahia de Los Angeles ca. 28°55-56'N 113°31-33'W 22-37m shrimp trawler April 26, 1962 coll. R. Rosenblatt
- E 575 M73-I-39 Golfo de Tehuantepec, Chiapas, Mex. 14°42.0'N 92°54.1'W 14°44.0'N 92°56.0'W 55m 40' otter trawl April 10, 1973 R/V Agassiz coll. C. Hubbs, S. Luke
- E 596 MV71-I-2 Isla de Guadalupe, Baja Calif. 28°52.0'N 118°14.6'W-118°15.3'W 102-99m 6' Sigsbee trawl May 18, 1971 R/V Agassiz coll. C. Hubbs, S. Luke
- E 651 H52-156 off Bahia Santa Rosalia, Baja Calif., Norte 73m trawl coll. K.S. Norris
- E 655 MV67-II-13 outside Monterey Bay, Calif. 36°50.7'N 122°07.3'W-36°48.3'N 122°03.5'W 99-101m 41' otter trawl June 12, 1967 R/V T. Washington coll. C. Hubbs (SI067-108)
- E 694 'ECCE' SJ San Juanito Bay, Baja Calif., Sur 26°12'N 112°28'W 4m otter trawl to 20 ft. July 20, 1975 coll. Hemingway, Luke
- E 705 6108-B-51 Banderas Bay, Jalisco, Mexico, 20°41'N 105°22'W Aug. 21, 1961 46-55m 10' otter trawl coll. F. Berry
- E 707 H51-26 Bahia Todos Santos, Baja Calif., Norte Feb. 5, 1961 coll. C. Hubbs on 'Orca'
- E 710 Haul 3181 off San Diego, Calif. 32°28.5'N 117°15.3'W 55m Feb. 10, 1912 coll. "Agassiz"
- E 721 No. 233 from head of Monterey Canyon, Calif. 36°49'N 121°49'W 37-27m Sept. 20, 1938 coll. F.P. Shepard

- E 722 La Jolla, Calif., La Jolla Canyon 46m  
Mar. 22, 1938 coll. F.P. Shepard R/V  
'E.W. Scripps'
- E 750 H51-27 Bahia Todos Santos, Baja Calif.,  
Norte ca. 31°45'N 116°40'W 37m dredge  
Feb. 5, 1951 coll. C. Hubbs on R/V Orca
- E 755 H51-32 Bahia Todos Santos, S. side, Baja  
Calif., Norte ca. 31°45'N 116°35'W 27-46m  
pipe dredge Feb. 6, 1951 coll. C. Hubbs on  
'Orca'
- E 758 H51-18 S. side of Bahia Todos Santos, Baja  
Calif., Norte ca. 31°45'N 116°40'W 70-59m  
Feb. 2, 1951 coll. C. Hubbs on 'Orca'
- E 762 H51-35 S. side of Bahia Todos Santos, Baja  
Calif., Norte ca. 31°45'N 116°40'W 8 ft.  
Feb. 6, 1951 coll. C. Hubbs on 'Orca'
- E 778 RR65-3 Bahia de La Paz, Mexico 55-80m 40'  
otter trawl July 5, 1965 W. Baldwin
- E 787 RR65-96 Bahia de La Paz, Baja Calif., Sur  
24°27'N 110°38'W 46m 40' otter trawl  
July 23, 1965 R. Rosenblatt
- E 786 SI065-517 off San Diego Co., Calif.  
32°38.6'N 117°15.6'W 30m dredge kelp &  
rocks
- E 793 El Golfo II BT-164 Salina Cruz, Mex.  
16°03.6'N 95°19'W 44m 20' otter trawl  
June 7, 1965 T. Matsui
- E 797 El Golfo II BT-157 Guerrero, Mex. 17°34'N  
101°31.2'W 90-160 ft. 20' otter trawl  
June 4, 1965 T. Matsui
- E 892 La Jolla Shores Beach, La Jolla, Calif.  
May 13, 1966 Arnold Ross
- E 949 SI062-522 off Bahia San Quintin Baja  
Calif., Norte 30°13'N 116°05'W 183m 16'  
otter trawl Apr. 1, 1962 B6203-18 Perkins
- E 952 Off San Diego, Calif. Aug. 11, 1970 32°33'N  
117°10.3'W 25' otter trawl R/V Agassiz 23m
- E 958 Saucer Dive #345 due W. of Bird Rock, La  
Jolla, Calif. Apr. 17, 1965 110-200m  
R. Ford
- E 968 Off Point Fermin, Palos Verde, Calif.  
Mar. 22, 1938 146m
- E 977 Holt Exped. Sta. #10 San Quintin Bay, Baja  
Calif., Norte 30°17'N 116°04'W 118m 10'  
otter trawl Dec. 4, 1960 C. Boyd
- E 981 SI054-222 S. of Guadalupe Is. Baja Calif.,  
Norte pipe dredge 49-37m Nov. 18, 1954 M/V  
Orca C. Hubbs
- E 985 MV68-I-59 N.W. of Angel de La Guarda, Golfo  
de Calif. 29°41'N 113°56'W 566-644m 40'  
otter trawl R/V T. Washington Jan. 18, 1968  
C. Hubbs
- E 1103 TEPE78-4 Folfode Papagayo, Costa Rica  
10°46.7'N 85°46.2'W Apr. 2, 1978 49m 16'  
otter trawl R/V A. Helix W. Newman, S. Luke
- E 1109 TEPE78-12 off Salina Cruz, Oaxaca, Mex.  
15°59.5'N 95°09'W Apr. 6, 1978 16' otter  
trawl 42-40m R/V A. Helix W. Newman,  
S. Luke
- E 1111 TEPE78-13 Salina Cruz, Oaxaca, Mex.  
16°00.0'N 95°10.2'W 16' otter trawl 42m  
Apr. 6, 1978 R/V A. Helix W. Newman,  
S. Luke
- E 1480 Student cruise off Pt. Loma, Calif.  
32°35.5'N 117°20'W Nov. 15, 1980 91-101m  
otter trawl 'E.B. Scripps' A. Fleminger
- E 1872 P-212-60 off Cabo Tepoca, Sonora, Mex.  
30°20.5'N 113°20.5'W Mar. 31, 1960 67-57m  
10' ott. tr.
- E 1887 P-222-60 off Tijuana River, San Diego,  
Calif., 32°33.4'N 117°13.2'W 31m deep  
diving dredge Mar. 8, 1960
- E 2175 Monsoon (P-234-60) Torres Strait 10°11.0'S  
139°31.0'E Oct. 12, 1960 51m rock dredge  
Rowland
- E 2200 P-150-60 off Altata, Sinaloa, Mexico  
24°33'N 108°04'W March 16, 1960 33-36m 10'  
ott. tr. R. Parker
- E 2209 S. Coronado Is., Baja Calif., Norte, Mexico  
ca. 32°22'N 117°10'W Nov. 9, 1946  
'E.W. Scripps' C. Hubbs
- E 2212 P-190-60 Gulf of Calif., Mexico 28°24.6'N  
111°48.0'W Mar. 25, 1960 13m shell dredge  
Curry & R. Parker
- E 2215 P-182-60 Gulf of Calif., Mexico 28°29'N  
112°W Mar. 24, 1960 18m 10' ott. tr. Curry  
& R. Parker
- E 2218 P-172-60 Gulf of Calif., Mexico 28°23.3'N  
111°39.8'W Mar. 22, 1960 13m shell dredge  
Curry & Parker
- E 2220 P-183-60 Gulf of Calif., Mexico 28°30.8'N  
111°53.6'W Mar. 24, 1960 18m shell dredge  
Curry & R. Parker
- E 2225 P-157-60 off San Blas, Nayarit, Mex.  
21°46.4'N 105°45.2'W Mar. 9, 1960 13-22m  
10' ott. tr.
- E 2228 P-201-60 Gulf of Calif., Mexico 28°30.0'N  
112°22.0'W March 27, 1960 230m shell dredge  
R. Parker & Curry
- E 2236 P-185-60 Gulf of Calif., Mexico 28°20.9'N  
111°58.0'W March 25, 1960 57m shell dredge  
R. Parker & Curry
- E 2239 P-181-60 Gulf of Calif., Mexico 28°30.0'N  
111°59.5'W March 24, 1960 16m shell dredge  
R. Parker & Curry
- E 2645 Sta. 27 Bahia Magdalena, Baja Calif., Sur,  
Mexico received at Scripps July 16, 1975  
from Jeff Moser N.M.F.S.-La Jolla
- E 2766 VS-BII-25 off Rio San Lorenzo, Sinaloa  
23°56.2'N 107°19.6'W 49-57m ott. tr.  
May 10, 1959 R. Parker (SI059-262)
- E 2779 H51-221 Bahia Santa Maria, Baja Calif.,  
Norte, Mex. July 1, 1951 breakers to beach  
tuna clipper Northern Light David H. Beason
- E 2780 Menard's Student Cruise-off San Diego,  
Calif. 32°32.9'N 117°21.6'W 128-137m rock  
dredge Feb. 7
- Dipsacaster eximus Fisher  
E 56 Cruise M-1 Sta. #2 San Diego Trough  
32°53.8'N 117°29.9'W 32°58.9'N 117°33.8'W  
768m 25' otter trawl, Feb. 3, 1971 R/V  
Agassiz coll. Matsui
- E 248 MV 68-I-50 S. of Isle San Pedro, Mex.  
27°40.0'N 111°22.6'W-27°38.1'N 111°20.1'W  
931-952m 40' otter trawl Jan. 16, 1968 R/V  
T. Washington coll. C. Hubbs
- E 322 M6-2 San Diego Trough-La Jolla Canyon  
32°56.0'N 117°30.0'W-32°51.2'N 117°31.4'W  
732-860m 25' otter trawl Aug. 13, 1971 R/V  
Agassiz coll. T. Matsui
- E 734 SI076-95 N. of Catalina Is., Calif.  
33°33.5'N 118°39'W March 9, 1976 585-534m  
40' otter trawl R/V Agassiz coll. S. Luke
- E 743 SI076-96 N. of Catalina Is., Calif.  
33°33.5'N 118°38'W Mar. 9, 1976 556-585m  
40' otter trawl R/V Agassiz coll. S. Luke
- Dytaster cf. exilis Sladen  
E 304 MV72-II-32 off San Juan Peru 15°48'S  
76°06'W May 10, 1972 3475m 25' ott. tr. R/V  
T. Washington S. Luke
- Dytaster gilberti Fisher  
E 307 MV66-III-21 W.S.W. of Cortez Bank 32°05'N  
120°29'W-32°03'N 120°30'W 3777-3792m 40'  
otter trawl Dec. 11, 1966 coll. C. Hubbs  
(SI066-547)

- E 1530 MET sta. 123 W. of Patton Escarpment  
32°35'N 120°35'W 40' ott. tr. Feb. 5, 1981  
3634-3713m R/V N. Horizon K. Smith, S. Luke
- E 1552 MET sta. 129 W. of Patton Escarpment  
32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981  
3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1557 MET sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981  
3689-3632m R/V N. Horizon K. Smith, S. Luke

Dytaster cf. gilberti Fisher

- E 4 SI070-22 W. of Patton Escarpment 31°10'N  
119°36'W Dec. 18, 1969 3599-3676m 25' ott.  
tr. R/V Melville C. Hubbs, S. Luke
- E 32 MV70-III-3 Baja Calif. abyssal plain  
31°24.0'-31°28.8'N 120°145'-120°10.3'W  
3880m 25' otter trawl March 21, 1970 R/V  
Melville coll. R. Wisner, F. Rokop, S. Luke
- E 33 MV70-III-6 Baja Calif. abyssal plain  
31°36.0'-31°14.4'N 120°07.4'-120°09.6'W  
3706-3806m 25' otter trawl March 22, 1970  
R/V Melville coll. R. Wisner, F. Rokop,  
S. Luke
- E 34 MV70-III-8 Baja Calif. abyssal plain  
31°47.5'-31°32.0'N 120°19.0'-120°18.0'W  
3916-3950m 25' otter trawl March 23, 1970  
R/V Melville coll. R. Wisner, F. Rokop,  
S. Luke

Dytaster sp.

- E 936 Circe Leg X Sta. 249 off French Guiana,  
08°33.6'N 52°43.3'W rock dredge 3658m  
Dec. 13, 1968 J. Coatsworth
- E 861 SS72-115 DB N. Pacific R/V Sea Scope  
38°56.39'N 178°37.26'W June 28, 1972 5396m  
dredge box, Global Marine

cf. Dytaster

- E 1587 VS-B-II-35 N.W. of Islas Tres Marias  
22°20'N 107°48'W May 15, 1959 2999-2996m  
40' ott. tr. R. Parker, Rowland (P-96-59)  
(SI059-269)

Leptychaster inermis (Ludwig)

- E 688 Allozyme A-28 Catalina Basin 32°56'N  
118°24'W 25' otter trawl 1143m Aug. 6, 1925  
R/V Agassiz coll. Siebenaller
- E 1511 MET sta. 105 Catalina Basin, Calif. 33°08'N  
118°35.5'W 25' otter trawl 1280-1271m  
Jan. 30, 1981 R/V N. Horizon K. Smith,  
S. Luke
- E 1516 MET sta. 109 Catalina Basin, Calif. 33°11'N  
118°30'W 40' otter trawl Jan. 31, 1981  
1198-1234m R/V N. Horizon K. Smith, S. Luke
- E 1522 MET sta. 117 Catalina Basin, Calif. 33°13'N  
118°32'W 40' otter trawl Feb. 3, 1981  
1262-1235m R/V N. Horizon K. Smith, S. Luke

Leptychaster cf. inermis (Ludwig)

- E 42 San Diego Trough Dec. 13, 1969 31°28'N  
117°31.4'W 25' otter trawl 1207-1235m R/V  
Melville R. Hessler, S. Luke
- E 50 Rokop 70-I-3 San Diego Trough 32°26.1'N  
117°30.7'W-32°22.5'N 117°28.8'W 1244-1259m  
25' otter trawl Oct. 26, 1970 R/V Agassiz  
F. Rokop, R. McConnaughey, S. Luke
- E 51 Rokop 70-I-9 Tanner Basin 32°53.4'N  
119°33.8'W 32°49.5'N 119°31.9'W 1398m 25'  
otter trawl Oct. 28, 1970 R/V Agassiz  
F. Rokop, R. McConnaughey, S. Luke
- E 74 Rokop 71-II-24 Tanner Basin 32°41.0'N  
119°30.5'W 32°46.5'N 119°25.9'W 1317-1363m  
25' otter trawl, Jan. 20, 1971 R/V Agassiz  
coll. F. Rokop, R. McConnaughey

- E 80 Rokop 71-II-20 San Diego Trough 32°24.7'N  
117°27.75'W 32°29.2'N 117°30.2'W 1226-1204m  
25' otter trawl Jan. 18-19, 1971 R/V  
Agassiz coll. F. Rokop
- E 83 Rokop 71-II-28 San Diego Trough 32°37.0'N  
117°33.2'W 32°34.3'N 117°33.8'W 1184-1217m  
25' otter trawl, Jan. 21, 1971 R/V Agassiz  
coll. F. Rokop
- E 214 N. of Del Mar, Calif. 33°09.7'N 117°35.8'W  
June 24, 1908 756m
- E 239 Rokop 71-41 Tanner Basin 32°51.0'N  
119°32.0'W 32°47.0'N 119°28.5'W 1391m 25'  
otter trawl July 13, 1971 R/V Agassiz coll.  
F. Rokop
- E 287 M4-1 (SI071-90) San Diego Trough 32°25.3'N  
117°28.9'W-32°35.1'N 117°33.7'W 1234m 25'  
otter trawl June 22, 1971 R/V Agassiz coll.  
R. McConnaughey
- E 288 ANTI-I-7 D off Santa Barbara, Calif.  
35°24.4'N 121°40.7'W 35°18.9'N 121°37.2'W  
1258-1036m dredge June 18, 1970 R/V  
Melville coll. P. Liebertz
- E 289 M15 OT-22 off Del Mar, Calif. 32°55.0'N  
117°32.8'W-32°01.2'N 117°40.3'W 920m 25'  
otter trawl April 4, 1974 R/V Agassiz coll.  
Matsui, Burnett
- E 290 trawl 10 off La Jolla, Calif. 32°55.5'N  
117°37.4'W 32°51.0'N 117°36.0'W 896m 16'  
otter trawl Sept. 6, 1974 Oconostota coll.  
Siebenaller
- E 291 SI063-17 San Diego Trough 32°25.2'N  
117°34.2'W-32°23.9'N 117°27.6'W 732-1280m  
IKMT on bottom Feb. 8, 1963 coll. R. Wisner
- E 292 Oconostota sta. 4 San Diego Trough 32°35'N  
117°28'W-32°40'N 117°32'W 1097-1180m 4'  
pipe stem dredge Nov. 7, 1969 R/V  
Oconostota coll. F. Rokop, S. Luke
- E 294 Rokop 71-35 Tanner Basin 32°51.8'N  
119°33.8'W 32°47.8'N 119°31.3'W 1391-1372m  
25' otter trawl April 20, 1971 R/V Agassiz  
coll. F. Rokop
- E 296 M15 OT-11 off Pta. Piedras Blancas, Calif.  
35°28'N 121°49'W 1189-1170m 25' otter trawl  
March 31, 1974 R/V Agassiz coll. T. Matsui
- E 323 CalCofi 74126/II off Pta. Piedras Blancas,  
Calif. 35°43.3'N 121°44.1'W-35°35.8'N  
121°44.8'W 915m 25' otter trawl Dec. 10,  
1974 R/V Agassiz coll. T. Matsui
- E 347 sta. 15 Catalina Basin, Calif. 32°58.4'N  
118°26.8'W 32°55.4'N 118°22.3'W 1121-1137m  
16' otter trawl Dec. 10, 1972 R/V Agassiz  
coll. P. Jumars
- E 354 sta. 19 Santa Catalina Basin, Calif.  
32°59.3'N 118°26.2'W-32°57.4'N 118°23.3'W  
1116m 16' otter trawl Dec. 11, 1972 R/V  
Agassiz coll. P. Jumars
- E 615 A-15 Afterthot II East Cortez Basin  
32°32.0'N 118°53.1'W-32°32.7'N 118°53.6'W  
1298m 25' otter trawl May 6, 1975 R/V  
Agassiz coll. J.F. Siebenaller
- E 623 A-17 Afterthot II West Cortez Basin  
32°25.3'N 119°30.4'W-32°24.8'N 119°29.9'W  
1362m 25' otter trawl May 7, 1975 R/V  
Agassiz coll. J. Siebenaller
- E 636 A-24 Afterthot II San Diego Trough  
32°52.1'N 117°42.1'W-32°52.3'N 117°41.9'W  
1057m 25' otter trawl May 8, 1975 R/V  
Agassiz coll. Siebenaller
- E 1429 R-50 San Diego Trough otter trawl Oct. 23,  
1971 Imm screen F. Rokop

Leptychaster sp.

- E 62 Cruise M-1 sta. #2 San Diego Trough  
32°53.8'N 117°29.9'W 32°58.9'N 117°33.8'W  
768m 25' otter trawl Feb. 3, 1971 R/V  
Agassiz coll. Matsui
- E 293 MV71-I-62 San Diego Trough 32°21.8'N  
117°24.0'W 32°30.7'N 117°32.8'W 1235m 25'  
otter trawl June 1-2, 1971 R/V Agassiz  
coll. C. Hubbs, S. Luke

Pallaster pectinatus (Fisher)

- E 425 M-6 Sta. 3 San Clemente Basin, Calif.  
32°31.0'N 118°07.2'W-32°37.0'N 118°18.8'W  
1628-1838m 25' otter trawl Aug. 12, 1971  
R/V Agassiz coll. T. Matsui
- E 435 trawl #9 San Clemente Basin 32°26.0'N  
117°54.0'W 32°25.5'N 117°49.8'W 1600m 16'  
otter trawl Sept. 5, 1974 Oconostota coll.  
Siebenaller
- E 578 M-7, sta. 3 San Clemente Basin, Calif.  
32°34'N 118°10'W 32°27'N 118°06'W 1792-  
1866m 40' otter trawl Sept. 16, 1971 R/V  
Agassiz coll. T. Matsui

Psilaster sp.

- E 302 MV72-II-32 Nasca Ridge, off Pta. San Juan,  
Peru 15°39.2'S 76°13.6'W-15°52.8'S  
76°04.2'W 3475m 25' otter trawl May 10,  
1972 R/V T. Washington coll. S. Luke
- E 577 MV72-II-26 off Arica, Chile 18°44.7'S  
70°40.7'W 18°40.2'S 70°35.1'W 1097-1152m  
25' otter trawl May 7, 1972 R/V  
T. Washington coll. S. Luke

Tethyaster canaliculata Clark

- E 175 RR65-50&51 Bahia Santa Inez, Baja Calif.,  
Sur, Mex. 26°59'N 111°57'W 40-82m 40' otter  
trawl July 14, 1965 C. Hubbs, R. Rosenblatt

Thriassacanthias penicillatus (Fisher)

- E 1 S.D. Trough 25' otter trawl Dec. 13, 1969  
32°23.5'-32°28.8'N 117°31.75'-117°31.01'W  
1207-1235m mud bottom R/V Melville coll.  
R. Hessler, F. Rokop, S. Luke
- E 57 Cruise M-1 sta. #2 San Diego Trough  
32°53.8'N 117°29.9'W-32°58.9'N 117°33.8'W  
768m 25' otter trawl Feb. 3, 1971 R/V  
Agassiz coll. Matsui
- E 67 Rokop 70-I-12 San Diego Trough 32°37.0'N  
117°32.6'W 32°33.2'N 117°33.1'W 117-1217m  
25' otter trawl Oct. 29, 1970 R/V Agassiz  
F. Rokop, R. McConnaughey, S. Luke
- E 247 MV68-I-50 S. of Isle San Pedro, Mex.  
27°40.0'N 111°22.6'W-27°38.7'N 111°20.1'W  
931-952m 40' otter trawl Jan. 6, 1968 R/V  
T. Washington coll. C. Hubbs
- E 267 SI071-90 (M4 sta. 1) San Diego Trough  
32°25.3'N 117°28.9'W-32°35.1'N 117°33.7'W  
1234m 25' otter trawl June 22, 1971 R/V  
Agassiz coll. R. McConnaughey
- E 295 Rokop 71-35 Tanner Basin 32°51.8'N  
119°33.8'W 32°47.8'N 119°31.3'W 1391-1372m  
25' otter trawl April 20, 1971 R/V Agassiz  
coll. F. Rokop
- E 313 CalCofi: 7412/II Piedras Blancas, Calif.  
35°43.3'N 121°44.1'W 35°35.8'N 121°44.8'W  
914m 25' otter trawl #5 Dec. 10, 1974 R/V  
Agassiz coll. T. Matsui
- E 314 Rokop 71-51 San Diego Trough 32°27.0'N  
117°29.0'W-32°21.3'N 117°27.1'W 1238-1256m  
25' otter trawl Oct. 23, 1971 R/V Agassiz  
coll. F. Rokop, S. Luke

- E 315 M6-2 San Diego Trough 32°56.0'N 117°30.0'W  
32°51.2'N 117°31.4'W 732-860m 25' otter  
trawl Aug. 13, 1971 R/V Agassiz coll.  
Matsui
- E 316 M-7-1 sta. 1 San Diego Trough M7-1  
32°25.8'N 117°28.8'W 32°30.7'N 117°31.9'W  
1225-1244m 40' otter trawl Sept. 14, 1971  
R/V Agassiz coll. T. Matsui
- E 317 M8-1 San Diego Trough (SI071-201) 32°24.4'N  
117°29.5'W-32°31.0'N 117°33.4'W 1207-1244m  
40' otter trawl Nov. 1, 1971 R/V Agassiz  
coll. T. Matsui
- E 318 M15 OT-11 off Pta. Piedras Blancas, Calif.  
35°24.4'N 121°42.8'W-35°30.6'N 121°52.7'W  
1189-1170m 25' otter trawl March 31, 1974  
R/V Agassiz coll. T. Matsui
- E 319 SI063-870 San Diego Trough SDTC-TR-2  
32°30.25'N 117°24.75'W-32°33.8'N  
117°23.25'W 850-146m 10' IKMT Oct. 31, 1963  
R/V Agassiz coll. R. Wisner
- E 320 M15 OT-12 off Pta. Piedras Blancas, Calif.  
35°29.3'N 121°35.8'W-35°34.5'N 121°42.0'W  
906m 25' otter trawl April 1, 1974 R/V  
Agassiz coll. T. Matsui
- E 321 M15 OT-22 off Del Mar, Calif. 32°55.0'N  
117°32.8'W-32°01.2'N 117°40.3'W 920m 25'  
otter trawl April 4, 1974 R/V Agassiz coll.  
T. Matsui
- E 735 SI076-95 N. of Catalina Is., Calif.  
33°33.5'N 118°39'W March 9, 1976 585-534m  
40' otter trawl R/V Agassiz coll. S. Luke
- E 742 SI076-96 N. of Catalina Is., Calif.  
33°33.5'N 118°38'W 556-585m 40' otter trawl  
Mar. 9, 1976 R/V Agassiz coll. Luke
- E 1440 SnaFu SI080-8 San Diego Trough 32°36.5'N  
117°32'W 40' otter trawl #1 1171m Feb. 29,  
1980 R/V New Horizon R. Rosenblatt
- E 1503 MET sta. 104 Catalina Basin, Calif. 33°24'N  
118°35.5'W 25' otter trawl 550-640m  
Jan. 29, 1981 R/V N. Horizon K. Smith,  
S. Luke

Gen. Indet.

- E 228 1 mi. due W. of Scripps Pier, course N.N.W.  
88-68m July 13, 1916 La Jolla, Calif.
- E 253 Monsoon 71-D. E. of New Zealand 43°10'S  
175°15'E Rock Dredge 119m Jan. 29, 1961  
coll. Russell (SI060-150)
- E 271 Monsoon Rock Dredge 76-D sta. VI-7 43°38'S  
177°26'E E. of New Zealand 161m Jan. 31,  
1961 coll. Russell, Menard
- E 447 Lusid sta. #17 S-36 W. of S. Africa  
31°32.0'S 02°32.1'E 31°27.5'S 02°27.9'E  
1496-1220m chain rock dredge June 8, 1963  
coll. V. Vacquier (SI063-541)
- E 872 Monsoon 107-D sta. VII-5 S.E. of New  
Zealand 47°35'S 178°58'E Feb. 28, 1961 146m  
rock dredge Russell
- E 873 Monsoon 77-D sta. VI-8 S. of New Zealand  
49°31'S 170°32'E 583m rock dredge Feb. 4,  
1961
- E 875 Monsoon sta. VI-6 Rock Dredge 75-D Jan. 31,  
1961 0906-1153
- E 900 SS-72, 140-DB S. of Kauai, Hawaii  
21°49.54'N 159°23.85'W dredge box 732m  
July 10, 1972 R/V Sea Scope
- E 1171 NAGA S3 60-0110 Gulf of Thailand 06°22'15"N  
102°14'00"E 6' Beam T. Jan. 22, 1960 27m  
Cat. #53-00351
- E 1172 NAGA S3 60-0110 Gulf of Thailand 06°22'15"N  
102°14'00"E 6' Beam T. Jan. 22, 1960 27m  
Cat. #53-00347
- E 1173 NAGA S3 60-0110 Gulf of Thailand 06°22'15"N  
102°14'00"E 6' Beam T. Jan. 22, 1960 27m  
Cert. #53-00349

- E 1175 NAGA S3 60-0120 Gulf of Thailand 09°06'00"N 104°14'00"E 2' Bio Dredge Jan. 23, 1960 22m Cat. #53-00353
- E 1180 NAGA S4 60-0208 S. China Sea 12°14.8'N 109°14.7'E 10' Beam T. Feb. 25, 1960 85 ft. Cert. #53-01454
- E 1182 NAGA S4 60-0211 S. China Sea 15°41'00"N 108°41'00"E Beam T. Feb. 27, 1960 37m Cat. #53-00206
- E 1183 NAGA S4 60-0212 S. China Sea 15°40'00"N 109°22.9'E 10' Beam T. Feb. 27, 1960 110-198m Cat. #53-00463
- E 1186 NAGA S4 60-0237 S. China Sea 12°09.7'N 109°24.7'E 10' Beam T. Mar. 4, 1960 51m Cat. #53-00389
- E 1189 NAGA S4 60-0270 S. China Sea 10°23.8'N 108°53.7'E 2' dredge Mar. 10, 1960 49m Cert. #53-00393
- E 1189 NAGA S6 60-0546 S. China Sea 04°45'00"N 106°08'00"E 6' Beam T. June 22, 1960 82m Cert. #53-01357
- E 1194 NAGA S9A 60-1052 Gulf of Thailand 11°59'24"N 102°11'06"E 7' Beam T. Dec. 10, 1960 26m Cat. #53-01509
- E 1196 NAGA S9A 60-1077 Gulf of Thailand 12°21'18"N 101°31'55"E 16' otter trawl Dec. 12, 1960 31m Cat. #53-01614
- E 1199 NAGA S9A 60-1094 Gulf of Thailand 12°16'45"N 100°07'15"E 16' otter trawl Dec. 13, 1960 23m Cat. #53-01022
- E 1200 NAGA S9A 60-1097 Gulf of Thailand 12°39'25"N 100°15'45"E 16' otter trawl Dec. 13, 1960 29m Cat. #53-00443
- E 1201 NAGA S9A 60-1097 Gulf of Thailand 12°39'25"N 100°15'45"E 16' otter trawl Dec. 13, 1960 29m Cat. #53-00444
- E 1202 NAGA S9A 60-1103 Gulf of Thailand 13°05'50"N 100°26'10"E 16' otter trawl Dec. 13, 1960 19m Cat. #53-01046
- E 1269 NAGA S8 60-0724 S. China Sea 15°40'35"N 108°59'00"E 6' Beam T. Sept. 12, 1960 91m Cat. #53-00411
- E 1280 NAGA S3 60-0137 Gulf of Thailand 08°25'30"N 100°44'40"E 6' Beam T. Jan. 26, 1960 27m Cat. #53-00361
- E 1286 NAGA S5 60-0325 Gulf of Thailand 06°24'12"N 102°13'00"E 6' Beam T. Apr. 24, 1960 27m Cat. #53-00399
- E 1287 NAGA S5 60-0363 Gulf of Thailand 08°39'45"N 100°14'45"E 6' Beam T. Apr. 27, 1960 17m Cat. #53-00394
- E 1293 NAGA S7 60-0627 Gulf of Thailand 09°11'30"N 100°06'15"E 6' Beam T. Aug. 6, 1960 19m Cat. #53-00247
- E 1295 NAGA S8 60-0711 S. China Sea 09°03'00"N 106°26'00"E 2.5' dredge Sept. 8, 1960 25m Cat. #53-00404
- E 1296 NAGA S8 60-0833 Nhatrang Bay 06°14'50"N 105°47'10"E 6' Beam T. Oct. 5, 1960 49m Cat. #53-00421
- E 1414 NAGA S3 60-0104 Gulf of Thailand 09°37'00"N 100°21'00"E 6' Beam T. Jan. 20, 1960 26-28m Cat. #53-00468
- E 1416 NAGA S3 60-0140 Gulf of Thailand 09°07'00"N 100°47'45"E 6' Beam T. Jan. 26, 1960 30m Cat. #53-00469
- E 1461 SnaFu SI0080-10 off San Diego, Calif. 32°40.2'N 117°21.6'W 25' otter trawl #3 201m Feb. 29, 1980 R/V New Horizon R. Rosenblatt
- E 1813 H52-14 San Diego Trough, Calif. 32°33'N 117°37'W deep water dredge 1234m Feb. 28, 1952 R/V Horizon J. Isaacs
- E 1874 P-164-60 off Estero de Tastiota, Sonora, Mex. 28°14.5'N 111°47.5'W Mar. 21, 1960 75-64m 10' otter trawl
- E 2197 P-159-60 Islas Tres Marias, Mexico 22°30.8'N 106°01.2'W Mar. 11, 1960 46-57m 10' otter trawler R. Parker
- E 2198 P-168-60 Gulf of Calif., Mexico 28°10.8'N 111°49.0'W shell dredge 201m Mar. 22, 1960
- E 2232 Monsoon 72-D off New Zealand 43°26'S 176°43'E Jan. 29, 1961 245m rock dredge
- Family Gonioplectinidae
- Gtenodiscus crispatus (Retzius)
- E 40 SI069-486 San Diego Trough 32°17.0' to 32°37.1'N 117°29.5' to 117°30.0'W ca. 1250m IKMP Dec. 13, 1969 on mud bottom R/V Melville cr. 1 coll. R. Hessler, F. Rokop, S. Luke
- E 41 San Diego Trough 25' otter trawl Dec. 13, 1969 32°23.5'-32°28.8'N 117°31.75'-117°31.01'W 1207-1235m mud bottom M.W.O.=3600 R/V Melville coll. R. Hessler, F. Rokop, S. Luke
- E 46 MV68-I-85 Galfo de Calif. Mex. 25°18'N 110°19.5'W Jan. 23, 1968 1810-1908m commercial otter trawl R/V T. Washington C. Hubbs
- E 48 Rokop 70-I-3 San Diego Trough 32°26.1'N 117°30.7'W-32°22.5'N 117°28.8'W 1244-1259m 25' otter trawl Oct. 26, 1970 R/V Agassiz F. Rokop, R. McConnaghey, S. Luke
- E 285 Rokop 71-45 San Diego Trough 32°25.0'N 117°26.8'W-32°26.0'N 117°28.1'W 1207-1243m 25' otter trawl July 14, 1971 R/V Agassiz coll. F. Rokop
- E 286 M8-1 San Diego Trough SI071-201 32°24.4'N 117°29.5'W-32°31.0'N 117°33.4'W 1207-1244m 40' otter trawl Nov. 1, 197 R/V Agassiz coll. T. Matsui
- E 299 MV72-II-26 off Arica, Chile 118°44.7'S 70°40.7'W 118°40.2'S 70°35.1'W 1097-1152m 25' otter trawl May 7, 1972 R/V T. Washington coll. S. Luke
- E 408 MV66-III-7 W. of Bahia Descanso, Baja Calif. 32°05.2'N 117°14.0'W-32°03.3'N 117°12.7'W 1332-1244m 40' otter trawl Dec. 8, 1966 coll. C. Hubbs
- E 414 MV65-I-4 N.W. of N. tip of Cedros Is., Baja 28°55.3'N 115°47.9'W-28°46.3'N 115°41.2'W 1536-1511m 6' Sigabee trawl June 10, 1965 R/V Horizon coll. C. Hubbs
- E 622 A-17 Afterthot II West Cortez Basin 32°25.3'N 119°30.4'W-32°24.8'N 119°29.9'W 1362m 25' otter trawl May 7, 1975 R/V Agassiz coll. J. Siebenaller
- Family Porcellanasteridae
- Abyssaster tara (Wood-Mason & Alcock)
- E 2639 E. Pacific, box core ca. 4572m from manganese nodule ship Kennecott Exploration Inc. Del Mar, Calif. E. Habecker
- Eremicaster crassus (Sladen)
- E 305 TP-38 (H53-338) S.E. of Kamchatka 46°16.5'N 168°52.0'E 46°17.3'N 169°10.0'E 4892-4682m diving dredge Sept. 6-7, 1953 R/V Spencer F. Baird coll. R. Wisner
- E 897 SS-72, 111-DB N. mid-Pacific 40°18.0'N 173°45.9'E dredge box 4397m June 25, 1972 R/V Sea Scope



Eremicaster cf. crassus (Sladen)

- E 1586 VS-B-II-35 N.W. of Islas Tres Marias  
22°20'N 107°48'W May 15, 1959 40' otter  
trawl 2999-2996m R. Parker, Rowland (P-96-  
59) (SIO59-269)
- E 1716 MV65-I-57 S.W. of Cabo San Lucas, Baja  
Calif., Sur, Mex. 22°35'N 110°12'W 2889-  
2505m 6' Sigsbee trawl June 29, 1965 R/V  
Horizon C. Hubbs

Eremicaster gracilis (Sladen)

- E 37 MV70-III-8 W. of Patton Escarpment 31°35'N  
120°18.3'W Mar. 23, 1970 3916-3950m 25'  
otter trawl R/V Melville S. Luke
- E 277 MV65-I-13 Cedros Trench W. of Is. Cedros  
28°19.6'N 116°09.9'W 28°00.4'N 116°58.3'W  
4414-4425m 6' Sigsbee trawl June 13, 1965  
R/V Horizon coll. C. Hubbs
- E 280 MV67-II-22 W. of Pioneer Seamount 37°18'N  
123°53.5'W June 14, 1967 3592-3799m 41'  
otter trawler R/V T. Washington C. Hubbs
- E 282 MV66-III-21 W.S.W. of Cortez Bank 32°04'N  
120°29.5'W Dec. 11, 1966 3777-3792m 40'  
otter trawl C. Hubbs
- E 300 MV72-II-32 off Pta. San Juan, Peru 15°48'S  
76°06'W May 10, 1972 3562m 25' otter trawl  
R/V T. Washington S. Luke
- E 1531 MET sta. 123 W. of Patton Escarpment  
32°35'N 120°35'W 40' otter trawl Feb. 5,  
1981 3634-3713m R/V N. Horizon K. Smith,  
S. Luke
- E 1555 MET sta. 129 W. of Patton Escarpment  
32°22'N 120°42'W 40' otter trawler Feb. 6,  
1981 3640-3740m R/V N. Horizon K. Smith,  
S. Luke
- E 1556 MET sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' otter trawler Feb. 7,  
1981 3689-3632m R/V N. Horizon K. Smith,  
S. Luke
- E 1611 Baja Slope Exped. BS-14 Cedros Trench, Baja  
Calif., Sur, Mex. 27°12'N 115°20'W 4188-  
4161m 10' beam tr. May 6, 1961 R. Parker  
(P-287-61)
- E 2245 TO-58-2, D-8 off Nicaragua 12°17'N 91°51'W  
Nov. 21, 1958 3594-3475m dredge R. Wisner,  
R. Parker (SIO58-422)

Eremicaster pacificus (Ludwig)

- E 278 MV71-I-43 off N.W. Baja Calif., Mex.  
31°25'N 117°45'W 1000 fm Basin 2001-2025m  
6' Sigsbee trawl May 29, 1971 R/V Agassiz  
coll. C. Hubbs, S. Luke
- E 281 MV66-II-4 off Eureka, Calif. 40°30.5'N  
120°45.2'W May 22, 1966 2999-3017m 16'  
otter trawl coll. R. Wisner
- E 283 MV65-I-2 off Isla San Martin, Baja Calif.  
30°01.3'N 116°49.9'W-30°05.0'N 116°52.2'W  
2392-2532m 6' Sigsbee trawl June 9, 1965  
R/V Horizon coll. C. Hubbs
- E 284 M8-5 (SIO71-202) off San Diego, Calif.  
32°35.0'N 118°08.9'W-32°32.0'N 118°05.0'W  
1829m 40' otter trawl Nov. 3, 1971 R/V  
Agassiz coll. T. Matsui
- E 298 MV65-IV-76 off Chile Cruise 12 sta. 4  
32°51'S 72°08'W Dec. 19, 1965 2580m 5'  
Agassiz beam tr. R. Wisner R/V A. Brunn  
(SIO65-666)
- E 424 M-6 sta. 3 San Clemente Basin, Calif.  
32°31.0'N 118°07.2'W-32°37.0'N 118°18.8'W  
1628-1838m 25' otter trawl Aug. 12, 1971  
R/V Agassiz coll. T. Matsui
- E 430 trawl 8 San Clemente Basin 32°28.0'N  
117°46.7'W 32°27.6'N 117°54.5'W 1527-1545m  
16' otter trawl Sept. 5, 1974 R/V Oconos-  
tota coll. Siebenaller

- E 434 trawl #9 San Clemente Basin 32°26.0'N  
117°54.0'W 32°25.5'N 117°49.8'W 1600m 16'  
otter trawl Sept. 5, 1974 Oconostota coll.  
Siebenaller
- E 628 A-11 Afterthot II San Clemente Basin,  
Calif. 32°29.4'N 18°06.5'W-32°28.8'N  
118°06.0'W 1829m 25' otter trawl May 5,  
1975 R/V Agassiz coll. J. Siebenaller
- E 1612 S.O.B.-III-5 W. of Pta. Banda, Baja Calif.,  
Norte, Mex. 31°18'N 117°36'W Feb. 13, 1960  
2068-2086m 30' otter trawl R. Parker (P-  
137-60)
- E 1696 MV66-I-6 off N.W. Baja Calif., Norte, Mex.  
31°05'N 118°0'W 40' otter trawl Mar. 31, 1966  
1463-1728m R/V Agassiz C. Hubbs
- E 2202 VSS-6 off Cabo San Lucas, Baja Calif., Sur,  
Mexico 22°35'N 109°47'W 2790-2817m deep  
diving dredge Mar. 22, 1959 R. Parker (P-  
41-59)

Eremicaster cf. pacificus (Ludwig)

- E 1803 MV65-I-51 S.W. of Cabo San Lucas, Baja  
Calif., Sur, Mex. 22°46'N 110°22'W 1917-  
2014m 30' otter trawl June 28, 1965 R/V  
Horizon C. Hubbs
- E 2755 VS-B-II-35 N.W. of Islas Tres Marias, Mex.  
22°20'N 107°48'W May 15, 1959 2999-2996m  
40' otter trawl R. Parker, Rowland (P-96-  
59) (SIO59-269)

Hyphalaster inermis Sladen

- E 241 MV65-I-39 off Bahia Magdalena, Baja Calif.  
24°37.5'N 113°29.0'W-24°21.3'N 113°12.5'W  
3427-3621m 45' otter trawl June 25, 1965  
R/V Horizon coll. C. Hubbs
- E 1594 MV65-I-38 Basin off Bahia Magdalena, Baja  
Calif., Sur, Mex. 24°35'N 113°25'W 3563-  
3621m 6' Sigsbee tr. June 24, 1965 R/V  
Horizon C. Hubbs
- E 1606 Baja Slope Exped. BS-12 Basin off Bahia  
Magdalena, Baja Calif., Sur, 23°59.5'N  
113°11.9'W 3481-3518m 10' beam tr. May 3,  
1961 R. Parker (P-285-61)

Hyphalaster cf. inermis Sladen

- E 3 SIO70-22 W. of Patton Escarpment 31°12'N  
119°36'W Dec. 18, 1969 3599-3676m 25' otter  
trawl R/V Melville C. Hubbs, S. Luke
- E 35 MV70-III-6 Baja Calif. abyssal plain  
31°36.0'-31°14.4'N 120°07.4'-120°09.6W  
3706-3806m 25' otter trawl March 22, 1970  
R/V Melville coll. R. Wisner, F. Rokop,  
S. Luke
- E 36 MV70-III-8 Baja Calif. abyssal plain  
31°47.5'-31°32.0'N 120°19.0'-120°18.0'W  
3916-3950m 25' otter trawl March 23, 1970  
R/V Melville coll. R. Wisner, F. Rokop,  
S. Luke

Hyphalaster sp.

- E 899 SS-72, 107-DB N. Mid-Pacific 34°03.41'N  
172°36.72'E dredge box 5158m June 21, 1972  
R/V Sea Scope

cf. Hyphalaster

- E 1056 Quebrada 22-D 09°55.1'N 104°29.5'W E. of  
Clipperton Is. Dec. 11, 1969 1716-1684m  
rock dredge R/V T. Washington J. Coatsworth

Styracaster sp.

- E 306 TP-38 (H53-338) S.E. of Kamchatka,  
46°16.5'N 168 52.0'E 46°17.3'N 169°10.0'E  
4892-4682m diving dredge Sept. 6-7, 1953  
R/V Spencer F. Baird R. Wisner

- E 860 SS72-115 DB N. Pacific R/V Sea Scope  
38°56.39'N 178°37.26'W June 28, 1972 5396m  
dredge box, Global Marine
- E 877 SS-72, 72 DB Central Pacific 08°58.8'N  
145°06.6'W dredge box 4940m May 20, 1972  
R/V Sea Scope

Thoracaster cylindricus (Sladen)

- E 303 MV 72-II-32 Nasca Ridge, off Pta. San Juan,  
Peru 15°39.2'S 76°13.6'W-15°52.8'S  
76°04.2'W 3475m 25' otter trawl May 10,  
1972 R/V T. Washington coll. S. Luke
- E 896 SS-72, 111-DB N. Mid-Pacific 40°18.0'N  
173°45.9'E dredge box 4397m June 25, 1972  
R/V Sea Scope
- E 909 SS-72, 112-DB N. Mid-Pacific 40°20.39'N  
175°37.79'E dredge box 5303m June 26, 1972  
R/V Sea Scope

Gen. Indet.

- E 273 MV73-I-81 S. of Pta. Guiones, Costa Rica  
09°32.5'N 85°43.0'W 09°36.7'N 85°40.5'W  
1157-1454m 10' IKMT-hit bottom April 20,  
1973 R/V Agassiz coll. C. Hubbs, S. Luke
- E 866 Eurydice Exped. Leg 2 Canton Trough  
01°17.7'N 168°16.8'W among rocks in dredge  
#7 6,620m Oct. 26, 1974 (2238) Betty Shor
- E 867 SI069-487 San Diego Trough 32°25'N  
117°31.5'W 25' otter trawl 1207-1234m  
Dec. 13, 1969 R/V Melville R. Hessler,  
S. Luke

Family Benthopectinidae

Benthopecten acanthonotus Fisher

- E 274 MV73-I-81 S. of Pta. Guiones, Costa Rica  
09°32.5'N 85°43.0'W 09°36.7'N 85°40.5'W  
1157-1454m 10' IKMT-hit bottom April 20,  
1973 R/V Agassiz coll. C. Hubbs, S. Luke
- E 409 MV66-III-7 W. of Bahia Descanso, Baja  
Calif. 32°05.2'N 117°14.0'W-32°03.3'N  
117°12.7'W 1332-1244m 40' otter trawl  
Dec. 8, 1966 coll. C. Hubbs (SI066-537)
- E 421 M-8, sta. 5 (SI071-202) off San Diego,  
Calif. 32°35.0'N 118°08.9'W-32°32.0'N  
118°05.0'W 1829m 40' otter trawl Nov. 3,  
1971 R/V Agassiz coll. T. Matsui
- E 423 M-6, sta. 3 San Clemente Basin, Calif.  
32°31.0'N 118°07.2'W-32°37.0'N 118°18.8'W  
1628-1838m 25' otter trawl Aug. 12, 1971  
R/V Agassiz coll. T. Matsui
- E 428 MV65-III-14 N.W. of 60 mi. bank 32°10.0'N  
118°29.9'W 32°19.9'N 118°35.3'W 1615-1664m  
10' IKMT Dec. 24, 1965 R/V Agassiz coll.  
C. Hubbs
- E 629 A-11 Afterthot II San Clemente Basin,  
Calif. 32°29.4'N 118°06.5'W-32°28.8'N  
118°06.0'W 1829m 25' otter trawl May 5,  
1975 R/V Agassiz coll. J. Siebenaller
- E 2201 VSS-17 off Cabo Falso, Baja Calif., Sur,  
Mexico 22°37.5'N 110°02'W 2682-2726m deep  
diving dredge Mar. 26, 1959 R. Parker (P-  
42-59) (SI062-366)

Benthopeten cf. mutabilis Fisher

- E 442 trawl 10 off La Jolla, Calif. 32°55.5'N  
117°37.4'W-32°51.0'N 117°36.0'W 896m 16'  
otter trawl Sept. 6, 1974 Oconostota coll.  
Siebenaller

Benthopecten sp.

- E 445 MV72-II-26 off Arica, Chile 18°44.7'S  
70°40.7'W-18°40.2'S 70°35.1'W 1097-1152m  
25' otter trawl May 7, 1972 R/V  
T. Washington coll. S. Luke

- E 871 Monsoon sta. VI-28 Rock Dredge 101-D  
49°42'S 178°52'E Feb. 20, 1961 (274m)  
Russell, Menard (SI061-155)

Nearchaster aciculosus (Fisher)

- E 53 Rokop 70-I-9 Tanner Basin, R/V Agassiz  
32°53.4'N 119°33.8'W 32°49.5'N 119°31.9'W  
1398m 25' otter trawl, Oct. 28, 1970 R/V  
Agassiz F. Rokop, R. McConnaughey, S. Luke
- E 54 Rokop 70-I-3 San Diego Trough 32°26.1'N  
117°30.7'W-32°22.5'N 117°28.8'W 1244-1259m  
25' otter trawl Oct. 26, 1970 R/V Agassiz  
F. Rokop, R. McConnaughey, S. Luke
- E 55 San Diego Trough 25' otter trawl 32°23.5'N  
117°31.75'W-32°28.8'N 117°31.01'W 1207-1235  
mud bottom Dec. 13, 1969 R/V Melville coll.  
R. Hessler, F. Rokop, S. Luke
- E 71 Rokop 70-I-12 San Diego Trough 32°37.0'N  
117°32.6'W 32°33.2'N 117°33.1'W 1171-1217m  
25' otter trawl Oct. 29, 1970 R/V Agassiz  
F. Rokop, R. McConnaughey, S. Luke
- E 85 Rokop 71-II-28 San Diego Trough 32°37.0'N  
117°33.2'W 32°34.3'N 117°33.8'W 1184-1217m  
25' otter trawl Jan. 21, 1971 R/V Agassiz  
coll. F. Rokop
- E 237 Rokop 71-41 Tanner Basin 32°51.0'N  
119°32.0'W 32°47.0'N 119°28.5'W 1391m 25'  
otter trawl July 13, 1971 R/V Agassiz coll.  
F. Rokop
- E 259 Rokop 71-37 San Diego Trough 32°28.9'N  
117°29.7'W-32°24.3'N 117°24.6'W 1194-1097m  
25' otter trawl April 21, 1971 R/V Agassiz  
coll. F. Rokop
- E 268 SI071-90(M4 sta. 1) San Diego Trough  
32°25.3'N 117°28.9'W-32°35.1'N 117°33.7'W  
1234m 25' otter trawl June 22, 1971 R/V  
Agassiz coll. R. McConnaughey
- E 353 sta. 19 Santa Catalina Basin, Calif.  
32°59.3'N 118°26.2'W-32°57.4'N 118°23.3'W  
1116m 16' otter trawl Dec. 11, 1972 R/V  
Agassiz coll. P. Jumars
- E 349 sta. 15 Catalina Basin, Calif. 32°58.4'N  
118°26.8'W 32°55.4'N 118°22.3'W 1121-1137m  
16' otter trawl Dec. 10, 1972 R/V Agassiz  
coll. P. Jumars
- E 436 M-7, sta. 1, San Diego Trough 32°26'N  
117°29'W-32°31'N 117°32'W 1225-1244m 40'  
otter trawl Sept. 14, 1971 R/V Agassiz  
coll. Matsui
- E 437 M-1, sta. 2 San Diego Trough 32°53.8'N  
117°29.9'W-32°58.9'N 117°33.8'W 768m 25'  
otter trawl Feb. 3, 1971 R/V Agassiz coll.  
T. Matsui
- E 438 Rokop 71-38 San Diego Trough 32°36.3'N  
117°32.4'W-32°32.1'N 117°27.7'W 1207m 25'  
otter trawl April 21, 1971 R/V Agassiz  
coll. F. Rokop
- E 439 H53-20 off San Clemente Is. 32°56.0'N  
118°19.5'W-32°59.5'N 118°25.0'W 1207m  
Isaacs Dredge April 28, 1953 coll. Lewis  
Kidd
- E 443 M15 OT-11 Pta. Piedras Blancas, Calif.  
35°24.4'N 121°42.0'W-35°30.6'N 121°52.7'W  
1189-1170m 25' otter trawl March 31, 1974  
R/V Agassiz coll. Matsui
- E 689 Allozyme A-28 Catalina Basin, Calif.  
32°56'N 118°24'W 25' otter trawl 1143m  
Aug. 6, 1925 R/V Agassiz coll. Siebenaller
- E 765 H53-21 off E. side of San Clemente Is.,  
Calif. 32°58.3'N 118°21.5'W ca. 466m Isaacs  
Kidd diving dredge April 28, 1953 L. Kidd
- E 1441 SnaFu SI080-8 San Diego Trough 32°36.5'N  
117°32'W 40' otter trawl #1 1171m Feb. 29,  
1980 R/V New Horizon R. Rosenblatt

- E 1512 MET sta. 105 Catalina Basin, Calif. 33°08'N  
118°35.5'W 25' otter trawl 1280-1271m  
Jan. 30, 1981 R/V N. Horizon K. Smith,  
S. Luke
- E 1517 MET sta. 109 Catalina Basin, Calif. 33°11'N  
118°30'W 40' otter trawl Jan. 31, 1981  
1198-1234m R/V N. Horizon K. Smith, S. Luke
- E 1523 MET sta. 117 Catalina Basin, Calif. 33°13'N  
118°32'W 40' otter trawl Feb. 3, 1981  
1262-1235m R/V N. Horizon K. Smith, S. Luke
- E 2331 L.C.-6 Santa Cruz Basin, Calif. 33°38.0'N  
119°28.0'W Nov. 6, 1960 1903m 16' otter  
trawl C. Boyd (P-255-60)

Nearchaster cf. aciculosus (Fisher)

- E 78 Rokop 71-II-20 San Diego Trough 32°24.7'N  
117°27.75'W 32°29.2'N 117°30.2'W 1226-1204m  
25' otter trawl Jan. 18-19, 1971 R/V  
Agassiz coll. F. Rokop

cf. Nearchaster

- E 440 SI063-17 San Diego Trough 32°25.2'N  
117°27.6'W 32°23.9'N 117°30.2'W 732-1280m  
10' IKMT Feb. 8, 1963 coll. R. Wisner
- E 441 sta. 16 Santa Catalina Basin 32°56.6'N  
118°16.7'W 33°03'N 118°17.2'W 1097m IKMT  
Dec. 10, 1972 R/V Agassiz coll. R. Hessler
- E 737 SI076-95 N. of Catalina Is., Calif.  
33°33.5'N 118°39'W Mar. 9, 1976 585-534m  
40' otter trawl R/V Agassiz coll. S. Luke
- E 745 SI076-96 N. of Catalina Is., Calif.  
33°33.5'N 118°38'W Mar. 9, 1976 556-585m  
40' otter trawl R/V Agassiz coll. S. Luke

Pectinaster agassizi (Ludwig)

- E 261 MV65-I-50 SW of Cabo San Lucas, Mex.  
22°42.5'N 110°21.0'W 22°41.4'N 110°12.0'W  
1893-1957m 6' Sigsbee trawl June 28, 1965  
R/V Horizon coll. C. Hubbs
- E 1603 MV65-I-51 S.W. of Cabo San Lucas, Baja  
Calif., Sur, Mex. 22°45'N 110°23'W 1917-  
2014m 30' otter trawl June 28, 1965 R/V  
Horizon C. Hubbs

Pectinaster agassizi evoplus (Fisher)

- E 410 MV66-III-7 W. of Bahia Descanso, Baja  
Calif. 32°05.2'N 117°14.0'W-32°03.3'N  
117°12.7'W 1332-1244m 40' otter trawl  
Dec. 8, 1966 coll. C. Hubbs (SI066-537)
- E 413 MV65-I-4 N.W. of N. tip of Cedros Is., Baja  
28°55.3'N 115°47.9'W-28°46.3'N 115°41.2'W  
1536-1511m 6' Sigsbee trawl June 10, 1965  
R/V Horizon coll. C. Hubbs
- E 418 MV65-I-31 off Bahia San Hipolito, Baja  
Calif. 26°26.2'N 114°07.1'W-26°33.5'N  
114°19.6'W 2054-2136m 45' otter trawl  
June 22, 1965 R/V Horizon coll. C. Hubbs  
(SI065-214)
- E 419 M-7, sta. 3 San Clemente Basin 32°34'N  
118°10'W-32°27'N 118°06'W 1792-1866m 40'  
otter trawl Sept. 16, 1971 R/V Agassiz  
coll. T. Matsui
- E 420 M-8, sta. 5 (SI071-202) off San Diego,  
Calif. 32°35.0'N 118°08.9'W-32°32.0'N  
118°05.0'W 1829m 40' otter trawl Nov. 3,  
1971 R/V Agassiz coll. T. Matsui
- E 422 M-6, sta. 3 San Clemente Basin, Calif.  
32°31.0'N 118°07.2'W-32°37.0'N 118°18.8'W  
1628-1838m 25' otter trawl Aug. 12, 1971  
R/V Agassiz coll. T. Matsui
- E 427 MV65-III-14 N.W. of 60 mi. Bank 32°10.0'N  
118°29.9'W 32°19.9'N 118°35.3'W 1615-1664m  
10' IKMT Dec. 24, 1965 R/V Agassiz coll.  
C. Hubbs

- E 429 trawl 8 San Clemente Basin 32°28.0'N  
117°46.7'W 32°27.6'N 117°54.5'W 1527-1545m  
16' otter trawl Sept. 5, 1974 R/V  
Oconostota coll. Siebenaller
- E 433 trawl #9 San Clemente Basin 32°26.0'N  
117°54.0'W 32°25.5'N 117°49.8'W 1600m 16'  
otter trawl Sept. 5, 1974 Oconostota coll.  
Siebenaller
- E 618 A-19 Afterthot II West Cortez Basin  
32°27.7'N 119°33.8'W-32°27.9'N 119°34.1'W  
1445m 25' otter trawl May 7, 1975 R/V  
Agassiz coll. J. Siebenaller
- E 624 A-17 Afterthot II West Cortez Basin  
32°25.3'N 119°30.4'W-32°24.8'N 119°29.9'W  
1362m 25' otter trawl May 7, 1975 R/V  
Agassiz coll. J. Siebenaller
- E 630 A-11 Afterthot II San Clemente Basin,  
Calif. 32°29.4'N 118°06.5'W-32°28.8'N  
118°06.0'W 1829m 25' otter trawl May 5,  
1975 R/V Agassiz coll. J. Siebenaller
- E 1476 No Fac #5 San Nicholas Basin 33°20'N  
119°15'W July 6, 1980 1738m 25' otter trawl  
R. Wilson R/V Melville
- E 1695 MV66-I-6 off N.W. Baja Calif., Norte, Mex.  
31°05'N 118°W 40' otter trawl Mar. 31, 1966  
1463-1728m R/V Agassiz C. Hubbs

Pectinaster cf. robustus Clark

- E 444 MV72-II-26 off Arica, Chile 18°44.7'S  
70°40.7'W-18°40.2'S 70°35.1'W 1097-1152m  
25' otter trawl May 7, 1972 R/V  
T. Washington coll. S. Luke

Gen. Indet.

- E 880 SS-72, 72-DB Central Pacific 08°58.8'N  
145°06.6'W dredge box 4940m May 20, 1972  
R/V Sea Scope
- E 901 SS-72, 140-DB S. of Kauai, Hawaii  
21°49.54'N 159°23.85'W dredge box 732m  
July 10, 1972 R/V Sea Scope
- E 1185 NAGA S4 60-0219 S. China Sea 15°39'00"N  
111°51'00"E 10' Beam T. Feb. 29, 1960 1264m  
Cat. #53-00382

Order VALVATIDA

Family Odontasteridae

Odontaster crassus Fisher

- E 179 Scripps Canyon wall, La Jolla, Calif. 40m  
Hopkins & Crozier
- E 180 Cod Hole, N.E. of La Jolla Cove, La Jolla,  
Calif.
- E 461 Cortez Bank, May 16, 1963 32°30.2'N  
119°13.7'W 86m F. Berry
- E 780 No. 202 Monterey, Calif. 36°41'N 122°00.8'W  
Sept. 9, 1938 dredge haul F.P. Shepard
- E 1953 Holt Exped. sta. #10 Bahia San Quintin,  
Baja Calif., Norte, Mex. 30°17'N 116°04'W  
118m 10' otter trawl Dec. 4, 1960 C. Boyd,  
D. Dockins (P-267-60) (SI060-468)
- E 2441 VSS-66 Salsipuedes Channel, Gulf of Calif.,  
Mex. 28°39.7'N 113°02.5'W 595-515m chain  
bag dredge Apr. 6, 1959 Marshall (P-59-59)

Odontaster sp.

- E 1486 S. Cape Armitage, Antarctica, 60 ft. SCUBA  
Dec. 5, 1975

Gen. Indet.

- E 2234 Monsoon 72-D off New Zealand 43°26'S  
176°43'E Jan. 29, 1961 245m rock dredge

## Family Goniasteridae

Ceramaster leptoceramus (Fisher)

- E 59 Cruise M-1 sta. #2 San Diego Trough  
32°53.8'N 117°29.9'W 32°58.9'N 117°33.8'W  
768m 25' otter trawl Feb. 3, 1971 R/V  
Agassiz coll. Matsui
- E 462 M15 OT-22 off Del Mar, Calif. 32°55.0'N  
117°32.8'W-33°01.2'N 117°40.3'W 920m 25'  
otter trawl April 4, 1975 R/V Agassiz coll.  
T. Matsui
- E 736 SI076-95 N. of Catalina Is., Calif.  
33°33.5'N 118°39'W Mar. 9, 1976 585-534m  
40' otter trawl R/V Agassiz coll. S. Luke
- E 744 SI076-96 N. of Catalina Is., Calif.  
33°33.5'N 118°38'W Mar. 9, 1976 556-585m  
40' otter trawl R/V Agassiz coll. S. Luke
- E 2242 T0-58-2, D-4 off Salina Cruz, Oaxaca,  
Mexico 14°50'N 96°15'W Nov. 18, 1958 1042-  
1134m diving dredge R. Wisner, R. Parker  
(SI058-419)

Ceramaster sp.

- E 245 MV68-I-50 S. of Isla San Pedro, Mex.  
27°40.0'N 111°22.6'W-27°38.1'N 111°20.1'W  
931-952m 40' otter trawl Jan. 16, 1968 R/V  
T. Washington coll. C. Hubbs

Pentagonaster sp.

- E 448 Lusiad sta. #175-36 W. of S. Africa  
31°32.0'S 02°32.1'E 31°27.5'S 02°27.9'E  
1496-1220m chain rook dredge June 8, 1963  
coll. V. Vacquier (SI063-541)
- E 508 Nasca Ridge 19°40.5'S 80°22'W Downwind  
Exped. #5 Dredge haul #8

cf. Stellaster sp.

- E 465 SI066-525 Queensland Australia, W. Coast of  
Stanley Is. Flinders Group Dec. 26, 1966  
14°09.3'S 144°12.2'E otter trawl R/V  
A. Helix 15-18m coll. C. Hubbs

Hippasteria californica Fisher

- E 2328 LG-25 W. of Farallon Is., Calif. 37°35.7'N  
123°15.2'W Nov. 11, 1960 1830m 16' otter  
trawl C. Boyd (P-257-60)

Hippasteria spinosa Verrill

- E 479 M15 OT-14 San Simeon, Calif. 35°32.4'N  
121°16.2'W-35°35.3'N 121°19.7'W 256m 25'  
otter trawl April 1, 1974 R/V Agassiz coll.  
T. Matsui

Pseudarchaster parellii (Duben & Koren)

- E 297 M15 OT-11 Pta. Piedras Blancas, Calif.  
35°28'N 121°50'W March 31, 1974 1189-1170m  
25' otter trawl R/V Agassiz T. Matsui
- E 312 Rokop 71-41 Tanner Basin 32°51.0'N  
119°32.0'W 32°47.0'N 119°28.5'W 1390m 25'  
otter trawl July 13, 1971 R/V Agassiz coll.  
F. Rokop

Pseudarchaster cf. pectinifer Ludwig

- E 415 MV65-I-4 N.W. of N. tip of Cedros Is., Baja  
28°55.3'N 115°47.9'W-28°46.3'N 115°41.2'W  
1536-151m 6' Sigsbee trawl June 10, 1965  
R/V Horizon coll. C. Hubbs
- E 463 M8-5 San Diego Trough (SI071-202) 32°35.0'N  
118°08.9'W 32°32.0'N 118°05.0'W 1829m 40'  
otter trawl Nov. 3, 1971 R/V Agassiz coll.  
T. Matsui

Pseudarchaster cf. pulcher Ludwig

- E 412 MV66-III-7 W. of Bahia Descanso, Baja  
Calif. 32°05.2'N 117°14.0'W-32°03.3'N  
117°12.7'W 1332-1244m 40' otter trawl  
Dec. 8, 1966 coll. C. Hubbs (SI066-537)
- E 464 MV65-I-4 N.W. of N. tip of Cedros Is.  
28°55.3'N 115°47.9'W-28°46.3'N 115°41.2'W  
1536-151m 6' Sigsbee trawl June 10, 1965  
R/V Horizon coll. C. Hubbs

Pseudarchaster pusillus Fisher

- E 451 MV71-I-31 between San Benitos and Cedros  
Is. 28°17.7'N 115°29.1'W 28°17.2'N  
115°27.2'W 329-311m 6' Sigsbee trawl  
May 27, 1971 R/V Agassiz coll. C. Hubbs,  
S. Luke
- E 725 SI076-93 E. of Catalina Is., Calif. 33°28'N  
118°27'W 25' otter trawl 397-355m March 8,  
1976 R/V Agassiz coll. S. Luke
- E 1452 SnaFu SI080-9 off San Diego, Calif. 32°43'N  
117°24.4'W 25' otter trawl #2 402-421m  
Feb. 29, 1980 R/V New Horizon R. Rosenblatt

Mediaster aequalis Stimpson

- E 452 CalCofi 74126/II off San Luis Obispo,  
Calif. 35°50.5'N 121°29.0'W 35°48.8'N  
121°28.0'W 99m 16' otter trawl #3 Dec. 10,  
1974 R/V Agassiz coll. T. Matsui
- E 453 CalCofi 74126/II Piedras Blancas, Calif.  
35°46.3'N 121°24.7'W 35°48.5'N 121°25.9'W  
73m 16' otter trawl #4 Dec. 10, 1974 R/V  
Agassiz coll. T. Matsui
- E 454 M15 OT-9 Long Beach, Calif. 33°53.3'N  
118°09.2'W-118°07.6'W 49m 40' otter trawl  
March 29, 1974 R/V Agassiz coll. T. Matsui
- E 455 Cortez Bank 16' otter trawl 32°30.2'N  
119°13.7'W May 16, 1963 86m coll. F. Berry
- E 456 M15 OT-15 off Morro Bay, Calif. 35°24.7'N  
121°00.4'W 35°06.5'N 121°03.0'W 99m 25'  
otter trawl April 2, 1974 R/V Agassiz coll.  
T. Matsui
- E 457 M15 OT-16 Pismo Beach, Calif. 35°05.0'N  
120°47.5'W-35°06.2'N 120°46.4'W 70m 25'  
otter trawl April 2, 1974 R/V Agassiz coll.  
T. Matsui
- E 458 Off Tijuana, Baja Calif., Norte, Mex.  
32°23.5'N 119°05.8'W July 17, 1908 92m
- E 459 M15 OT-20 off Summerland, Calif. 34°17.5'N  
120°48.9'W 34°17.9'N 120°49.1'W 75m 25'  
otter trawl April 2, 1974 R/V Agassiz coll.  
T. Matsui
- E 460 40 mi. bank 32°43'N 118°12'W 102m  
'E.W. Scripps' March 22, 1938 dredge coll.  
Shepard
- E 470 M15 OT-10 Santa Monica, Calif. 33°52.0'N  
118°33.2'W-33°52.8'N 118°34.5'W 73m 25'  
otter trawl March 29, 1974 R/V Agassiz  
coll. Matsui

Amphiaster insignis Verrill

- E 474 MB-6904-4 TR #149 6 1/2 mi. E. of Tiburon  
Is., Gulf of Calif. 28°48'N 112°10.5'W 25m  
17' otter trawl April 25, 1969 Moser
- E 475 Bahia de Los Angeles, Baja Calif., Norte,  
Mex. ca. 28°57'N 113°30'W given to Carl  
Hubbs by Ricardo Daggett April, 1962
- E 576 RR65-89 N.E. end of Santa Cruz Is., Gulf of  
Calif., Mex. 25°18.3'N 110°41.7'W 95-  
105 ft. Chemfish and SCUBA July 22, 1965  
R. Rosenblatt (SI065-343)
- E 2250 RR-61 Isla Espiritu Santo, Baja Calif.,  
Sur, Mexico ca. 24°40'N 110°40'W 10-40 ft.  
SCUBA June 23, 1961 D. Leighton

cf. Sibogaster sp.

- E 308 MV66-III-21 W.S.W. of Cortez Bank 32°05'N  
120°29'W-32°03'N 120°30'W 3777-3792m 40'  
otter trawl Dec. 11, 1966 coll. C. Hubbs  
(SI066-547)
- E 1551 MET sta. 129 W. of Patton Escarpment  
32°22'N 120°42'W 40' otter trawl Feb. 6,  
1981 3640-3740m R/V N. Horizon K. Smith,  
S. Luke

Gen. Indet.

- E 251 Monsoon 71-D E. of New Zealand 43°10'S  
175°15'E Rock Dredge 119m Jan. 29, 1961  
coll. Russell SI061-150
- E 254 Monsoon 71-D E. of New Zealand 43°10'S  
75°15'E Rock Dredge 119m Jan. 29, 1961  
coll. Russell SI061-150
- E 272 Monsoon Rock Dredge 76-D sta. VI-7 43°38'S  
117°26'E E. of New Zealand 161m Jan. 31,  
1961 coll. Russell, Menard
- E 844 STYX-7 MPE68094 sta. 1 Hamilton Guyot  
18°27'N 179°29'W 25' otter trawl 1545-1500m  
Sept. 4, 1968 R/V Agassiz W. Newman
- E 1063 RR61-20 Pta. Los Frailes, Baja Calif., Sur,  
Mex. 23°24'N 109°24.5'W Chemfish, and  
Diving 65 ft. June 17, 196 R. Rosenblatt  
(SI061-242)
- E 1613 S.O.B.-III-5 W. of Pta. Banda, Baja Calif.,  
Norte, Mex. 31°18'N 117°36'W Feb. 13, 1960  
2068-2086m 30' otter trawl R. Parker (P-  
137-60)
- E 2199 VSS-104 Bay, E. side of Angel de La Guarda,  
Gulf of Calif., Mex. Apr. 10, 1959 ca.  
29°17'N 113°21'W shell dredge 73m R. Parker  
(P-71-59)
- E 2233 Monsoon 72-D off New Zealand 43°26'S  
176°43'E Jan. 29, 1961 245m rock dredge
- E 2440 VS-54 Islas Tres Marias, Mexico 21°52'N  
106°12'W mid-water trawl ca. 730m ca.  
May 18, 1959 R. Wisner Vermillion Sea  
Exped.

## Family Oreasteridae

Oreaster occidentalis Verrill

- E 173 RR-61 Pta. Pulmo, Los Frailes Bay, Baja  
Calif. 23°27.5'N 109°24.4'W 80 ft. SCUBA  
sand June 19, 1961 coll. D. Leighton
- E 473 Pta. La Gringa, Bahía de Los Angeles, Baja  
Calif., Norte, ca. 29°N 113°30'W given to  
C. Hubbs by Ricardo Daggett April, 1962
- E 790 RR65-75 Ildefonso Is., S. end ca. 26°38'N  
111°26.5'W July 19, 1965 80-105 ft. Chem-  
fish and SCUBA R. Rosenblatt
- E 1114 TEPE78-15 Isla Sacrificios, Oaxaca, Mex.  
15°40.8'N 96°14.6'W Apr. 7, 1978 40 ft.  
SCUBA R/V A. Helix W. Newman, S. Luke
- E 1142 TEPE78-26 S.E. corner of Isla Cerralvo,  
Baja Calif., Sur, Mex. 24°08'N 109°47.5'W  
SCUBA 20-25 ft. Apr. 14, 1978 R/V A. Helix  
W. Newman, S. Luke
- E 1456 Bahía Concepción, Baja Calif., Sur, Mex.  
0-15 ft. snorkel, sand and rock July 19,  
1980 S. Luke

Nidorellia armata (Gray)

- E 171 RR-61 Cerralvo Is. off Bahía de La Paz,  
Baja Calif. 24°N 109°56'W 25 ft. skin  
diving June 21, 1961 coll. D. Leighton
- E 471 RR61 Los Frailes Cove, Gulf of Calif. ca.  
23°20'N 109°20'W 3-20 ft. SCUBA June 17,  
1961 coll. D. Leighton rocks
- E 937 Islas Galapagos, Ecuador, Isla Baltra  
July 15, 1969

- E 1457 Bahía Concepción, Baja Calif., Sur, Mex.  
0-15 ft. snorkel, sand and rock July 19,  
1980 S. Luke

Gen. Indet.

- E 1151 Caroline Is.
- E 1152 Caroline Is.
- E 1153 Caroline Is.
- E 1437 Islas San Benitos, Baja Calif., Norte, Mex.  
*Allopora californica* reef 60 ft. Scripps  
Grad. Student Cruise May, 1977 kept in  
Scripps Aquarium until death May 19, 1980  
M/V Hustler Tim Gerodete, Bob Kiwala, Mark  
Ferguson

## Family Ophidiasteridae

Linckia columbiae Gray

- E 476 SI062-212 E. side of Isla Cerraja, Bahía,  
de Los Angeles 29°00.3'N 113°33.7'W 0-  
20 ft. Chemfish April 19, 1962 coll.  
C. Hubbs
- E 483 From La Jolla, San Diego County, Calif.  
Oct. 16, 1955 coll. Paul W. Johnson
- E 486 SI062-162 Bahía Santa Inez, S. side of Pta.  
Inez, Baja Calif., Sur, Mex. 12 ft. diving  
April 26, 1953 coll. B.W. Walker sandstone  
and sand
- E 487 SI063-167 S. end of Isla Guadalupe,  
Melpomene Cove 28°53.15'N 118°16.3'W 25-  
50 ft. Chemfish and diving April 21, 1963  
coll. J. Stewart rocks and gravel
- E 491 SI062-233 S.E. end of Isla Cabeza de  
Caballo, Bahía de Los Angeles 28°58.6'N  
113°30.4'W 50-75 ft. Chemfish April 25,  
1962 coll. R. Rosenblatt boulders and sand
- E 552 SI062-210 W. side of Isla Ventana, Bahía de  
Los Angeles 29°00.4'N 113°32.4'W 15 ft.  
Chemfish April 18, 1962 coll. C. Hubbs
- E 1162 6111B-43 Pta. Entrada, N. of Sail Rock  
50 yds., Magdalena Bay, Baja Calif., Sur,  
Mex. 24°32.5'N 112°04.8'W 0-40 ft. rotenone  
and SCUBA Dec. 1, 1961 J. Stewart
- E 1163 SI062-225 E. side of Pta. Que Malo, S. of  
Bahía de Los Angeles, Baja Calif., Norte,  
Mex. 28°58.0'N 113°27.7'W 15-33 ft. Chem-  
fish April 23, 1962 R. Rosenblatt
- E 1181 Bahía Magdalena, Baja Calif., Sur, Mex.  
30 ft. 1964
- E 1466 Bahía Tortugas and Bahía Asunción, Baja  
Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft.  
SCUBA Mia Tegner

Pharia pyramidata (Gray)

- E 480 Los Arcos Puerta Vallarta Reef 3-12 ft.  
coll. R. Parker May 20, 1959
- E 490 RR65-11 (SI065-265) Isle San Jose  
24°52'25"N 110°37.0'W S. side of Isla ca.  
20 ft. Chemfish and SCUBA July 7, 1965  
coll. R. Rosenblatt
- E 554 SI062-225 E. side of Pt. Que Malo 28°58.0'N  
113°27.7'W Baja Calif., Norte, 15-33 ft.  
Chemfish April 23, 1962 coll. R. Rosenblatt
- E 791 RR65-75 Ildefonso Is., S. end ca. 26°38'N  
111°26.5'W July 19, 1965 80-105 ft. Chem-  
fish and SCUBA R. Rosenblatt
- E 963 RR70-3 rocky area 1/2 mi. S. of Cerro  
Colorado, Sonora, Mex. Chemfish and diving  
0-4 ft. Mar. 17, 1970 R. Rosenblatt  
(SI070-69)
- E 1105 TEPE78-6 Bahía Murcie Lagos, Costa Rica  
10°53.6'N 85°54.9'W SCUBA 20 ft. Apr. 13,  
1978 R/V A. Helix W. Newman, S. Luke

- E 1116 TEPE78-15 Isla Sacrificios, Oaxaca, Mex.  
15°40.8'N 96°14.6'W Apr. 7, 1978 40 ft.  
SCUBA R/V A. Helix W. Newman, S. Luke
- E 1132 TEPE78-23 Bahia Chamela, Jalisco, Mex.  
19°35'N 105°08.5'W SCUBA 15-20 ft. Apr. 12,  
1978 R/V A. Helix W. Newman, S. Luke
- E 1139 TEPE78-24 S.E. end of Isla Cerralvo, Baja  
Calif., Sur, Mex. 24°08'N 109°48'W  
intertidal April 14, 1978 R/V A. Helix  
W. Newman, S. Luke
- E 1144 TEPE78-26 S.E. end of Isla Cerralvo, Baja  
Calif., Sur, Mex. 24°08'N 109°47.5'W SCUBA  
April 14, 1978 R/V A. Helix W. Newman,  
S. Luke taken under ship 60 ft.
- E 1146 TEPE78-26 S.E. end of Isla Cerralvo, Baja  
Calif., Sur, Mex. 24°08'N 109°47.5'W SCUBA  
20-25 ft. Apr. 14, 1978 R/V A. Helix  
W. Newman, S. Luke
- E 1158 Cabo San Lucas, Baja Calif., Sur, Mex. 0-  
160 ft. Aug. 20, 1957 W. North
- E 1458 Bahia Concepcion, Baja Calif., Sur, Mex.  
0-15 ft. snorkel, sand and rock July 19,  
1980 S. Luke

Phataria unifascialis (Gray)

- E 181 Bahia Magdalena, Baja Calif., Sur, Mex.  
30 ft. 1964
- E 481 6108B-9 Tres Marias Is., San Juanito Is.,  
W. side 21°44'N 106°42.3'W 3 ft. Pro-  
noxifish Aug. 14, 1961 coll. F.H. Berry
- E 482 RR61-15 San Jose del Cabo Bay 23°00.75'N  
109°42.25'W Baja Calif., Sur 30 ft. Chem-  
fish and diving June 15, 1961 coll.  
R. Rosenblatt (SI061-237)
- E 484 SI062-216 Piedras Ahogadas, Isla La Ventana  
and Isla Cabeza de Caballo, Bahia de Los  
Angeles 28°59.9'N 113°31.4'W 60-90 ft.  
Chemfish April 21, 1962 coll. R. Rosenblatt
- E 488 SI067-37 Pearl Is., Isla San Jose, pocket  
beach 1/4 mi. N. of Pta. Cruz ca. 08°20'N  
79°20'W March 28, 1967 0-4 ft. rotenone and  
diving coll. R. Rosenblatt
- E 798 RR65-54 Bahia Santa Inez, Baja Calif., Sur  
26°54.5'N 111°58.2'W 0-12 ft. Noxfish  
July 14, 1965 B. Walker
- E 106 TEPE78-6 Bahia Murcie Lagos, Costa Rica  
10°53.6'N 85°54.9'W SCUBA 20 ft. April 3,  
1978 R/V A. Helix W. Newman, S. Luke
- E 1115 TEPE78-15 Isla Sacrificios, Oaxaca, Mex.  
15°40.8'N 96°14.6'W April 7, 1978 40 ft.  
SCUBA R/V A. Helix W. Newman, S. Luke
- E 1127 TEPE78-18 Isla Grande, Guerrero, Mex.  
17°40.3'N 101°40.4'W April 10, 1978 SCUBA  
15-20 ft. R/V A. Helix W. Newman, S. Luke
- E 1131 TEPE78-23 Bahia Chamela, Jalisco, Mex.  
19°35'N 105°08.5'W SCUBA 15-20 ft.  
April 12, 1978 R/V A. Helix W. Newman,  
S. Luke
- E 1145 TEPE78-26 S.E. end of Isla Cerralvo, Baja  
Calif., Sur, Mex. 24°08'N 109°47.5'W SCUBA  
20-25 ft. April 14, 1978 R/V A. Helix  
W. Newman, S. Luke
- E 1160 Cabo San Lucas, Baja Calif., Sur, Mex. 0-  
160 ft. Aug. 20, 1957 W. North
- E 1161 Los Arcos Puerta Vallarta reef 3-12 ft.  
May 20, 1959 R. Parker
- E 1459 Bahia Concepcion, Baja Calif., Sur, Mex.  
0-15 ft. snorkel, sand and rock July 19,  
1980 S. Luke

Gen. Indet.

- E 466 SI066-525 Queensland Australia, W. Coast of  
Stanley Is. Flinders Group Dec. 26, 1966  
14°09.3'S 144°12.2'E otter trawl R/V  
A. Helix 15-18m coll. C. Hubbs

- E 1154 Truk Lagoon, Caroline Is.
- E 1159 Cabo San Lucas, Baja Calif., Sur, Mex. 0-  
160 ft. Aug. 20, 1957 W. North

Order SPINULOSIDA

Family Solasteridae

Solaster borealis (Fisher)

- E 348 Sta. 15 Catalina Basin, Calif. 32°58.4'N  
118°26.8'W 32°55.4'N 118°22.3'W 1121-1137m  
16' otter trawl Dec. 10, 1972 R/V Agassiz  
coll. P. Jumars
- E 603 M15 OT-12 Pta. Piedras Blancas, Calif.  
35°29.3'N 121°35.8'W-35°34.5'N 121°42.0'  
906m 25' otter trawl April 1, 1974 R/V  
Agassiz coll. T. Matsui
- E 605 CalCofi 74126/II Piedras Blancas, Calif.  
35°43.3'N 121°44.1'W 35°35.8'N 121°44.8'W  
914m 25' otter trawl #5 Dec. 10, 1974 R/V  
Agassiz coll. T. Matsui
- E 607 M15 OT-11 Pta. Piedras Blancas, Calif.  
35°24.4'N 121°42.8'W 35°30.6'N 121°52.7'W  
1189-1170m 25' otter trawl March 31, 1974  
R/V Agassiz coll. T. Matsui
- E 609 M15 OT-22 off Del Mar, Calif. 32°55.0'N  
117°32.8'W 33°01.2'N 117°40.3'W 920m 25'  
otter trawl April 4, 1974 R/V Agassiz coll.  
T. Matsui
- E 687 Allozyme A-28 Catalina Basin, Calif.  
32°56'N 118°24'W 25' otter trawl 1143m  
Aug. 6, 1975 R/V Agassiz coll.  
J. Siebenaller

Solaster endeca (Linnaeus)

- E 72 Rokop 71-II-24 Tanner Basin 32°41.0'N  
119°30.5'W 32°46.5'N 119°25.9'W 1317-1363m  
25' otter trawl Jan. 20, 1971 R/V Agassiz  
coll. F. Rokop, R. McConnaughey

Solaster sp.

- E 1554 MET Sta. 129 W. of Patton Escarpment  
32°22'N 120°42'W 40' otter trawl Feb. 6,  
1981 3640-3740m R/V N. Horizon K. Smith,  
S. Luke

Heterozonias alternatus (Fisher)

- E 58 Cruise M-1 Sta. #2 San Diego Trough  
32°53.8'N 117°29.9'W 32°58.9'N 117°33.8'W  
768m 25' otter trawl, Feb. 3, 1971 R/V  
Agassiz coll. T. Matsui
- E 604 M15 OT-12 Pta. Piedras Blancas, Calif.  
35°29.3'N 121°35.8'W-35°34.5'N 121°42.0'W  
906m 25' otter trawl April 1, 1974 R/V  
Agassiz coll. T. Matsui
- E 606 CalCofi 74126/II Piedras Blancas, Calif.  
35°43.3'N 121°44.1'W 35°35.8'N 121°44.8'W  
914m 25' otter trawl #5 Dec. 10, 1974 R/V  
Agassiz coll. T. Matsui
- E 608 M15 OT-11 Pta. Piedras Blancas, Calif.  
35°24.4'N 121°42.8'W 35°30.6'N 121°52.7'W  
1189-1170m 25' otter trawl March 31, 1974  
R/V Agassiz coll. T. Matsui
- E 644 A-27 Afterthot II off Encinitas, Calif.  
32°59.6'N 117°34.1'W-33°00.3'N 117°34.5'W  
750m 25' otter trawl May 9, 1975 R/V  
Agassiz coll. J. Siebenaller
- E 934 M15 OT-13 off Pta. Piedras Blancas, Calif.  
35°35'N 121°28'W 25' otter trawl 567-603m  
R/V Agassiz April 1, 1974 coll. T. Matsui
- E 935 M-6, Sta. 2 San Diego Trough 32°53'N  
117°31'W 25' otter trawl 732-860m Aug. 13,  
1971 R/V Agassiz coll. T. Matsui

Lophaster furcilliger Fisher

- E 616 A-15 Afterthot II East Cortez Basin  
32°32.0'N 118°53.1'W-32°32.7'N 118°53.6'W  
1298m 25' otter trawl May 6, 1975 R/V  
Agassiz coll. J.F. Siebenaller
- E 1011 HR-3 Santa Cruz Basin, Calif. 33°40.5'N  
119°29.3'W 16' otter trawl 1880-1936m  
Mar. 11, 1960 R. Parker (P-145-60)
- E 1051 South Tow 0.0-50 off Mexico and U.S. Border  
31°45.6'N 119°33.0'W R/V T. Washington  
Dec. 12, 1971
- E 2332 L.C.-6 Santa Cruz Basin, Calif. 33°38.0'N  
119°28.0'W Nov. 6, 1960 1903m 16' ott. tr.  
C. Boyd (P-255-60)

Gen. Indet.

- E 1558 MET Sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981  
3689-3632m R/V N. Horizon K. Smith, S. Luke

## Family Pythonasteridae

Pythonaster pacificus Downey

- E 309 MV66-II-21 W.S.W. of Cortez Bank 32°05'N  
120°29'W-32°03'N 120°30'W 3777-3792m 40'  
otter trawl Dec. 11, 1966 coll. C. Hubbs  
(SI066-547)
- E 1430 MV69-VI-9 Baja Calif. Norte, Mex. abyssal  
plain 31°11'N 119°37'W 25' otter trawl  
3600-3676m Dec. 18, 1969 R/V Melville  
C. Hubbs, S. Luke

Gen. Indet.

- E 1595 MV65-I-38 Basin off Bahia Magdalena, Baja  
Calif., Sur, Mex. 24°35'N 113°25'W June 24,  
1965 3563-3621m 6' Sigbee tr. R/V Horizon  
C. Hubbs

## Family Pterasteridae

Pteraster jordani Fisher

- E 61 Cruise M-1 Sta. #2 San Diego Trough  
32°53.8'N 117°29.9'W 32°58.9'N 117°33.8'W  
768m 25' otter trawl Feb. 3, 1971 R/V  
Agassiz coll. T. Matsui

Pteraster sp.

- E 176 MV66-III-7 W. of Bahia Descanso 32°05.2'N  
117°14.0'N-32°03.3'N 117°12.7'W 1332-1244m  
40' otter trawl Dec. 8, 1966 coll. C. Hubbs
- E 1518 MET Sta. 109 Catalina Basin, Calif. 33°11'N  
118°30'W 40' ott. tr. Jan. 31, 1981 1198-  
1234m R/V N. Horizon K. Smith, S. Luke
- E 1524 MET Sta. 117 Catalina Basin, Calif. 33°13'N  
118°32'W 40' ott. tr. Feb. 3, 1981 1262-  
1235m R/V N. Horizon K. Smith, S. Luke

Diploteraster multipes (Sars)

- E 43 San Diego Trough 25' otter trawl Dec. 13,  
1969 32°23.5'-32°28.8'N 117°31.75'-  
117°31.01'W R/V Melville coll. R. Hessler,  
F. Rokop, S. Luke

Hymenaster sp.

- E 38 MV70-III-3 Baja Calif. abyssal plain  
31°24.0'-31°28.8'N 120°14.5'-120°10.3'W  
3880m 25' otter trawl March 21, 1970 R/V  
Melville coll. R. Wisner, F. Rokop, S. Luke
- E 39 MV70-III-6 Baja Calif. abyssal plain  
31°36.0'-31°14.4'N 120°07.4'-120°09.6'W  
3800-3706m 25' otter trawl March 22, 1970  
R/V Melville coll. R. Wisner, F. Rokop,  
S. Luke

- E 238 Rokop 71-41 Tanner Basin 32°51.0'N  
119°32.0'W 32°47.0'N 119°28.5'W 1391m 25'  
otter trawl July 13, 1971 R/V Agassiz coll.  
F. Rokop
- E 940 M-7, Sta. 3 W. of San Diego Trough 32°30'N  
118°08'W 40' otter trawl 1792-1866m  
Sept. 16, 1971 R/V Agassiz T. Matsui

cf. Hymenaster sp.

- E 11 SI070-22 Baja Calif. abyssal plain  
31°19.7'N 119°39.2'W-31°08.2'N 119°35.5'W  
3599-3676 fms 25' otter trawl, Dec. 18,  
1969 R/V Melville coll. C. Hubbs,  
R. Wisner, S. Luke

Gen. Indet.

- E 68 Rokop 70-I-12 San Diego Trough 32°34'N  
117°33'W 25' otter trawl 1171-1217m  
Oct. 29, 1970 R/V Agassiz F. Rokop, S. Luke
- E 257 Rokop 71-37 San Diego Trough 32°28.9'N  
117°29.7'W-32°24.3'N 117°24.6'W 1194-1097m  
25' otter trawl April 21, 1971 R/V Agassiz  
coll. F. Rokop
- E 301 MV72-II-32 Nasca Ridge, off Pta. San Juan,  
Peru 15°39.2'S 76°13.6'W-15°52.8'S  
76°04.2'W 3475m 25' otter trawl May 10,  
1972 R/V T. Washington coll. S. Luke
- E 631 A-11 Afterthot II San Clemente Basin,  
Calif. 32°29.4'N 118°06.5'W-32°28.8'N  
118°06.0'W 1829m 25' otter trawl May 5,  
1975 R/V Agassiz coll. J. Siebenaller
- E 635 A-24 Afterthot II San Diego Trough  
32°52.1'N 117°42.1'W-32°52.3'N 117°41.9'W  
1057m 25' otter trawl May 8, 1975 R/V  
Agassiz coll. J. Siebenaller
- E 827 MV72-II-26 off Arica, Chile May 7, 1972  
18°42'S 70°37'W 25' otter trawl 1097-1152m  
R/V T. Washington, S. Luke
- E 836 MV72-II-27 off Arica, Chile May 7, 1972  
18°35'S 70°32'W 25' otter trawl 768-968m  
25' otter trawl S. Luke R/V T. Washington
- E 882 SS-72, 96-DB N. mid-Pacific 31°19.82'N  
174°01.29'W dredge box 5401m June 15, 1972  
R/V Sea Scope
- E 939 M15 OT-1 San Diego Trough Mar. 27, 1974  
32°27'N 117°30'W 25' otter trawl 1225m R/V  
Agassiz T. Matsui
- E 941 Monsoon 74-D Sta. VI-5 E. of New Zealand  
43°21'S 179°30'E 425m rock dredge Jan. 30,  
1961
- E 942 M-10, Sta. 1A San Diego Trough 32°28'N  
117°33'W 25' otter trawl 1189m Feb. 9, 1972  
R/V Oconostota T. Matsui
- E 943 M-7, Sta. 1 San Diego Trough Sept. 14, 1971  
32°28'N 117°30'W 40' otter trawl 1225-1224m  
R/V Agassiz T. Matsui
- E 944 M-15 OT-11 off Pta. Piedras Blancas, Calif.  
35°28'N 121°48'W 25' otter trawl 1189-1170m  
Mar. 31, 1974 R/V Agassiz T. Matsui
- E 945 M-6, Sta. 1 San Diego Trough 32°23'N  
117°28'W 25' otter trawl 1244m Aug. 11,  
1971 T. Matsui R/V Agassiz
- E 946 H53-227 San Diego Trough 32°33'N 117°28'W  
5' IK diving dredge 1207-1216m Dec. 12,  
1953 M/V Horizon C. Hubbs
- E 948 M-8, Sta. 1 San Diego Trough 32°28'N  
117°32'W 40' otter trawl 1207-1244m Nov. 1,  
1971 R/V Agassiz T. Matsui
- E 1478 NoFac #5 San Nicholas Basin 33°20'N  
119°15'W July 6, 1980 1738m 25' ott. tr.  
R. Wilson R/V Melville
- E 1588 VS-B-II-35 N.W. of Islas Tres Marias  
22°20'N 107°48'W 40'ott. tr. May 15, 1959  
2999-2996m R. Parker, Rowland (P-96-59)  
(SI059-269)

- E 1596 MV65-I-38 Basin off Bahia Magdalena, Baja Calif., Sur, Mex. 24°35'N 113°35'W June 24, 1965 3563-3621m 6' Sigsbee tr. R/V Horizon C. Hubbs
- E 1608 Baja Slope Exped. BS-12 Basin off Bahia Magdalena, Baja Calif., Sur, 23°59.5'N 113°11.9'W 3481-3518m 10' beam tr. May 3, 1961 R. Parker (P-285-61)
- E 1730 SOB-5 W. of Pta. Banda, Baja Calif., Norte, Mex. 31°18'N 117°37'W 30' ott. tr. 2068-2086m Feb. 13, 1960 R. Parker (P-137-60)
- E 2207 SOB-III-12 N.E. of Isla Guadalupe, Baja Calif., Mex. 29°40.2'N 117°06.6'W 2708-2763m 30' ott. tr. Feb. 15, 1960 R. Parker (P-139-60)
- E 2326 TO-58-2, D-5 off Salina Cruz, Oaxaca, Mexico Nov. 19, 1958 3539-3610m R. Parker, R. Wisner
- E 2334 L.C.-6 Santa Cruz Basin, Calif. 33°38.0'N 119°28.0'W Nov. 6, 1960 1903m 16' ott. tr. C. Boyd (P-255-60)
- E 2335 L.C.-23 A.E.C. Sand Dab V, off San Francisco, Farallon Is., Calif. Nov. 10, 1960 2300 C. Boyd
- E 2719 Oconostota trawl #6 Tanner Basin 32°48'N 119°31'W Sept. 4, 1974 1362m 16' ott. tr. J.F. Siebenaller
- E 2772 MV65-I-57 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°35'N 110°11'W 2889-2505m 6' Sigsbee tr. June 29, 1965 R/V Horizon C. Hubbs (SI065-240)
- E 2774 Monsoon Sta. VI-6 E. of New Zealand ca. 43°28'N 178°E Jan. 31, 1961 161m rock dredge 75-D Russel & Menard

## Family Asterinidae

Asterina pectinifera (Müller & Troschel)

- E 589 Anana Beach, Hakodate, Hokkaido, Japan 2-20 ft. Sept. 21, 1953

Patiria miniata (Brandt)

- E 166 Point Loma, Calif. 75 ft. rocks coll. Hopkins & Crozier
- E 264 Ventura, Calif. 3-4 mi. W. of Santa Clara, river mouth 22-44m otter trawl Aug. 18, 1961 "El Capitan" coll. J. Copp SI061-499
- E 580 SIOM 59-23-7 tip of Point Loma, San Diego, Calif. Nov. 14, 1955 coll. P. Johnson
- E 581 H48-215-222 S. Coronado Is., Baja Calif. 32°25'N 117°13'W-32°20'N 117°08'W 15-55m pipe stem dredge Aug. 11, 1948 'E.W. Scripps' coll. C. Hubbs
- E 582 SIOH48-232 Bahia Descanso, E. of Sugarloaf Rock, ca. 32°20'N 117°05'W 18-24m pipe dredge Aug. 13, 1948 'E.W. Scripps' coll. C. Hubbs
- E 583 MV71-I-28 Isla San Benitos del Oeste 28°18'N 115°33'W Baja Calif. Norte hand collected intertidal at low tide May 26, 1971 R/V Agassiz coll. C. Hubbs, S. Luke
- E 585 6111 B-25 Magdalena Bay, Baja Calif. 24°38'N 112°02.4'W 24°38.5'N 112°01.2'W 27-23m 16' otter trawl Nov. 29, 1961 coll. F.H. Berry (SI062-113)
- E 586 Point Loma Lite, Point Loma, San Diego, Calif. May 26, 1966 coll. Taylor-Hoese
- E 601 MB-6904-5 TR# 150 Golfo de Calif. 28°57.0'N 112°35.0'W-28°58.0'N 112°34.0'W 100-82m 17' otter trawl April 25, 1969 4 mi. N of Pta. Willard, Isla Tiburon coll. Moser USFWS
- E 657 'ECCE' P.A.-1 Pta. Abreojos, Baja Calif., Sur 26°44'N 113°35'W rocky intertidal hand collection Pta. Baliza near Campo Media July 23, 1975 coll Hemingway, Luke

- E 680 'ECCE' B.T.-22 Bahia Tortugas, Baja Calif. 27°41'N 114°53'W upper mid-intertidal July 31, 1975 coll. Hemingway, Luke
- E 920 La Jolla, Calif., Casa area in tidepools July 11, 1968 T. Cukr
- E 1465 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50ft. SCUBA Mia Tegner
- E 2205 P-198-60 off Bahia Kino, Sonora, Mex. 28°41.6'N 112°11.0'W Mar. 27, 1960 92m shell dredge R. Parker

Gen. Indet.

- E 246 MV68-I-50 S. of Isle San Pedro, Mexico 27°40.0'N 111°22.6'W-27°38.1'N 111°20.1'W 931-952m 40' otter trawl Jan. 16, 1968 R/V T. Washington coll. C. Hubbs
- E 919 TEPE70-7 Isla Jicaron, Panama 07°15.7'N 81°45.3'W Sept. 16, 1970 64m rock dredge R/V A. Helix W. Newman, S. Luke
- E 1059 Monsoon P232-60 shore collection Wharton Reef, Australia 14°08'S 144°00'E 6 ft. skindiving Oct. 9, 1960

## Family Poraniidae

Porania sp.

- E 2786 Cape Armitage, McMurdo Sound, Antarctica Nov. 11, 1974 140 ft.

Dermasterias imbricata (Grube)

- E 167 Point Loma, Calif. 70 ft. rocks coll. Hopkins & Crozier
- E 579 SIOM 60-91-4 Point Loma, Calif. Pt. Loma kelp beds June 22, 1960 40' coll. J. Jordan

## Family Echinasteridae

cf. Echinaster tenuispina Verrill

- E 1467 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex., Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner

Othilia tenuispina Verrill

- E 478 SI062-212 E. side of Isla Cerraja, Bahia de Los Angeles 29°00.3'N 113°33.7'W 0-20 ft. Chemfish April 19, 1962 coll. C. Hubbs
- E 485 SI062-216 Piedras Ahogadas, Isla La Ventura & Isla Cabeza de Caballo, Bahia de Los Angeles 28°59.9'N 113°31.4'W 60-90 ft. Chemfish April 21, 1962 coll. R. Rosenblatt
- E 555 SI062-225 E. side of Pt. Que Malo 28°58.0'N 113°27.7'W Baja Calif. Norte 15-33 ft. Chemfish April 23, 1962 coll. R. Rosenblatt
- E 584 MV71-I-28 Isla San Benitos del Oeste 28°18'N 115°33'W Baja Calif. Norte hand collected intertidal at low tide May 26, 1971 R/V Agassiz coll. C. Hubbs, S. Luke
- E 594 6111 B-43 Magdalena Bay, Baja Calif. 24°32.5'N 112°04.8'W Dec. 1, 1961 0-40 ft. Rotenone SCUBA coll. J. Stewart SI062-131
- E 652 H48-31 Turtle Bay, reef on Point 1/4 mi. S. of Town on W. side of Bay 27°41.05'N 114°53.40'W Feb. 4, 1948, 0-5 ft. sandstone cliffs coll. C. Hubbs
- E 661 'ECCE' P.A.-3 rocky point E. of Pta. Abreojos, Baja Calif., Sur, W. side of Bahia La Baliza W. of Campo Media 26°44'N 113°35'W upper mid-intertidal hand collection sandstone July 24, 1975 coll. Hemingway, Luke
- E 677 'ECCE' B.T.-23 rocky point E. 1 mi. of town, Bahia Tortugas, Baja Calif. July 31, 1975 27°41'N 114°53'W SCUBA rocky point 10-15 ft. coll. Hemingway, Luke



- E 681 'ECCE' B.T.-22 Bahia Tortugas, Baja Calif. 27°41'N 114°53'W upper mid-intertidal July 31, 1975 coll. Hemingway, Luke
- E 799 RR65-54 Bahia Santa Inez, Baja Calif., Sur 26°54.5'N 111°58.2'W 0-12 ft. noxfish July 14, 1965 B. Walker
- E 800 Bahia Tortugas, Baja Calif., Sur, Mex., ca. 27°41'N 114°53'W Nov. 1959
- E 921 RR61-47 Isla Partida, Gulf of Calif., Mexico 24°32.5'N 110°23.8'W 8-20 ft. chemfish & SCUBA June 23, 1961 (SI061-269)
- E 922 SI062-235 Bahia de Los Angeles, Baja Calif. Norte 29°01.1'N 113°35.2'W 1.5m chemfish April 26, 1962 C. Hubbs
- E 923 RR65-17 Canal de San Jose, Baja Calif. Sur, 24°59.75'N 110°46'W 0-4 ft. chemfish & SCUBA July 8, 1965 R. Rosenblatt
- E 924 SI062-726 N. of Belcher Point, Bahia Magdalena, Baja Calif. Sur, Mexico 24°35.25'N 112°05.2'W Dec. 8, 1962 0-25 ft. chemfish & diving B. Zahuranec B6212-26
- E 925 SI062-228 W. shore of S. arm of Bahia de Los Angeles 28°55.6'N 113°33.8'W 0-6 ft. April 24, 1962 chemfish C. Hubbs
- E 926 Puerto Penasco, Sonora, Mexico S. of Rocky Pt., tidepools Oct. 19, 1968 T. Cukr
- E 928 Puerto Penasco, Sonora, Mexico Apr. 22, 1951 Fred Wylie
- E 931 H52-117 25 mi. E. of Pta. Eugenia, Bahia Vizcaino, Baja Calif. Sur, 2.5 ft. rotenone Aug. 10, 1952 K.S. Norris
- E 932 SI048-88 Bahia Ballenas, E. of Pta. Abreojos light, Baja Calif. Sur, Feb. 15, 1948 26°50'N 113°32'W gill net 0-10 ft. C. Hubbs
- E 933 SI060-390 N. side of Isla Margarita, Magdalena Bay, Baja Calif. Sur ca. 30-60 ft. 10' otter trawl Aug. 24, 1960 F.H. Berry
- E 1468 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner
- Othilia cf. tenuispina Verrill  
E 165 Magdalena Bay, Baja Calif., Sur, Mexico 15 ft. rocks Hopkins, Crozier
- Henricia aspera Fisher  
E 160 75 ft. Quast Rock, La Jolla, Calif. coll. Hopkins & Crozier
- Henricia cf. aspera Fisher  
E 211 off San Diego, Calif. July 30, 1906 32°51'N 117°20'W rocky 73m
- E 344 SL58 Sea Lab off Scripps Pier, in Scripps Canyon Oct. 5, 1965 88m on 70° slope
- E 598 M15 OT-9 off Long Beach, Calif. 33°53.3'N 118°09.2'W-118°07.6'W 49m 40' otter trawl March 29, 1974 R/V Agassiz coll. T. Matsui
- E 599 SI048-232 Bahia Descanso, E. of Sugarloaf Rock ca. 32°20'N 117°05'W 18-24m pipe dredge Aug. 13, 1948 'E.W. Scripps' coll. C. Hubbs
- E 600 MB-6904-5 TR #150 Golfo de Calif. 28°57.0'N 112°35.0'W-28°58.0'N 112°34.0'W 100-82m 17' otter trawl April 25, 1969 4 mi. N. of Pta. Willard, Isla Tiburon coll. Moser USFWS
- Henricia cf. asthenactis Fisher  
E 215 Off San Diego, Calif. July 7, 1908 32°46.5'N 118°20.5'W 503m
- Henricia leviuscula (Stimpson)  
E 159 75 ft. Quast Rock, La Jolla, Calif. coll. Hopkins & Crozier
- E 191 Pacific Grove, Calif. Feb. 1921 coll. M. Johnson
- Henricia cf. leviuscula (Stimpson)  
E 161 75 ft. Quast Rock, La Jolla, Calif. coll. Hopkins
- E 595 MV71-I-2 Isla de Guadalupe, Baja Calif. 28°52.0'N 118°14.6'W-118°15.3'W 102-99m 6' Sigsbee trawl May 18, 1971 R/V Agassiz coll. C. Hubbs, S. Luke
- E 597 6111B-25 Bahia Magdalena, Baja Calif. 24°38'N 112°02.4'W-24°38.5'N 112°01.2'W 27-23m 16' otter trawl Nov. 29, 1961 coll. F.H. Berry
- E 602 La Jolla Canyon, La Jolla, Calif. 113-40m Rock Dredge Jan. 7, 1954
- E 650 H53-160 Guadalupe Is., Mexico, skiff mooring for weather station 0-60 ft. rotenone & dynamite June 8, 1953 coll. C. Limbaugh
- E 517 H48-229 Baja Calif., Bahia Descanso E. of Sugar Loaf Rock, pipe dredge 20-26m Aug. 13, 1948 'E.W. Scripps' coll. C. Hubbs
- Henricia polyacantha Fisher  
E 60 Cruise M-1 Sta. #2 San Diego Trough 32°53.8'N 117°29.9'W 32°58.9'N 117°33.8'W 768m 25' otter trawl Feb. 3, 1971 R/V Agassiz coll. T. Matsui
- Henricia cf. sanguinolenta (Muller)  
E 591 Cod Hole, La Jolla Canyon, La Jolla, Calif. Jan. 19, 1956 120-130 ft. J. Stewart
- Henricia sp.  
E 709 Shepard No. 69 40 mile Bank 32°N 117°56.2'W June 10, 1938 183m dredge 'E.W. Scripps'
- E 869 Mag. Bay A-20 N.W. of Bahia Magdalena, Baja Calif. Sur 24°54'N 113°08'W 1229-1147m 6' Sigsbee trawl Jan. 31, 1964 R/V Horizon C. Hubbs (SI0 64-14)
- E 929 H50-35 reef near middle of Pt. of W. anchorage, W. side of Guadalupe Is., Baja Calif. tidepools, 3-8 ft. Jan. 30, 1950 M/V 'Orca' C. Hubbs
- E 994 A-27 Afterthot II off Encinitas, Calif. 33°N 117°34.5'W 25' otter trawl 750m May 9, 1975 R/V Agassiz J. Siebenaller
- E 1028 M8-1 San Diego Trough 40' otter trawl 32°29'N 117°32'W Nov. 1, 1971 1207-1244m R/V Agassiz T. Matsui (SI071-201)
- E 1029 M-6, Sta. 2 San Diego Trough 25' otter trawl 32°53'N 117°31'W Aug. 13, 1971 732-860m R/V Agassiz T. Matsui
- E 1519 MET Sta. 109 Catalina Basin, Calif. 33°11'N 118°30'W 40' ott. tr. Jan. 31, 1981 1198-1234m R/V N. Horizon K. Smith, S. Luke
- E 1888 P-222-60 off Tijuana River, San Diego, Calif. 32°33.4'N 117°13.2'W 31m deep diving dredge Mar. 8, 1960
- E 1954 Holt Exped. Sta. #10 Bahia San Quintin, Baja Calif., Norte, Mex. 30°17'N 116°04'W 118m 10' ott. tr. Dec. 4, 1960 C. Boyd, D. Dockins (P-267-60) (SI0 60-468)
- cf. Henricia  
E 70 Rokop 70-I-12 San Diego Trough 32°37.0'N 117°32.6'W 32°33.2'N 117°33.1'W 1171-1217 m 25' otter trawl Oct. 29, 1970 R/V Agassiz F. Rokop, R. McConnaughey, S. Luke
- E 355 Sta. 19 Santa Catalina Basin, Calif. 32°59.3'N 118°26.2'W-32°57.4'N 118°23.3'W 1116m 16' otter trawl Dec. 11, 1972 R/V Agassiz coll. P. Jumars

- E 593 SIO63-17 San Diego Trough 32°25.2'N  
117°27.6'W 32°23.9'N 117°30.2'W 732-1280m  
10' IKMT Feb. 8, 1963 coll. R. Wisner
- E 686 Allozyme A-28 Catalina Basin, Calif.  
32°56'N 118°24'W 25' otter trawl 1143m  
Aug. 6, 1975 R/V Agassiz coll. Siebenaller

Poraniopsis inflata (Fisher)

- E 163 Scripps Canyon, La Jolla, Calif. 130 ft.  
canyon walls coll. Hopkins & Crozier
- E 164 174m off La Jolla Canyon, La Jolla, Calif.
- E 345 SL58 Sea Lab off Scripps Pier in Scripps  
Canyon Oct. 5, 1965 290 ft. on 70° slope
- E 590 SIO M 59-78-1 La Jolla Canyon "Pothole," La  
Jolla, Calif. Oct. 3, 1959 145 ft. coll. C.  
Limbaugh
- E 930 SOB III-13 N.E. of Isla Guadalupe, Baja  
Calif. 29°30.8'N 117°16.8'W rock dredge  
549-732m Feb. 16, 1960 R/V S.F. Baird,  
R. Parker (P60-140), C.M. Yonge

Gen. Indet.

- E 874 Monsoon Sta. VI-6 Rock dredge 75-D Jan. 31,  
1961 0906-1153
- E 1264 NAGA S4 60-0216 S. China Sea 15°40'00"N  
109°43'30"E 10' Beam T. Feb. 28, 1960 479m  
Cat. #53-00233
- E 1525 MET Sta. 117 Catalina Basin, Calif. 33°13'N  
118°32'W 40' ott. tr. Feb. 3, 1981 1262-  
1235m R/V N. Horizon K. Smith, S. Luke
- E 1533 MET Sta. 123 W. of Patton Escarpment  
32°35'N 120°35'W 40' ott. tr. Feb. 5, 1981  
3634-3713m R/V Horizon K. Smith, S. Luke
- E 2235 Monsoon 72-D off New Zealand 43°26'S  
176°43'E Jan. 29, 1961 245m rock dredge
- E 2243 TO-58-2, D-4 off Salina Cruz, Oaxaca,  
Mexico 14°50'N 96°15'W Nov. 18, 1958 1042-  
1134m diving dredge R. Wisner, R. Parker  
(SIO 58-419)

Family Acanthasteridae

Acanthaster ellisii Gray

- E 472 RR61 Los Frailes Cove, Gulf of Calif. ca.  
23°20'N 109°20'W 3-20 ft. SCUBA June 17,  
1961 D. Leighton rocks
- E 794 RR65-86 Sta. Catalina Is., Baja Calif. Sur  
ca. 25°42'N 110°50'W 0-15 ft. chemfish July  
21, 1965 L. Findley
- E 1149 TEPE78-26 S.E. end of Isla Cerralvo, Baja  
Calif., Sur., Mex. 24°08'N 109°47.5'W SCUBA  
20-25 ft. Apr. 14, 1978 R/V A. Helix  
W. Newman, S. Luke

Family Mithrodiidae

Mithrodia bradleyi Verrill

- E 174 RR-61 Cerralvo Is. off Bahia de La Paz,  
Baja Calif., 24°18'N 109°57'W 10 ft. rock  
June 23, 1961
- E 1143 TEPE78-26 S.E. corner of Isla Cerralvo,  
Baja Calif., Sur, Mex. 24°08'N 109°47.5'W  
SCUBA 20-25 ft. Apr. 14, 1978 R/V A. Helix  
W. Newman, S. Luke
- E 1157 Cabo San Lucas, Baja Calif. Sur, Mexico 0-  
160 ft. Aug. 20, 1957 W. North
- E 1464 Bahia Tortugas & Bahia Asuncion, Baja  
Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft.  
SCUBA Mia Tegner
- E 2757 6108B-25 Islas Tres Marias, Mex. 21°26.5'N  
106°22'W Aug. 16, 1961 0-25 ft. rotenone &  
diving (SIO62-25)

Mithrodia cf. bradleyi Verrill

- E 162 Cabo San Lucas, Baja Calif., Sur, Mex.  
45 ft., rocks, Crozier

Order FORCIPULATIDA

Family Heliasteridae

Heliaster cumingii (Gray)

- E 1017 Academy Bay, Santa Cruz Island, Galapagos  
Islands Aug. 10, 1952

Heliaster kubiniji Xantus

- E 172 RR-61 Cerralvo Is. off Bahia de La Paz,  
Baja Calif., Mexico 24°18'N 109°56'W  
intertidal June 22, 1961 coll. D. Leighton
- E 1018 RR65-17 Canal de San Jose, Gulf of Calif.  
24°59.75'N 110°46.0'W 0-4 ft. chemfish &  
diving July 8, 1965 B. Walker (SIO 65-271)

Heliaster microbrachius Xantus

- E 656 'ECCE' P.A.-1 Pta. Abreojos, Baja Calif.,  
Sur 26°44'N 113°35'W rocky intertidal hand  
collection E. of town near Campo Media,  
Bahia Baliza Point July 23, 1975 coll.  
Hemingway, Luke
- E 859 'ECCE' P.A.-10 Pta. Abreojos, Baja Calif.,  
Sur 26°44'N 113°35'W mid-intertidal July  
25, 1975 Hemingway, Luke

Heliaster sp.

- E 1019 RR65-69 Carmen Is., N. end at Pta. Lobos,  
Baja Calif. Sur, ca. 26°04'N 111°05'W 0-  
20 ft. noxfish July 17, 1965 B. Walker
- E 477 SIO62-212 E. side of Isla Cerraja, Bahia de  
Los Angeles 29°00.5'N 113°33.7'W 0-20 ft.  
chemfish April 19, 1962 coll. C. Hubbs

Family Zoroasteridae

Zoroaster evermanni Fisher

- E 65 Cruise M-1 Sta. #2 San Diego Trough  
32°53.8'N 117°29.9'W 32°58.9'N 117°33.8'W  
768m 25' otter trawl Feb. 3, 1971 R/V  
Agassiz coll. T. Matsui
- E 643 A-27 Afterthot II off Encinitas, Calif.  
32°59.6'N 117°34.1'W-33°00.3'N 117°34.5'W  
750m 25' otter trawl May 9, 1975 R/V  
Agassiz coll. J. Siebenaller
- E 996 CalCofl 74126/II off Piedras Blancas,  
Calif. 35°39'N 121°44.5'W 25' otter trawl  
915m Dec. 10, 1974 R/V Agassiz T. Matsui
- E 998 M15-OT-22 off Del Mar, Calif. 25' otter  
trawl 33°N 117°38'W April 4, 1974 R/V  
Agassiz T. Matsui 920m
- E 999 M15-OT-11 Pta. Piedras Blancas, Calif.  
35°28'N 121°48'W 25' otter trawl 1189-1170m  
Mar. 31, 1974 R/V Agassiz T. Matsui
- E 1003 M-6, Sta. 2 San Diego Trough 25' otter  
trawl 32°53'N 117°31'W Aug. 13, 1971 R/V  
Agassiz 732-860m T. Matsui
- E 1004 M15-OT-12 off Pta. Piedras Blancas, Calif.  
35°33'N 121°40'W 25' otter trawl 906m  
Apr. 1, 1974 R/V Agassiz T. Matsui

Zoroaster nudus Ludwig

- E 170 MV65-I-50 (SIO65-233) S.W. of Cabo San  
Lucas, 22°42.5'N 110°21.0'W-22°41.4'N  
110°12.0'W (1893-1957m) 6' Sigabee beam tr.  
June 28, 1965 R/V Horizon coll. C. Hubbs
- E 1602 MV65-I-51 S.W. of Cabo San Lucas, Baja  
Calif. Sur., Mex. 22°45'N 110°23'W 30' ott.  
tr. 1917-2014m June 28, 1965 R/V Horizon  
C. Hubbs

Zoroaster ophiurus Fisher

- E 1014 M8-5 off S. Calif. 40' otter trawl 32°33'N  
118°07'W Nov. 3, 1971 1829m R/V Agassiz  
T. Matsui (SI071-202)
- E 1015 M-7, Sta. 3 San Clemente Basin, Calif.  
32°28'N 118°07'W 40' otter trawl 1792-1866m  
Sept. 16, 1971 R/V Agassiz T. Matsui

Zoroaster sp.

- E 426 M-6 Sta. 3 San Clemente Basin, Calif.  
32°31.0'N 118°07.2'W-32°37.0'N 118°18.8'W  
1628-1838m 25' otter trawl Aug. 12, 1971  
R/V Agassiz coll. T. Matsui

Myxoderma sacculatum Fisher

- E 995 Calcofi 74126/II off Piedras Blancas,  
Calif. 35°39'N 121°44.5'W 25' otter trawl  
915m Dec. 10, 1974 R/V Agassiz T. Matsui
- E 1012 S.E. San Nicolas Island, Calif. 1189-732m  
Dredge #15 Jan. 6, 1969 R/V Agassiz Edwin  
Allison

Myxoderma sacculatum ectenes Fisher

- E 52 Rokop 70-I-9 Tanner Basin R/V Agassiz  
32°53.4'N 119°33.8'W 32°49.5'W 119°31.9'W  
1398m 25' otter trawl Oct. 28, 1970 R/V  
Agassiz F. Rokop, R. McConnaughey, S. Luke
- E 69 Rokop 70-I-12 San Diego Trough 32°37.0'N  
117°32.6'W 32°33.2'N 117°33.1'W 1171-1217m  
25' otter trawl Oct. 29, 1970 R/V Agassiz  
F. Rokop, R. McConnaughey, S. Luke
- E 77 Rokop 71-II-20 San Diego Trough 32°24.7'N  
117°27.75'W 32°29.2'N 117°30.2'W 1226-1204m  
25' otter trawl Jan. 18-19, 1971 R/V  
Agassiz coll. F. Rokop
- E 90 MV71-I-62 San Diego Trough 32°21.8'N  
117°24.0'W 32°30.7'W 117°32.8'W 1235m  
25 ft. otter trawl June 1-2, 1971 R/V  
Agassiz coll. C. Hubbs, R. Wisner, S. Luke
- E 94 Rokop 71-41 Tanner Basin 32°51.0'N  
119°32.0'W 32°47.0'N 119°28.5'W 1391m 25'  
otter trawl July 13, 1971 R/V Agassiz coll.  
F. Rokop
- E 258 Rokop 71-37 San Diego Trough 32°28.9'N  
117°29.7'W-32°24.3'N 117°24.6'W 1194-1097m  
25' otter trawl April 21, 1971 R/V Agassiz  
coll. F. Rokop
- E 266 SI071-90 (M4 Sta. 1) San Diego Trough  
32°25.3'N 117°28.9'W-32°35.1'N 117°33.7'W  
1234m 25' otter trawl June 22, 1971 R/V  
Agassiz coll. R. McConnaughey
- E 1000 M15 OT-11 Pta. Piedras Blancas, Calif.  
35°28'N 121°48'W 25' otter trawl 1189-1170m  
Mar. 31, 1974 R/V Agassiz T. Matsui
- E 1007 M8-1, SI071-201 San Diego Trough 32°30'N  
117°32'W 40' otter trawl 1207-1244m Nov. 1,  
1971 R/V Agassiz T. Matsui
- E 1008 M10, Sta. 1A San Diego Trough 32°29'N  
117°33'W 25' otter trawl 1189m Feb. 9, 1972  
R/V Oconstota T. Matsui
- E 1009 M-7 Sta. 1 San Diego Trough 32°29'N  
117°30'W 40' otter trawl 1225-1244m  
Sept. 14, 1971 T. Matsui
- E 1010 HR-3 Santa Cruz Basin, Calif. 33°40.5'N  
119°29.3'W 16' otter trawl 1880-1936m  
Mar. 11, 1960 R. Parker (P-145-60)
- E 1013 Sta. A Disposal Area Survey, SI064-1029  
Santa Cruz Basin, Calif. 33°46'N 119°37'W  
Rock dredge 1829m Apr. 23, 1957 R/V Baird
- E 1442 SnaFu SI080-8 San Diego Trough 32°36.5'N  
117°32'W 40' otter trawl #1 1171m Feb. 29,  
1980 R/V New Horizon R. Rosenblatt
- E 2333 L.C.-6 Santa Cruz Basin, Calif. 33°38.0'N  
119°28.0'W Nov. 6, 1960 1903m 16' ott. tr.  
C. Boyd (P-255-60)

Myxoderma cf. sacculatum cf. ectenes Fisher

- E 411 MV66-III-7 W. of Bahia Descanso, Baja  
Calif. 32°05.2'N 117°14.0'W-32°03.3'N  
117°12.7'W 1332-1244m 40' otter trawl  
Dec. 8, 1966 coll. C. Hubbs (SI066-537)

Myxoderma platyacanthum (Clark)

- E 733 SI076-95 N. of Catalina Is., Calif.  
33°33.5'N 118°39'W March 9, 1976 585-534m  
40' otter trawl R/V Agassiz coll. S. Luke
- E 741 SI076-96 N. of Catalina Is., Calif.  
33°33.5'N 118°38'W Mar. 9, 1976 556-585m  
40' otter trawl R/V Agassiz coll. S. Luke
- E 1001 M-15 OT-13 off Pta. Piedras Blancas, Calif.  
35°35'N 121°28'W 25' otter trawl Apr. 1,  
1974 567-603m R/V Agassiz T. Matsui
- E 1002 M15 OT-14 off San Simeon, Calif. 35°34'N  
121°18'W 25' otter trawl 256m Apr. 1, 1974  
R/V Agassiz T. Matsui
- E 1504 MET Sta. 104 Catalina Basin, Calif. 33°24'N  
118°35.5'W 25' ott. tr. 550-640m Jan. 29,  
1981 R/V N. Horizon K. Smith, S. Luke
- E 2646 No. 100 mouth of Redondo Canyon, Calif.  
658m dredge June 10, 1938 Shepard 'E.W.  
Scripps'

Myxoderma sp.

- E 620 A-19 Afterthot II West Cortez Basin  
32°27.'N 119°33.8'W-32°27.9'W 119°34.1'W  
1445m 25' otter trawl May 7, 1975 R/V  
Agassiz coll. J. Siebenaller
- E 1005 Operation Blind Spot-off Pta. Chivato, Baja  
Calif. Sur, 27°18'N 111°24'W 25' otter  
trawl 1829-1875m June 15, 1970 R/V Agassiz  
E. Kampa
- E 1006 Operation Blind Spot - off Pta. Lobos,  
Sonora, Mex. 27°13'N 111°28'W 25' otter  
trawl June 14, 1970 1829-1875m R/V Agassiz  
E. Kampa

Gen. Indet.

- E 249 MV68-I-50 S. of Isle San Pedro, Mex.  
27°40.0'N 111°22.6'W-27°38.1'N 111°20.1'W  
931-952m 40' otter trawl Jan. 16, 1968 R/V  
T. Washington coll. C. Hubbs
- E 431 trawl 8 San Clemente Basin 32°28.0'N  
117°46.7'W 32°27.6'N 117°54.5'W 1527-1545m  
16' otter trawl Sept. 5, 1974 R/V  
Oconastola coll. J. Siebenaller
- E 446 MV72-II-26 off Arica, Chile 18°44.7'S  
70°4.7'W-18°40.2'S 70°35.1'W 1097-1152m 25'  
otter trawl May 7, 1972 R/V T. Washington  
coll. S. Luke
- E 1477 NoFac #5 San Nicholas Basin 33°20'N  
119°15'W July 6, 1980 1738m 25' otter tr.  
R. Wilson R/V Melville

## Family Asteriidae

Leptasterias hexactis (Stimson)

- E 193 Pacific Grove, Calif. Feb. 1921 coll.  
M. Johnson
- E 1045 1 mi. S. of Pt. Arena lighthouse, Mendocino  
Co. mid-intertidal June, 21, 1968 B. Kues

Orthasterias koehleri (de Loriol)

- E 1573 Quast Rock, La Jolla, Calif. 75 ft. Hopkins  
& Crozier

Pisaster giganteus (Stimpson)

- E 1046 tip of Point Loma, San Diego, Calif.  
Dec. 28, 1955 P. Johnson

Pisaster ochraceus (Brandt)

- E 158 Pacific Beach, Calif. Crystal Pier hand collected off pilings, intertidal Feb. 6, 1974
- E 690 'ECCE' SR-34 Pta. Santa Rosalia, Baja Calif. 28°40'N 114°14'N rocky intertidal Aug. 6, 1975 coll. Hemingway, Luke
- E 700 'ECCE' PB-38 Pta. Baja, Baja Calif. mid intertidal 29°57'N 115°48'W coll. Hemingway, Luke Aug. 9, 1975

Sclerasterias heteropaes Fisher

- E 1574 Quast Rock, La Jolla, Calif. 75 ft. Hopkins & Crozier

Rathbunaster californicus Fisher

- E 1021 B6 203-1 Monterey Bay, Calif. Mar. 7, 1962 36°50'N 122°05'W 16' otter trawl #44 F.H. Berry (SI063-730)
- E 1022 CalCofi 74126/II off San Luis Obispo, Calif. 35°49'N 121°28.5'W Dec. 10, 1974 99m 16' otter trawl #3 R/V Agassiz T. Matsui
- E 1023 M15 OT-15 off Morro Bay, Calif. 35°24.7'N 121°00.4'W 35°06.5'N 121°03.0'W 99m 25' otter trawl April 2, 1974 R/V Agassiz T. Matsui

Pycnopodia helianthoides (Brandt)

- E 1024 M15 OT-15 off Morro Bay, Calif. 35°10'N 121°02'W 25' otter trawl 99m Apr. 2, 1974 R/V Agassiz T. Matsui
- E 1025 CalCofi 74126/II off San Francisco, Calif. 37°14.8'N 122°31.5'W 16' otter trawl 79m Dec. 9, 1974 R/V Agassiz T. Matsui
- E 1026 M15 OT-18 off Lompoc, Calif. 34°46.2'N 120°43.2'W 25' otter trawl 70m Apr. 2, 1974 R/V Agassiz T. Matsui
- E 1058 SI062-495 (P49-3) E. side of Isla Todos Santos, Baja Calif. Norte, Mexico ca. 31°47'N 116°48'W July 26, 1949 J.L. McHugh off Quast Rock, La Jolla, Calif. 80 ft. SCUBA T. Scanland

Gen. Indet.

- E 200 Pt. Dume, Calif. canyon rim 40-109m Sept. 8, 1954 C. Limbaugh
- E 202 Whale View Pt. March 7, 1948 coll. Wm. Singer
- E 217 off Tijuana, Mexico 32°23.5'N 119°05.8'W July 17, 1908 92 ms.
- E 263 Ventura, Calif. 3-4 mi. W. of Santa Clara river mouth 22-44m otter trawl Aug. 18-19, 1961 'El Capitan' coll. J. Copp SI061-499
- E 592 Cod Hole, La Jolla Canyon, La Jolla Calif. coll. J. Stewart Jan. 19, 1956 120-130 ft.
- E 961 DW 76-5-5 Alert Bay, British Columbia, rocky intertidal Aug. 27, 1976 D. Wilkie
- E 973 Pt. Barrow, Alaska, dive collections 40-120 ft. Aug. 3-8, 1958
- E 1020 RR65-69 Carmen Is., N. end of Pta. Lobos, Baja Calif. Sur, ca. 26°04'N 111°05'W 0-20 ft. noxfish July 17, 1965 B. Walker
- E 1038 SI048-232 Bahia Descanso, E. of Sugarloaf Rock ca. 32°20'N 117°05'W 18-24m pipe stem dredge Aug. 13, 1948 'E.W. Scripps' C. Hubbs
- E 1039 rocky beach near "Spindrift", La Jolla, Calif. Nov. 19, 1915 P.S. Barnhart
- E 1040 Scripps Canyon, La Jolla, Calif. diving saucer Nov. 17, 1964 A.O. Flechsig
- E 1041 S. of Clifton Pier, New Providence Is., Bahamas, tidepools and shallow water April 11, 1956 C. Limbaugh
- E 1042 Olympic Peninsula, La Push, Washington David Jensen

- E 1043 La Jolla Canyon, La Jolla, Calif. 213m bottom trap Aug. 23, 1967 Andy Saraspe
- E 1044 San Diego Bay, San Diego, Calif. June 15, 1904 Peterson
- E 2330 LC-25 W. of Farallon Is., San Francisco, Calif. 37°35.7'N 123°15.2'W 1830m 16' ott. tr. Nov. 11, 1960 C. Boyd (P-257-60)

## Family Brisingidae

cf. Brisingella sp.

- E 1505 MET Sta. 104 Catalina Basin, Calif. 33°24'N 118°35.5'W 25' ott. tr. 550-640m Jan. 29, 1981 R/V N. Horizon K. Smith, S. Luke

Gen. Indet.

- E 99 MV70-III-8 Baja Calif. Norte abyssal plain 31°47.5'N 120°19.0'W 31°32.0'N 120°18.0'W 3916-3950m 25' otter trawl March 23, 1970 R/V Melville coll. Wisner, Rokop, Luke
- E 243 MV70-III-1 Baja Calif. abyssal plain 31°47.0'N 120°12'W-31°18.8'N 120°14.8'W 3950-3880m IKMT-hit bottom March 21, 1970 R/V Melville coll. S. Luke
- E 269 Baja Calif. abyssal Plain MV 69-VI-9 31°19.7'N 119°30.2'W 31°08.2'N 119°35.5'W 3600-3676m 25' otter trawl Dec. 18, 1969 R/V Melville coll. C. Hubbs, S. Luke
- E 311 MV66-III-21 W.S.W. of Cortez Bank 32°05'N 120°29'W-32°03'N 120°30'W 3777-3792m 40' otter trawl Dec. 11, 1966 coll. C. Hubbs (SI066-547)
- E 416 MV65-I-4 N.W. of N. tip of Cedros Is. Baja 28°55.3'N 115°47.9'W-28°46.3'N 115°41.2'W 1536-1511m 6' Sigsbee trawl June 10, 1965 R/V Horizon coll. C. Hubbs
- E 432 trawl 8 San Clemente Basin 32°28.0'N 117°46.7'W 32°27.6'N 117°54.5'W 1527-1545m 16' otter trawl Sept. 5, 1974 R/V Oconastota coll. J. Siebenaller
- E 625 A-17 Afterthot II West Cortez Basin 32°25.3'N 119°30.4'W-32°24.8'N 119°29.9'W 1362m 25' otter trawl May 7, 1975 R/V Agassiz coll. J. Siebenaller
- E 632 A-11 Afterthot II San Clemente Basin, Calif. 32°52.1'N 118°06.5'W-32°28.8'N 118°06.0'W 1829m 25' otter trawl May 5, 1975 R/V Agassiz coll. J. Siebenaller
- E 824 MV-72-II-26 off Arica, Chile May 7, 1972 18°42'S 70°37'W 25' otter trawl 1097-1152m R/V T. Washington S. Luke
- E 886 SS-72, 103-DB N. Mid-Pacific 31°39.5'N 175°35.7'W dredge box 5121m June 18, 1972 R/V Sea Scope
- E 991 MV-66-II-7 W. of Bahia Descanso, Baja Calif. Norte, 32°04'N 117°13'W 40' otter trawl 1332-1244m Dec. 8, 1966 C. Hubbs (SI066-537)
- E 992 M-6, Sta. 3 San Clemente Basin, Calif. 32°35'N 118°15'W 25' otter trawl 1628-1838m Aug. 12, 1971 R/V Agassiz T. Matsui
- E 993 MV70-III-3 Baja Calif. abyssal plain 31°27'N 120°13.5'W 25' otter trawl 3880m Mar. 21, 1970 R/V Melville S. Luke
- E 1016 MV65-I-31 off Bahia San Hipolito 26°31'N 114°15'W 45' otter trawl 2054-2136m June 22, 1965 R/V Horizon C. Hubbs
- E 1534 MET Sta. 123 W. of Patton Escarpment 32°35'N 120°35'W 40' ott. tr. Feb. 5, 1981 3634-3713m R/V N. Horizon K. Smith, S. Luke
- E 1553 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V Horizon K. Smith, S. Luke

- E 1559 MET Sta. 133 W. of Patton Escarpment 32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981 3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 1609 Baja Slope Exped. BS-12 Basin off Bahia Magdalena, Baja Calif., Sur, 23°59.5'N 113°11.9'W 3481-3518m 10' beam tr. May 3, 1961 R. Parker (P-285-61)
- E 1614 S.O.B.-III-5 W. of Pta. Banda, Baja Calif., Norte, Mex. 31°18'N 117°36'W Feb. 13, 1960 2068-2086m 30' ott. tr. R. Parker (P-137-60)
- E 1620 Baja Slope Exped. BS-1 S.W. of Cabo Colnett, Baja Calif., Norte, 30°45'N 116°51'W 1986-1975m 30' ott. tr. Apr. 28, 1961 R. Parker (P-274)
- E 1621 MV70-III-6 W. of Patton Escarpment 31°20'N 120°09'W Mar. 23, 1970 25' ott. tr. 3706-3806m R/V Melville S. Luke
- E 1622 MV70-III-6 W. of Patton Escarpment 31°20'N 120°09'W Mar. 23, 1970 25' ott. tr. 3706-3806m R/V Melville S. Luke
- E 1623 MV70-III-6 W. of Patton Escarpment 31°20'N 120°09'W Mar. 23, 1970 25' ott. tr. 3706-3806m R/V Melville S. Luke
- E 1718 MV65-I-57 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°35'N 110°12'W 2889-2505m 6' Sigsbee tr. June 29, 1965 R/V Horizon C. Hubbs
- ASTEROIDEA
- Incertae Sedis
- E 252 Monsoon 71-D. E. of New Zealand 43°10'S 175°15'E Rock Dredge 119m Jan. 29, 1961 coll. Russell SIO61-150
- E 262 MV65-I-50 S.W. of Cabo San Lucas, Mex. 22°42.5'N 110°21.0'W 22°41.4'N 110°12.0'W 1893-1957m 6' Sigsbee trawl June 28, 1965 R/V Horizon coll. C. Hubbs
- E 276 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°32.5'N 85°43.0'W 09°36.7'N 85°40.5'W 1157-1454m 10' IKMT-hit bottom April 20, 1973 R/V Agassiz coll. C. Hubbs, S. Luke
- E 279 MV71-I-43 off N.W. Baja Calif. Mex 31°25'N 117°45'W "1000 Fm. Basin" 2001-2025m 6' Sigsbee trawl May 29, 1971 R/V Agassiz coll. C. Hubbs, S. Luke
- E 310 MV66-III-21 W.S.W. of Cortez Bank 32°05'N 120°29'W-32°03'N 120°30'W 3777-3792m 40' otter trawl Dec. 11, 1966 coll. C. Hubbs (SIO66-547)
- E 868 M-15 OT-13 off Pta. Piedras Blancas, Calif. 35°35'N 121°28'W 25' otter trawl 567-603m April 1, 1974 R/V Agassiz T. Matsui
- E 956 CIRCE Rodrigues Is., Indian Ocean 19°43'S 63°30'E hand collection 12-15 ft. Montipora reef Aug. 29, 1968 Donovan
- E 1027 #22 Area 19 Top of seamount 27°49'N 145°46'E Chain dredge 1116m Dec. 5, 1969 USNS Silas Bent AGS-26 J. McLane
- E 1030 M15 OT-11 off Pta. Piedras Blancas, Calif. 35°28'N 121°50'W 25' otter trawl 1189-1170m Mar. 31, 1974 R/V Agassiz T. Matsui
- E 1047 Monsoon 71-D Sta. VI-2 E. of New Zealand 43°10'S 175°15'E 119m Rock Dredge Jan. 29, 1961 Russell (SIO61-150)
- E 1048 Monsoon Rock Dredge 70-D Sta. VI-I E. of New Zealand 43°09'S 170°15'E 119m Jan. 29, 1961 Russell
- E 1049 Yvonne Is., Eniwetak Atoll, near bomb craters ca. 11°30'N 162°10'E 0-60 ft. SCUBA Sept. 1971 to May 1972 R. Nolan
- E 1050 Yvonne Is., Eniwetak Atoll, near bomb craters ca. 11°30'N 162°10'E 0-60 ft. SCUBA Sept. 1971 to May 1972 R. Nolan
- E 1052 M15 OT-9 off Long Beach, Calif. 33°53.3'N 118°08'W 40' otter trawl 49m R/V Agassiz Mar. 29, 1974 T. Matsui
- E 1053 M15-OT-15 off Morro Bay, Calif. 35°18'N 121°02'W 25' otter trawl 99m 25' otter trawl April 2, 1974 R/V Agassiz T. Matsui
- E 1054 MV70-III-1 Baja Calif. Norte abyssal plain 31°37'N 120°14'W IKMT hit bottom 3950-3880m Mar. 21, 1970 R/V Melville S. Luke
- E 1060 Monsoon-shore collection #7 Rottneest Is., off Fremantle, Australia Feb. 5, 1961 1230-1530
- E 1164 Monsoon Exped. Green Is., off Cairns, Queensland, Australia 16°46'S 145°58'E 0-15 ft. skindiving Oct. 7, 1960 Rowland P-231-60
- E 1170 NAGA S3 60-0110 Gulf of Thailand 06°22'15"N 102°14'00"E 6' Beam T. Jan. 22, 1960 27m Cat. #53-01383
- E 1174 NAGA S3 60-0110 Gulf of Thailand 06°22'15"N 102°14'00"E 6' Beam T. Jan. 22, 1960 27m Cat. #53-00182
- E 1176 NAGA S3 60-0120 Gulf of Thailand 09°06'00"N 104°14'00"E 2' Bio. Dredge Jan. 23, 1960 22m Cat. # 53-00354
- E 1178 NAGA S3 60-0137 Gulf of Thailand 08°25'30"N 100°44'40"E 6' Beam T. Jan. 26, 1960 27m Cat. #53-00360
- E 1184 NAGA S4 60-0212 S. China Sea 15°40'00"N 109°22.9'E 10' Beam T. Feb. 27, 1960 110-198m Cat. #53-00497
- E 1188 NAGA S5 60-0325 Gulf of Thailand 06°24'12"N 102°13'00"E 6' Beam T. Apr. 24, 1960 27m Cat. #53-00461
- E 1190 NAGA S6 60-0546 S. China Sea 04°45'00" 106°08'00"E 6' Beam T. June 22, 1960 82m Cat. #53-00210
- E 1203 NAGA SIO 61-0248 Timor Sea 10°55.4'S 128°54.8'E shell dredge Apr. 19, 1961 40m Cat. #53-00882
- E 1259 NAGA S3 60-0175 Gulf of Thailand 12°04'30"N 100°46'00"E 6' Beam T. Jan. 30, 1960 27m Cat. #53-00373
- E 1266 NAGA S4 60-0274 S. China Sea 10°16.0'N 107°56.5'E 6' Beam T. Mar. 10, 1960 30m Cat. # 53-01418
- E 1275 NAGA SSII 61-0256 Timor Sea 11°00.5'S 129°40.5'E shell dredge Apr. 20, 1961 82m Cat. 53-00457
- E 1277 NAGA S3 60-0102 Gulf of Thailand 12°33'00"N 100°44'00"E 6' Beam T. Jan. 19, 1960 27m Cat. #53-00252
- E 1279 NAGA S3 60-0110 Gulf of Thailand 06°22'15"N 102°14'00"E 6' Beam T. Jan. 22, 1960 27m Cat. #53-00350
- E 1282 NAGA S5 60-0316 Gulf of Thailand 09°46'15"N 100°10'30"E 6' Beam T. Apr. 22, 1960 25m Cat. #53-00454
- E 1285 NAGA S5 60-0316 Gulf of Thailand 09°46'15"N 100°10'30"E 6' Beam T. Apr. 22, 1960 25m Cat. #53-00488
- E 1289 NAGA S4 60-0216 S. China Sea 15°40'00"N 109°43'30"E 10' Beam T. Feb. 28, 1960 479m Cat. #53-00231
- E 1291 NAGA S4 60-0237 S. China Sea 12°09.7'N 109°24.7'E 10' Beam T. Mar. 4, 1960 93m Cat. #53-0388
- E 1292 NAGA S4 60-0264 S. China Sea 10°31'30"N 109°25'00"E 10' Beam T. Mar. 9, 1960 183m Cat. #53-00391
- E 1412 NAGA S2 59-0131 Gulf of Thailand 13°01'45"N 100°50'30"E 40' Otter T. Dec. 15, 1959 11 ft. Cat. #53-00478

- E 1413 NAGA S3 60-0102 Gulf of Thailand 12°33'00"N  
100°44'00"E 6' Beam T. Jan. 19, 1960 27m  
Cat. #53-00470
- E 1415 NAGA S3 60-0104 Gulf of Thailand 09°37'00"N  
100°21'00"E 6' Beam T. Jan. 20, 1960 26-28m  
Cat. #53-00468
- E 1418 NAGA S3 60-0175 Gulf of Thailand 12°04'30"N  
100°46'00"E 6' Beam T. Jan. 30, 1960 27m  
Cat. #53-00471
- E 1420 NAGA S4 60-0212 South China Sea 15°40'00"N  
109°22.9'E 10' Beam T. Feb. 27, 1960 110-  
198m Cat. #53-00474
- E 1421 NAGA S4 60-0237 South China Sea 12°09.7'N  
109°24.7'E 10' Beam T. Mar. 4, 1960 93m  
Cat. #53-00475
- E 1423 NAGA S8 60-0828 Nhatrang Bay 05°28'50"N  
106°37'40"E 2.5' dredge Oct. 4, 1960 55m  
Cat. #53-00476
- E 1424 NAGA S9 60-0845 Gulf of Thailand 12°54'30"N  
100°26'30"E 6' Beam T. Nov. 9, 1960 20m  
Cat. #53-00477
- E 1427 NAGA SSII V-356 61-0246 Timor Sea 10°55.8'S  
129°15.5'E shell dredge Apr. 19, 1961 71m  
CN1050
- E 1428 NAGA SSII V-356 61-0246 Timor Sea 10°55.8'S  
129°15.5'E shell dredge Apr. 19, 1961 71m  
CN1050
- E 1359 NAGA S8 60-0724 S. China Sea 15°40'35"N  
108°59'00"E 6' Beam T. Sept. 12, 1960 91m  
Cat. #53-00430
- E 1389 NAGA S11A 61-0226 Timor Sea 11°00.0'S  
128°33.8'E Chain dredge Apr. 12, 1961 342m  
CN1029
- E 1393 NAGA S11A 61-0222 Timor Sea 11°29.5'S  
125°20.0'E shell dredge Apr. 11, 1971 102m  
CN1025
- E 1397 NAGA S11A U1-0245 Timor Sea 10°56'24"S  
126°36'18"E shell dredge Apr. 19, 1961 28m  
CN1048a
- E 1400 NAGA S11A 61-0245 Timor Sea 10°56'24"S  
126°36'18"E shell dredge Apr. 19, 1961 28m  
CN1048a
- E 1494 Cape Armitage, Antarctica, Oct. 25, 1974
- E 1497 Staten Is., Vancouver Is., Argentina May 7,  
1973 SCUBA 20-45 ft.
- E 1498 Staten Is., Vancouver Is., Argentina May 4,  
1973 10m
- E 1499 Staten Is., Vancouver Is., Argentina May 4,  
1973 10m
- E 1515 MET Sta. 105 Catalina Basin, Calif. 33°08'N  
118°35.5'W 25' ott. tr. 1280-1271m Jan. 30,  
1981 R/V N. Horizon K. Smith, S. Luke
- E 1526 MET Sta. 117 Catalina Basin, Calif. 33°13'N  
118°32'W 40' ott. tr. Feb. 3, 1981 1262-  
1235m R/V N. Horizon K. Smith, S. Luke
- E 1607 Baja Slope Exped. BS-12 Basin off Bahia  
Magdalena, Baja Calif., Sur, 23°59.5'N  
113°11.9'W 3481-3518m 10' beam tr. May 3,  
1961 R. Parker (P-285-61)
- E 1717 MV65-I-57 S.W. of Cabo San Lucas, Baja  
Calif., Sur, Mex. 22°35'N 110°12'W 2889-  
2505m 6' Sigsbee tr. June 29, 1965 R/V Hor-  
izon C. Hubbs
- E 2196 VSS-50 Bahia Santa Ana, Baja Calif., Sur,  
Mexico 27°45'N 112°38.5'W 64m shell dredge  
April 4, 1959 R. Parker (P-57-59)
- E 2251 RED-67 Basilan Strait, Philippines  
06°50.3'N 122°04.8'E Aug. 31, 1961 108-112m  
dredge cable ship "Recorder"
- E 2641 Monsoon Sta. VI-6 E. of New Zealand ca.  
43°30'S 178°E Rock dredge 75-D Jan. 31,  
1961 0906-1153 Russell & Menard

## Subclass OPHTHIOUROIDEA

## Order PHRYNOPHYURIDA

## Family Ophiomyxidae

Ophioscolex corynetes (Clark)

- E 746 SI076-96 N. of Catalina Is., Calif.  
33°33.5'N 118°38'W Mar. 9, 1976 556-585m  
40' otter trawl R/V Agassiz coll. S. Luke
- E 1507 MET Sta. 104 Catalina Basin, Calif. 33°24'N  
118°35.5'W 25' ott. tr. 550-640m Jan. 29,  
1981 R/V N. Horizon K. Smith, S. Luke
- E 1635 MET Sta. 109 Catalina Basin, Calif. 33°11'N  
118°30'W 40' ott. tr. Jan. 31, 1981 1198-  
1234m R/V N. Horizon K. Smith, S. Luke
- E 1711 M-1, Sta. 2 San Diego Trough 32°57'N  
117°32'W 25' ott. tr. Feb. 3, 1971 768m R/V  
Agassiz T. Matsui
- E 1742 SI076-95 N. of Catalina Is., Calif.  
33°33.5'N 118°38'W 40' ott. tr. Mar. 9,  
1976 585-534m R/V Agassiz S. Luke
- E 1902 M-15 OT-14 off San Simeon, Calif. 35°34'N  
121°18'W 25' ott. tr. Apr. 1, 1974 256m R/V  
Agassiz T. Matsui

Gen. Indet.

- E 646 A-27 Afterthot II off Encinitas, Calif.  
32°59.6'N 117°34.1'W-33°00.3'N 117°34.5'W  
750m 25' otter trawl May 9, 1975 R/V Agas-  
siz coll. J. Siebenaller
- E 830 MV72-II-27 off Arica, Chile May 7, 1972  
18°35'S 70°32'W 25' otter trawl 768-968m  
R/V T. Washington S. Luke
- E 1672 SOB-III-5 W. of Pta. Banda, Baja Calif.,  
Norte, Mex. 31°18'N 117°36'W Feb. 13, 1960  
2068-2086m 30' ott. tr. R. Parker (P-137-  
60)

## Family Asteronychidae

Asteronyx longifissus Doderlein

- E 738 SI076-95 N. of Catalina Is., Calif.  
33°33.5'N 118°39'W Mar. 9, 1976 585-534m  
40' otter trawl R/V Agassiz coll. S. Luke
- E 1506 MET Sta. 104 Catalina Basin, Calif. 33°24'N  
118°35.5'W 25' ott. tr. 550-640m Jan. 29,  
1981 R/V N. Horizon K. Smith, S. Luke
- E 1739 M-15, OT-13 Pta. Piedras Blancas, Calif.  
35°36'N 121°28'W 25' ott. tr. Apr. 1, 1974  
567-603m R/V Agassiz T. Matsui

Asteronyx loveni Muller & Troschel

- E 614 A-15 Afterthot II East Cortez Basin  
32°32.0'N 118°53.1'W-32°32.7'N 118°53.6'W  
1298m 25' otter trawl May 6, 1975 R/V Agas-  
siz coll. J.F. Siebenaller
- E 1450 SnaFu SI080-9 off San Diego, Calif. 32°43'N  
117°24.4'W 25' ott. tr. #2 402-421m  
Feb. 29, 1980 R/V New Horizon R. Rosenblatt
- E 1704 MV65-I-31 off Bahia San Hipolito, Baja  
Calif., Sur, Mexico 26°31'N 114°15'W 45'  
ott. tr. 2054-2136m June 22, 1965 R/V Hor-  
izon C. Hubbs
- E 1738 M-15 OT-11 Pta. Piedras Blancas, Calif.  
35°28'N 121°49'W 25' ott. tr. Mar. 31, 1974  
1189-1170m R/V Agassiz T. Matsui
- E 1740 CalCofi 74126/II off Pta. Piedras Blancas,  
Calif. 35°38'N 121°44.5'W 25' ott. tr. #5  
915m Dec. 10, 1974 R/V Agassiz T. Matsui
- E 1762 M-15 OT-12 off Pta. Piedras Blancas, Calif.  
35°32'N 121°40'W 25' ott. tr. Apr. 1, 1974  
906m R/V Agassiz T. Matsui

- E 1807 M-7, Sta. 1 San Diego Trough 32°29'N  
117°30'W 40' ott. tr. 1225-1244m Sept. 14,  
1971 R/V Agassiz T. Matsui
- E 2129 R-24 Tanner Basin 25' ott. tr. 32°45'N  
119°31'W Jan. 20, 1971 1317-1362m R/V  
Agassiz F. Rokop
- E 2139 M15 OT-14 off San Simeon, Calif. 35°34'N  
121°18'W 25' ott. tr. 256m Apr. 1, 1974 R/V  
Agassiz T. Matsui
- E 2156 R-35 Tanner Basin Apr. 20, 1971 32°49'N  
119°32'W 25' ott. tr. 1391-1372m R/V  
Agassiz F. Rokop
- E 2162 MV66-III-7 W of Bahia Descanso, Baja  
Calif., Norte, Mex. 32°04'N 117°13'W 1332-  
1244m 40' ott. tr. Dec. 8, 1966 C. Hubbs  
(SIO66-537)
- E 2329 LG-25 W of Farallon Is., San Francisco,  
Calif. 37°35.7'N 123°15.2'W 1830m 16' ott.  
tr. Nov. 11, 1960 C. Boyd (P-257-60)
- E 2720 Oconostota trawl #6 Tanner Basin 32°48'N  
119°31'W Sept. 4, 1974 1362m 16' ott. tr.  
J.F. Siebenaller

Asteronyx sp.

- E 1589 VS-B-II-35 N.W. of Islas Tres Maria 22°20'N  
107°48'W 40' ott. tr. May 15, 1959 2999-  
2996m R. Parker, Rowland (P-96-59) (SIO59-  
269)
- E 1700 MV65-I-50 S.W. of Cabo San Lucas, Baja  
Calif., Sur, Mex. 22°42'N 110°15'W 6'  
Sigsbee tr. 1893-1957m June 28, 1965 R/V  
Horizon

Astrodia excavata (Lutken & Mortensen)

- E 1743 Mag Bay A 20 N.W. of Bahia Magdalena Baja  
Calif., Sur, Mex. 24°54'N 113°08'W 1229-  
1147m 6' Sigsbee tr. Jan. 31, 1964 R/V  
Horizon C. Hubbs (SIO64-14)
- E 1757 Baja 69-12 N. of Bahia Asuncion, Baja  
Calif., Sur, Mex. 27°06'N 114°28.2'W 348m  
pipe dredge Feb. 23, 1969 R/V Oconostota

cf. Astrodia cf. excavata (Lutken & Mortensen)

- E 1801 SIO76-96 N. end of Catalina Is., Calif.  
33°33.5'N 118°38'W 40' ott. tr. 556-585m  
Mar. 9, 1976 R/V Agassiz S. Luke

Gen. Indet.

- E 850 STYX-7 MPE 680917 Sta. 1 Darwin Guyot  
22°01'N 171°34'E Sept. 17, 1968 1280m  
Sigsbee trawl R/V Agassiz W. Newman
- E 851 STYX-7 MPE 68017 Sta. 2 Darwin Guyot  
22°02'N 171°37'E rock dredge Sept. 17, 1968  
1280-1262m R/V Agassiz W. Newman
- E 997 MV72-II-26 off Arica, Chile 18°42'S 70°37'W  
25' otter trawl 1097-1152m May 7, 1972 R/V  
T. Washington S. Luke
- E 1778 Monsoon Exped. P-239-60 N.E. of Timor, top  
of Guyot 08°31'S 128°22.8'E 1618-1666m rock  
dredge Oct. 24, 1960 Rowland

## Family Asteroschematidae

Asteroschema sublaeve Luthken & Mortensen

- E 1584 Coronado fan valley, off S. San Diego,  
Calif. 1524m collected by "Deep Quest"  
crew, attached to deep water gorgonian
- E 1585 MV71-I-62 San Diego Trough 32°28'N 117°30'W  
1235m 25' otter trawl June 2, 1971 R/V  
Agassiz C. Hubbs, S. Luke

## Family Gorgonocephalidae

Gorgonocephalus caryi (Lyman)

- E 1578 S 28 Coos Bay D. Jensen

- E 1579 Saucer Dive #345 Due W. of Bird Rock, La  
Jolla, Calif. 11°0-20°m April 17, 1965 A.  
Flechsig, R. Ford

Astrocaneum spinosum (Lyman)

- E 801 Bahia Tortugas, Baja Calif., Sur, Mexico  
ca. 27°41'N 114°53'W Nov. 1959
- E 1581 Bahia San Pablo, Baja Calif., Sur, Mexico  
30 ft. Feb. 1964 on dark brown Muricea T.  
Scanland
- E 1582 RR65-23 Canal de San José, Golfo de Calif.,  
Mex. 24°58'N 110°42'W 64m July 8, 1965 40'  
ott. tr. R. Rosenblatt (SIO65-277)

Gen. Indet.

- E 182 ARIES VII 540 Milwaukee Seamount Group,  
N.W. of Midway 32°17.4'N 172°47.7'E 732-  
375m Dredge haul Aug. 20, 1971 R/V  
T. Washington coll. R.V. Mead
- E 1583 Japanyon III-50 near Tokyo, Japan 34°53'N  
139°44.50'E dredge July 17, 1961 460m
- E 2172 Monsoon (P-234-60) Torres Strait 10°11.0'S  
139°31.0'E Oct. 12, 1960 51m rock dredge  
Rowland

Fam. Indet.

- E 183 ARIES 54 D Milwaukee Seamount Group, N.W. of  
Midway 32°17.4'N 172°47.7'E 732-375m Dredge  
haul Aug. 20, 1971 R/V T. Washington coll.  
R.V. Mead
- E 813 MV72-II Soutar off Chile 450-420m 21°23.7'S  
70°18.2'W rock dredge May 1, 1972 R/V  
T. Washington A. Soutar, S. Luke
- E 1725 MV65-I-57 S.W. of Cabo San Lucas, Baja  
Calif., Sur, Mex. 22°35'N 110°12'W 2889-  
2505m 6' Sigsbee tr. June 29, 1965 R/V  
Horizon C. Hubbs

## Order OPHIURIDA

## Family Ophiuridae

Ophiura bathybia Clark

- E 244 MV70-III-1 Baja Calif. abyssal plain  
31°47.0'N 120°12'W 18.8'N 120°14.8'W 3950-  
3880m IKMT-hit bottom March 21, 1970 R/V  
Melville coll. S. Luke
- E 1610 Baja Slope Exped. BS-14 Cedros Trench, Baja  
Calif., Sur, Mex. 27°12'N 115°20'W 4188-  
4161m 10' beam tr. May 6, 1961 R. Parker  
(P-287-61)
- E 1627 MV70-III-6 W. of Patton Escarpment 31°20'N  
120°09'W Mar. 23, 1970 25' ott. tr. 3706-  
3806m R/V Melville S. Luke
- E 1684 MV65-I-13 Cedros Trench, Baja Calif.,  
Norte, Mex. 28°05'N 116°45'W 6' Sigsbee tr.  
4414-4425m June 13, 1965 R/V Horizon  
C. Hubbs
- E 1698 MV70-III-3 W. of Patton Escarpment 31°27'N  
120°11'W 25' ott. tr. Mar. 21, 1970 3880m  
R/V Melville S. Luke
- E 1707 MV70-III-8 W. of Patton Escarpment 31°35'N  
120°18.3'W 25' ott. tr. Mar. 23, 1970  
3916-2950m R/V Melville S. Luke
- E 1729 MET Sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981  
3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 1736 MV69-VI-9 W. of Patton Escarpment 31°12'N  
120°36.5'W 25' ott. tr. Dec. 18, 1969 3600-  
3676m R/V Melville C. Hubbs, S. Luke
- E 1744 MV67-II-22 W. of Pioneer Seamount 37°18'N  
123°53'W 41' ott. tr. June 15, 1967 3592-  
3799m R/V T. Washington C. Hubbs

- E 1769 SI067-103 S. of Davidson's Seamount, Calif., 35°N 122°52'W 25' ott. tr. 3908-3972m June 10, 1967 R/V T. Washington C. Hubbs
- E 1959 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1964 MV65-I-26 off Bahia San Cristobal, Baja Calif., Norte, Mex. 27°08'N 115°10'W June 21, 1965 4085-4096m 10' IKMT R/V Horizon C. Hubbs (SI065-209)
- Ophiura flagellata (Lyman)
- E 260 MV65-I-50 S.W. Of Cabo San Lucas, Mex. 22°42.5'N 110°21.0'W 22°41.4'N 110°12.0'W 1893-1957m 6' Sigsbee trawl June 28, 1965 R/V Horizon coll. C. Hubbs
- E 1766 MV65-I-51 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°45'N 110°23'W 1917-2014m 30' ott. tr. June 28, 1965 R/V Horizon C. Hubbs
- E 2059 VS-BII-28 off Rio Elata, Sinaloa, Mex. 23°38'N 107°46'W May 11, 1959 1366-1385m ott. tr. R. Parker Vermillion Sea Exped. (SI059-265)
- Ophiura irrorata (Lyman)
- E 1590 VS-B-II-35 N.W. of Islas Tres Marias 22°20'N 107°48'W 40' ott. tr. May 15, 1959 2999-2996m R. Parker, Rowland (P-96-59) (SI059-269)
- E 1719 MV65-I-57 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°35'N 110°12'W 2889-2505m 6' Sigsbee tr. June 29, 1965 R/V Horizon C. Hubbs
- E 1861 VS-54 Vermillion Sea Exped. N. of Islas Tres Marias, Mex. 22°06'N 106°29'W 730m May 18, 1959 S.F. Baird (SI075-568) (CalCofi 1606.35)
- E 1957 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1962 MV65-I-55 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°33'N 110°08'W 2714-2886m 45' ott. tr. June 29, 1965 R/V Horizon C. Hubbs (SI065-238)
- E 2107 MB72-II-32 off Pta. San Juan, Peru 15°47'S 76°07'W May 10, 1972 3475m 25' ott. tr. R/V T. Washington S. Luke
- E 2187 TO-58-2, D-5 off Salina Cruz, Oaxaca, Mexico Nov. 19, 1958 3539-3610m R. Parker, R. Wisner
- Ophiura leptocenia Clark
- E 204 between San Clemente Is. and Santa Catalina Id. Midwater trawl hit bottom Dec. 7, 1950 27m SI059-86-1
- E 1660 Sta. 15 Catalina Basin, Calif. Dec. 10, 1972 32°56'N 118°24'W 16' ott. tr. 1121-1137m R/V Agassiz P. Jumars
- E 1630 MET Sta. 117 Catalina Basin, Calif. 33°13'N 118°32'W 40' ott. tr. Feb. 3, 1981 1262-1235m R/V N. Horizon K. Smith, S. Luke
- E 1633 MET Sta. 105 Catalina Basin, Calif. 33°08'N 118°35.5'W 25' ott. tr. Jan. 30, 1981 1280-1271m R/V N. Horizon K. Smith, S. Luke
- E 1637 MET Sta. 109 Catalina Basin, Calif. 33°11'N 118°30'W 40' ott. tr. Jan. 31, 1981 1198-1234m R/V N. Horizon K. Smith, S. Luke
- E 1655 Allozyme A-28 Catalina Basin, Calif. 32°56'N 118°24'W 25' ott. tr. Aug. 6, 1975 1143m R/V Agassiz J.F. Siebenaller
- E 1653 Oconostota trawl #4 Catalina Basin, Calif. 32°59'N 118°25'W 16' ott. tr. Sept. 4, 1974 1099-1104m R/V Oconostota J.F. Siebenaller
- E 1664 Oconostota Sta. 4 San Diego Trough 32°38'N 117°30'W 4' pipe stem dredge 1097-1180m Nov. 7, 1979 R/V Oconostota F. Rokop, S. Luke
- E 1667 A-15 Afterthot II E. Cortez Basin, Calif. 32°32.5'N 118°53.5'W 25' ott. tr. May 6, 1975 1298m R/V Agassiz J. Siebenaller
- E 1671 A-24 Afterthot San Diego Trough 32°52'N 117°42'W 25' ott. tr. May 8, 1975 1057m R/V Agassiz J.F. Siebenaller
- E 1728 Sta. 19 Catalina Basin, Calif. 32°58'N 118°24'N 16' ott. tr. Dec. 11, 1972 1116m R/V Agassiz P. Jumars
- E 1810 Rebathyl Sta. 108 Catalina Basin, Calif. 33°21'N 118°45'W 25' ott. tr. Jan. 24, 1980 1300m R/V N. Horizon K. Smith
- E 1775 MV66-II-4 off Eureka, Calif. May 22, 1966 40°30.5'N 125°45.2'W 16' ott. tr. 2999-3017m R. Wisner (SI066-52)
- E 1790 Sta. 16 Catalina Basin, Calif. Dec. 10, 1972 32°20'N 118°17'W IKMT 1097m R/V Agassiz R. Hessler
- E 1819 M-15 OT-11 off Pta. Piedras Blancas, Calif. 35°28'N 121°50'W 25' ott. tr. Mar. 31, 1974 1189-1170m R/V Agassiz T. Matsui
- E 1857 H51-148 San Diego Trough 32°44'N 117°40'W April 20, 1951 1006m 10' midwater trawl Al Allanson
- E 2001 M-8, Sta. 5 off San Diego, Calif. 32°33'N 118°06'W 40' ott. tr. Nov. 3, 1971 1829m R/V Agassiz T. Matsui
- E 2117 R-3 San Diego Trough 25' ott. tr. 32°24'N 117°29'W Oct. 26, 1970 1243-1258m R/V Agassiz F. Rokop, S. Luke
- E 2124 R-41 Tanner Basin 25' ott. tr. 32°48'N 119°30'W July 13, 1971 1390m R/V Agassiz F. Rokop
- E 2128 R-27 Tanner Basin 25' ott. tr. 32°48'N 119°31.5'W Jan. 21, 1971 1390-1372m R/V Agassiz F. Rokop
- E 2131 R-24 Tanner Basin 25' ott. tr. 32°45'N 119°31'W Jan. 20, 1971 1317-1362m R/V Agassiz F. Rokop
- E 2135 R-9 Tanner Basin 25' ott. tr. 32°51'N 119°33'W Oct. 28, 1970 1397m R/V Agassiz F. Rokop, S. Luke
- E 2182 Oconostota trawl #7 Tanner Basin 32°44'N 119°31'W Sept. 5, 1974 ca. 1200-1300m 16' ott. tr. J.F. Siebenaller
- Ophiura lutkeni (Lyman)
- E 234 1.5 mi. off Torrey Pines State Park, La Jolla, Calif. ca. 30m dredge July 3, 1917
- E 235 3/4 mi. W. of Torrey Pines Park, La Jolla, Calif. 23-30m July 30, 1917
- E 703 H51-32 S. side of Bahia Todos Santos, Baja Calif. ca. 31°45'N 116°35'W pipe dredge 27-46m Feb. 6, 1951 coll. C. Hubbs on 'Orca'
- E 724 La Jolla Canyon, La Jolla, Calif. 46m March 22, 1938 coll. F.P. Shephard on 'E.W. Scripps'
- E 980 Holt Exped. Sta. #10 Bahia San Quintin, Baja Calif. Norte 30°17'N 116° 04'W 118m 10' otter trawl Dec. 4, 1960 C. Boyd
- E 1482 Student Cruise off Pt. Loma, Calif. 32°35.5'N 117°20'W Nov. 15, 1980 91-101m otter trawl 'E.W. Scripps' A. Fleminger
- E 1677 M-15 OT-2 off Encinitas, Calif. 33°02'N 117°19'W 25' ott. tr. Mar. 29, 1974 51m R/V Agassiz T. Matsui
- E 1771 SI062-519 off Bahia San Quintin, Baja Calif., Norte, Mex. 30°16.5'N 115°57'W 74-77m 16' ott. tr. Apr. 1, 1962 H.C. Perkins U.S.F.W.S.



- E 1820 H51-18 N. side of Pta. Banda, Baja Calif., Norte, Mex. ca. 31°45'N 116°40'W Feb. 2, 1951 70-59m 'Orca' C. Hubbs
- E 1825 W. of Pt. La Jolla, San Diego, Calif. 101-183m 16' ott. tr. #1 Jan. 28, 1965 ST-908 Fager
- E 1883 H51-27 Bahia Todos Santos Baja, Calif., Norte, Mexico ca. 31°45'N 116°40'W dredge 37m Feb. 5, 1951 'Orca' C. Hubbs
- E 1970 H48-215-222 S. Coronado Is., Baja Calif., Norte, Mex. 32°23'N 117°10'W 15-55m pipe steam dredge Aug. 11, 1948 'E.W. Scripps' C. Hubbs
- E 1972 Cruise 52 Sta. 35 off N. Calif. 39°42.6'N 123°52'W otter trawl 95m July 15, 1970 Hartman U.S.F.W.S.
- E 1975 M15 OT-18 off Vandenberg Missile Base, Calif. 34°46.2'N 120°43.2'W 25' ott. tr. 70m Apr. 2, 1974 R/V Agassiz T. Matsui
- E 1976 M-15 OT-4 off San Onofre, Calif. 33°13.5'N 117°30'W 25' ott. tr. 91m Mar. 29, 1974 R/V Agassiz T. Matsui
- E 1977 M-15 OT-15 off Morro Bay, Calif. Apr. 2, 1974 35°10'N 121°02'W 25' ott. tr. 99m R/V Agassiz T. Matsui
- E 1979 CalCofi 74126/II Piedras Blancas, Calif. 35°48'N 121°25'W 16' ott. tr. #4 73m Dec. 10, 1974 R/V Agassiz T. Matsui
- E 1981 MV68-I-65 Angel de La Guarda, Golfo de Calif., Mex. 29°20'N 113°11.5'W 25' ott. tr. 265-284m Jan. 20, 1968 R/V T. Washington C. Hubbs
- E 1982 B6203-13 off Bahia San Quintin, Baja Calif., Norte, Mex. 30°17.5'N 115°56'W 186 ft. April 1, 1962 trawl TR-56 H.C. Perkins (SI062-518)
- E 1983 M-15 OT-5 off San Onofre, Calif. Mar. 29, 1974 33°16.5'N 117°30.5'W 25' ott. tr. 27m R/V Agassiz T. Matsui
- E 1984 M-15 OT-6 off San Onofre, Calif. Mar. 29, 1974 33°16'N 117°31'W 25' ott. tr. 54m R/V Agassiz T. Matsui
- E 1986 M-15 OT-7 off San Clemente, Calif. Mar. 29, 1974 33°23.7'N 117°40'W 25' ott. tr. 64m R/V Agassiz T. Matsui
- E 1987 M-15 OT-9 Long Beach, Calif. 33°53.3'N 118°08'W Mar. 29, 1974 49m 40' ott. tr. R/V Agassiz T. Matsui
- E 1990 M-15, OT-10 Santa Monica, Calif. 33°52.5'N 118°34'W 25' ott. tr. 73m Mar. 29, 1974 R/V Agassiz T. Matsui
- E 1991 M-15-OT-16 Pismo Beach, Calif. 35°06'N 120°47'W 25' ott. tr. 70m Apr. 2, 1974 R/V Agassiz T. Matsui
- E 1992 M-15 OT-17 Pt. Sal, Calif. 34°53'N 120°49'W 25' ott. tr. 132m Apr. 2, 1974 R/V Agassiz T. Matsui
- E 1994 M-15 OT-20 off Summerland, Calif. 34°17.8'N 120°49'W 40' ott. tr. 75m Apr. 2, 1974 R/V Agassiz T. Matsui
- E 1997 CalCofi 74126/II off Piedras Blancas, Calif. 35°37'N 121°44.6'W 25' ott. tr. #5 915m Dec. 10, 1974 R/V Agassiz T. Matsui
- E 2003 Cruise 52 Sta. 29 N. of Eureka, Calif. 40°47'N 124°22'W July 11, 1970 68m ott. tr. Hartman U.S.F.W.S. B.C.F.
- E 2004 Colnett-Nov. 64 Banco San Isidro, Baja Calif., Norte, Mex. 31°07'N 116°35'W 212m midwater trawl #19 Nov. 24, 1961 R/V Horizon Dan Brown
- E 2167 CalCofi 74126/II off San Francisco, Calif. 37°15'N 122°31.5'W 16' ott. tr. #1 79m Dec. 9, 1974 R/V Agassiz T. Matsui
- E 2168 CalCofi 74126/II off San Francisco, Calif. 37°08'N 122°23'W 16' ott. tr. #2 37m Dec. 9, 1974 R/V Agassiz T. Matsui
- Ophiura sarsi Lutken  
E 2008 Cruise 52 Sta. 21 off S. Oregon 42°08.5'N 124°32.8'W ott. tr. 146m July 9, 1970 coll Hartman U.S.F.W.S. B.C.F.
- Ophiura sp.  
E 1598 MV65-I-38 Basin off Bahia Magdalena, Baja Calif., Sur, Mex. 24°35'N 113°25'W June 24, 1965 3563-3621m 6' Sigsbee tr. R/V Horizon C. Hubbs
- Amphiophiura ponderosa (Lyman)  
E 1792 CalCofi 74126/II off Piedras Blancas, Calif. 35°37'N 121°44.5'W 25' ott. tr. #5 915m Dec. 10, 1974 R/V Agassiz T. Matsui
- E 1816 M-15 OT-11 off Pta. Piedras Blancas, Calif. 35°28'N 121°50'W 25' ott. tr. Mar. 31, 1974 1189-1170m R/V Agassiz T. Matsui
- E 1849 69/06/1 S.E. of San Nicholas Is., Calif. 1189-732m dredge #15 R/V Agassiz Edwin Allison
- E 2244 TO-58-2, D-4 off Salina Cruz, Oaxaca, Mex. 14°50'N 96°15'W Nov. 18, 1958 R. Parker (SI058-419)
- Amphiophiura superba (Lutken & Mortensen)  
E 1445 SnaFu SI080-8 San Diego Trough 32°36.5'N 117°32'W 40' ott. tr. #1 1171m Feb. 29, 1980 R/V New Horizon R. Rosenblatt
- E 1662 Oconostota Sta. 4 San Diego Trough 32°38'N 117°30'W 4' pipe stem dredge 1097-1180m Nov. 7, 1969 R/V Oconostota F. Rokop, S. Luke
- E 1669 MV71-I-62 San Diego Trough June 2, 1971 32°28'N 117°30'W 25' ott. tr. R/V Agassiz 1235m C. Hubbs, S. Luke
- E 1676 M-15 OT-2 off Encinitas, Calif. 33°02'N 117°19'W 25' ott. tr. Mar. 29, 1974 51m R/V Agassiz T. Matsui
- E 1781 R-3 San Diego Trough, Calif. Oct. 26, 1970 32°24'N 117°29'W 25' ott. tr. 1243-1258m R/V Agassiz F. Rokop, S. Luke
- E 1804 M-7, Sta. 1 San Diego Trough 32°29'N 117°30'W 40' ott. tr. Sept. 14, 1971 1225-1244m R/V Agassiz T. Matsui
- E 1815 M-15 OT-11 off Pta. Piedras Blancas, Calif. 35°28'N 121°50'W 25' ott. tr. Mar. 31, 1974 1189-1170m R/V Agassiz T. Matsui
- E 2060 VS-BII-28 off Rio Elata, Sinaloa, Mex. 23°38'N 107°46'W May 11, 1959 1366-1385m ott. tr. R. Parker Vermillion Sea Exped. (SI059-265)
- Gymnophiura mollis Lutken & Mortensen  
E 2007 Vermillion Sea Exped. VS-B-II-35 Islas Tres Marias, Mex. 22°20'N 107°48'W 2999-2996m 40' ott. tr. May 15, 1959 R. Parker, Rowland (P-96059) (SI059-269)
- Ophiocten hastatum Lyman  
E 617 A-19 Afterthot II West Cortez Basin 32°27.7'N 119°33.8'W-32°27.9'N 119°34.1'W 1145m 25' otter trawl May 7, 1975 R/V Agassiz coll. J. Siebenaller
- E 1670 MV71-I-62 San Diego Trough June 2, 1971 32°28'N 117°30'W 25' ott. tr. R/V Agassiz 1235m C. Hubbs, S. Luke
- E 1683 A-20 Afterthot II San Nicholas Basin, Calif. 32°02.5'N 119°02.7'W 25' ott. tr. May 7, 1975 1746m R/V Agassiz J. Siebenaller

- E 1694 MV66-I-6 off N.W. Baja Calif., Norte, Mex. 31°05'N 118°W 40' ott. tr. Mar. 31, 1966 1463-1728m R/V Agassiz C. Hubbs
- E 1748 M-8, Sta. 5 off San Diego, Calif. 32°33'N 118°06'W 40' ott. tr. Nov. 3, 1971 1829m R/V Agassiz T. Matsui
- E 1650 Oconostota trawl #8 San Clemente Basin, Calif. 32°27.8'N 117°52'W 16' ott. tr. Sept. 5, 1974 1527-1545m R/V Oconostota J.F. Siebenaller
- E 1751 Oconostota trawl #9 San Clemente Basin 32°25.8'N 117°51'W 16' ott. tr. Sept. 5, 1974 1596-1600m R/V Oconostota J.F. Siebenaller
- E 1754 MV65-III-14 Basin N.W. of 60 Mile Bank 32°17'N 118°33'W 10' IKMT Dec. 24, 1965 1615-1664m R/V Agassiz C. Hubbs, W. Newman
- E 1774 MV 66-II-4 off Eureka, Calif. May 22, 1966 40°30.5'N 125°45.2'W 16' ott. tr. 2999-3017m R. Wisner (SI066-52)
- E 1798 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 1157-1454m 10' IKMT R/V Agassiz C. Hubbs, S. Luke
- E 1818 M-15 OT-11 off Pta. Piedras Blancas, Calif. 35°28'N 121°50'W 25' ott. tr. Mar. 31, 1974 1189-1170m R/V Agassiz T. Matsui
- E 1854 H52-15 San Diego Trough 32°30'N 117°37'W Feb. 28, 1952 1207m L. Kidd
- E 1859 MV65-III-12 Basin N.W. of Sixty Mile Bank 32°15.6'N 118°26.4'W Sept. 23, 1965 1573-1836m 10' IKMT R/V Agassiz C. Hubbs
- E 1973 A-15 Afterthot II E. Cortez Basin, Calif. 32°32.5'N 118°53.5'W 25' ott. tr. May 6, 1975 1298m R/V Agassiz J. Siebenaller
- E 2039 AG 69/06/1 Sta. 2 Dredge 2, R/V Agassiz 32°21'N 119°36.5'W June 20, 1969 914-1061m chain dredge Allison, Winterer
- E 2063 MV69-VI-9 W of Patton Escarpment 31°10'N 119°37'W Dec. 18, 1969 25' ott. tr. 3600-3676m R/V Melville C. Hubbs, S. Luke (SI070-22)
- E 2065 Afterthot A-17 W. Cortez Basin 32°25'N 119°30'W 25' ott. tr. May 7, 1975 1362m R/V Agassiz J.F. Siebenaller
- E 2118 R-3 San Diego Trough 25' ott. tr. 32°24'N 117°29'W Oct. 26, 1970 1243-1258m R/V Agassiz F. Rokop, S. Luke
- E 2123 R-41 Tanner Basin 25' ott. tr. 32°48'N 119°30'W July 13, 1971 1390m R/V Agassiz F. Rokop
- E 2127 R-27 Tanner Basin 25' ott. tr. 32°48'N 119°31.5'W Jan. 21, 1971 1390-1372m R/V Agassiz F. Rokop
- E 2132 R-24 Tanner Basin 25' ott. tr. 32°45'N 119°31'W Jan. 20, 1971 1317-1362m R/V Agassiz F. Rokop
- E 2136 R-9 Tanner Basin 25' ott. tr. 32°51'W 119°33'W Oct. 28, 1970 1397m R/V Agassiz F. Rokop, S. Luke
- E 2157 R-35 Tanner Basin Apr. 20, 1971 32°49'N 119°32'W 25' ott. tr. 1391-1372m R/V Agassiz F. Rokop
- E 2164 MV66-III-7 W. of Bahia Descanso, Baja Calif., Norte, Mex. 32°04'N 117°13'W 1332-1244m 40' ott. tr. Dec. 8, 1966 C. Hubbs (SI066-537)
- E 2181 Oconostota trawl #7 Tanner Basin 32°44'N 119°31'W Sept. 5, 1974 ca. 1200-1300m 16' ott. tr. J.F. Siebenaller
- E 2195 NoPac #5 San Nicholas Basin 33°20'N 119°15'W July 6, 1980 1738m 25' ott. tr. R. Wilson R/V Melville
- E 2206 SOB-III-12 N.E. of Isla Guadalupe, Baja Calif., Mex. 29°40.2'N 117°06.6'W 2708-2763m 30' ott. tr. Feb. 15, 1960 R. Parker (P-139-60)
- E 2716 Oconostota Trawl #2 San Diego Trough 32°34'N 117°31'W Sept. 3, 1974 1188-1194m 16' ott. tr. J.F. Siebenaller
- Ophiurolepis sp.
- E 2788 Sta. 67A Cape Armitage, McMurdo Sound, Antarctica 100 ft. in sponge bed Oct. 17, 1967 Dayton & Robilliard
- E 2789 Cape Evans, McMurdo Sound, Antarctica Nov. 13, 1967 35 ft. & below, on algae
- Ophirolepis crassa Nielsen
- E 1823 TEPE70-7 Isla Jicaron, Panama 07°15.7'N 81°45.3'W rock dredge 64m Sept. 16, 1970 R/V A. Helix W. Newman, S. Luke
- E 1827 TEPE70-3 Panama, Pacific side 07°19.2'N 81°45.5'W Sept. 15, 1970 Rock dredge 22-31m R/V A. Helix W. Newman, S. Luke
- E 1867 VSS-103 Vermillion Sea Exped. E. of Angel de La Guarda 29°24.3'N 113°19.0'W 229-110m shell dredge Apr. 10, 1959 R. Parker (P70-59)
- E 1900 RR65-39 N.W. of Isla Monserrate, Baja Calif., Sur, Mexico 25°43'N 111°05.5'W 170-192m 40' ott. tr. July 11, 1965 R/V Horizon R. Rosenblatt (SI065-293)
- Ophirolepis variegata Lutken
- E 1877 P-195-60 S. of Tiburon Is., Gulf of Calif., Mex. 28°50.5'N 112°11.0'W Mar. 27, 1960 22m shell dredge
- E 1884 MV73-I-14 Bahia Chamela, Jalisco, Mex. 19°34'N 105°07.5'W 40' ott. tr. 27-18m Apr. 2, 1973 R/V Agassiz C. Hubbs, S. Luke
- E 2054 SI063-52 Golfo de Tehuantepec, Oaxaca, Mex. 15°44'N 96°06.5'W 9-27m 12' Try net G-5 Dockins July 15, 1963
- E 2223 P-157-60 off San Blas, Nayarit, Mex. 21°46.4'N 105°45.2'W Mar. 9, 1960 13-22m 10' ott. tr.
- Ophiomusium glabrum Lutken & Mortensen
- E 242 MV65-I-39 off Bahia Magdalena, Baja Calif. 24°37.5'N 113°29.0'W-24°21.3'N 113°12.5'W 3427-3621m 45' otter trawl June 25, 1965 R/V Horizon coll. C. Hubbs
- E 1560 MET Sta. 133 W. of Patton Escarpment 32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981 3689-3652m R/V N. Horizon K. Smith, S. Luke
- E 1599 MV65-I-38 Basin off Bahia Magdalena, Baja Calif., Sur, Mex. 24°35'N 113°25'W June 24, 1965 3563-3621m 6' Sigsbee tr. R/V Horizon C. Hubbs
- E 1604 Baja Slope Exped. BS-12 Basin off Bahia Magdalena, Baja Calif., Sur, 23°59.5'N 113°11.9'W 3481-3518m 10' beam tr. May 3, 1961 R. Parker (P-285-61)
- E 1624 MV70-III-6 W. of Patton Escarpment 31°20'N 120°09'W Mar. 23, 1970 25' ott. tr. 3706-3806m R/V Melville S. Luke
- E 1639 M-7, Sta. 3 San Clemente Basin, Calif. 32°28'N 118°07'W 40' ott. tr. Sept. 16, 1971 1792-1866m R/V Agassiz T. Matsui
- E 1644 MV71-I-44 off Rio San Vicente, Baja Calif., Norte, Mex. 31°18'N 117°23'W 6' Sigsbee tr. 1984-1957m May 30, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 1665 MV65-I-4 N.W. of N. tip of Isla Cedros, Baja Calif., Norte, Mex. 28°50'N 115°43'W 1536-1511m 6' Sigsbee tr. June 10, 1965 R/V N. Horizon C. Hubbs

- E 1686 MV66-III-21 W.S.W. of Cortez Bank 32°04'N 120°30'W 40' ott. tr. Dec. 11, 1966 3777-3792m C. Hubbs (SI066-547)
- E 1690 MV71-I-43 Outer 1,000 fm. Basin 31°25'N 117°45'W 6' Sigsbee tr. May 30, 1971 2001-2025m R/V Agassiz C. Hubbs, S. Luke
- E 1692 MV66-I-6 off N.W. Baja Calif., Norte, Mex. 31°05'N 118°W 40' ott. tr. Mar. 31, 1966 1463-1728m R/V Agassiz C. Hubbs
- E 1697 MV70-III-3 W. of Patton Escarpment 31°27'N 120°11'W 25' ott. tr. Mar. 21, 1970 3880m R/V Melville S. Luke
- E 1701 MV65-I-50 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°42'N 110°15'W 6' Sigsbee tr. 1893-1957m June 28, 1965 R/V Horizon
- E 1705 MV70-III-8 W. of Patton Escarpment 31°35'N 120°18.3'W 25' ott. tr. Mar. 23, 1970 3916-3950m R/V Melville S. Luke
- E 1726 M-8, Sta. 5 off San Diego, Calif. 32°33'N 118°06'W 40' ott. tr. Nov. 3, 1971 1829m R/V Agassiz T. Matsui
- E 1734 MV69-VI-9 W. of Patton Escarpment 31°12'N 120°36.5'W 25' ott. tr. Dec. 18, 1969 3600-3676m R/V Melville C. Hubbs, S. Luke
- E 1764 MV65-I-41 Basin off Bahia Magdalena, Baja Calif., Sur, Mex. 24°28'N 113°19'W 3497-3610m 10' IKMT June 25, 1965 R/V Horizon C. Hubbs
- E 1786 MV70-III-1 W. of Patton Escarpment 31°25'N 120°14'W IKMT Mar. 21, 1970 3950-3880m R/V Melville S. Luke
- E 1793 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 1157-1454m 10' IKMT R/V Agassiz C. Hubbs, S. Luke
- E 1947 MV68-I-85 Farallon Basin, Golfo de Calif., Mexico 25°17'N 110°19.5'W ott. tr. 1810-1908m Jan. 23, 1968 R/V T. Washington C. Hubbs
- E 1958 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 2106 MV72-II-32 off Pta. San Juan, Peru 15°47'S 76°07'W 25' ott. tr. 3475m May 10, 1972 R/V T. Washington S. Luke
- E 2112 MV65-IV-76 Cruise 12 Sta. 14 off Chile 32°51'S 72°08'W Dec. 19, 1965 2580m 5' Agassiz beam trawl R/V Anton Bruun R.L. Wisner (SI065-666)
- E 2188 TO-58-2, D-5 off Salina Cruz, Oaxaca, Mexico Nov. 19, 1958 3539-3610m R. Parker, R. Wisner
- E 2640 E. Pacific, box core ca. 4572m from manganese nodule ship Kennecott Exploration Inc., Del Mar, Calif. E. Habecker
- Ophiomusium jolliensis McClendon
- E 221 Near mouth of Pt. Dume Canyon 33°58.1'N 118°48.0'W June 6, 1938 421-274m dredge hauls for submarine canyon study by F.P. Shephard on 'E.W. Scripps'
- E 645 A-27 Afterthot II off Encinitas, Calif. 32°59.6'N 117°34.1'W-33°00.3'W 117°34.5'W 750m 25' otter trawl May 9, 1975 R/V Agassiz coll. J. Siebenaller
- E 769 SI076-94 W. of Palos Verdes, Calif. 33°28'N 118°25'W March 9, 1976 457-417 m 25' otter trawl R/V Agassiz coll. S. Luke
- E 870 Mag Bay A-20 N.W. of Bahia Magdalena, Baja Calif. Sur 24°54'n 113°08'W 1229-1147m 6' Sigsbee trawl Jan. 31, 1964 R/V Horizon C. Hubbs (SI064-14)
- E 1508 MET Sta. 104 Catalina Basin, Calif. 33°24'N 118°35.5'W 25' ott. tr. 550-640m Jan. 29, 1981 R/V N. Horizon K. Smith, S. Luke
- E 1666 M15 OT-13 off Pta. Piedras Blancas, Calif. 35°35'N 121°28'W 25' ott. tr. Apr. 1, 1974 567-603m R/V Agassiz T. Matsui
- E 1712 M-1, Sta. 2 San Diego Trough 32°57'N 117°32'W 25' ott. tr. Feb. 3, 1971 768m R/V Agassiz T. Matsui
- E 1741 SI076-95 N. of Catalina Is., Calif. 33°33.5'N 118°38'W 40' ott. tr. 585-534m R/V Agassiz S. Luke Mar. 9, 1976
- E 1756 Baja 69-12 N. of Bahia Asuncion, Baja Calif., Sur, Mex. 27°06'N 114°28.2'W 348m pipe dredge Feb. 23, 1969 R/V Oconostota
- E 1763 SUC cruise dredge 1 off San Diego, Calif. 32°05'N 118°20'W Rock Dredge 550-400m Mar. 19, 1964 Winterer
- E 1802 SI076-96 N. end of Catalina Is., Calif. 33°33.5'N 118°38'W 40' ott. tr. Mar. 9, 1976 556-585m R/V Agassiz S. Luke
- Ophiomusium lymani W. Thompson
- E 417 MV65-I-4 NW of N. tip of Cedros Is., Baja 28°55.3'N 115°47.9'W-28°46.3'N 115°41.2'W 1536-1511m 6' Sigsbee trawl June 10, 1965 R/V Horizon coll. C. Hubbs
- E 564 Baja Calif., Norte H52-9 32°37'N 117°37'W-32°17'N 117°37'W 1244m Deep water dredge Feb. 26, 1952 coll. J. Isaacs R/V Horizon
- E 613 A-15 Afterthot II East Cortez Basin 32°32.0'N 118°53.1'W-32°32.7'N 118°53.6'W 1298m 25' otter trawl May 6, 1975 R/V Agassiz coll. F.J. Siebenaller
- E 633 A-11 Afterthot II San Clemente Basin, Calif. 32°52.1'N 118°06.5'W-32°28.8'N 118°06.0'W 1829m 25' otter trawl May 5, 1975 R/V Agassiz coll. J. Siebenaller
- E 639 A-24 Afterthot II San Diego Trough 32°52.1'N 117°42.1'W-32°52.3'N 117°41.9'W 1057m 25' otter trawl May 8, 1975 R/V Agassiz coll. J. Siebenaller
- E 820 MV72-II-26 off Arica, Chile May 7, 1972 18°42'S 70°37'W 25' otter trawl 1097-1152m R/V T. Washington S. Luke
- E 1057 Quebrada 22-D E. of Clipperton Is. 09°55.1'N 104°29.5'W Dec. 11, 1969 1716-1684m rock dredge R/V T. Washington J. Coatsworth
- E 1447 SnaFu SI080-8 San Diego Trough 32°36.5'N 117°32'W 40' otter tr. #1 1171m Feb. 29, 1980 R/V New Horizon R. Rosenblatt
- E 1463 SnaFu SI080-10 off San Diego, Calif., 32°40.2'N 117°21.6'W 25' ott. tr. #3 201m Feb. 29, 1980 R/V New Horizon R. Rosenblatt
- E 1513 MET Sta. 105 Catalina Basin, Calif., 33°08'N 118°35.5'W 25' ott. tr. 1280-1271m Jan. 30, 1981 R/V N. Horizon K. Smith, S. Luke
- E 1527 MET Sta. 117 Catalina Basin, Calif. 33°13'N 118°32'W 40' ott. tr. Feb. 3, 1981 1262-1235m R/V N. Horizon K. Smith, S. Luke
- E 1592 MV71-I-62 San Diego Trough 25' ott. tr. 32°28'N 117°30'W June 2, 1971 1235m R/V Agassiz C. Hubbs, S. Luke
- E 1600 MV65-I-51 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°45'N 110°23'W 30' ott. tr. 1917-2014m June 28, 1965 R/V Horizon C. Hubbs
- E 1615 S.O.B.-III-5 W. of Pta. Banda, Baja Calif., Norte, Mex. 31°18'N 117°36'W Feb. 13, 1960 2068-2086m 30' ott. tr. R. Parker (P-137-60)
- E 1618 Baja Slope Exped. BS-1 S.W. of Cabo Colnett, Baja Calif., Norte, Mex. 30°45'N 116°51'W 1986-1975m 30' ott. tr. Apr. 28, 1961 R. Parker (P-274-61)

- E 1636 MET Sta. 109 Catalina Basin, Calif. 33°11'N 118°30'W 40' ott. tr. Jan. 31, 1981 1198-1234m R/V N. Horizon K. Smith, S. Luke
- E 1643 MV71-I-44 off Rio San Vicente, Baja Calif., Norte, Mex. 31°18'N 117°23'W 6' Sigsbee tr. 1984-1957m May 30, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 1647 MV65-I-50 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°41.6'N 110°15'W 1893-1957m 6' Sigsbee tr. June 28, 1965 R/V Horizon C. Hubbs
- E 1648 Oconostota trawl #8 San Clemente Basin, Calif. 32°27.8'N 117°52'W 16' ott. tr. Sept. 5, 1974 1527-1545m R/V Oconostota J.F. Siebenaller
- E 1661 Oconostota Sta. 4 San Diego Trough 32°38'N 117°30'W 4' pipe stem dredge 1097-1180m Nov. 7, 1969 R/V Oconostota F. Rokop, S. Luke
- E 1673 M-15 OT-2 off Encinitas, Calif., 33°02'N 117°19'W 25' ott. tr. Mar. 29, 1974 51m R/V Agassiz T. Matsui
- E 1678 M-15 OT-1 San Diego Trough Mar. 27, 1974 32°27'N 117°30'W 25' ott. tr. R/V Agassiz 1225m T. Matsui
- E 1689 MV71-I-43 Outer 1,000 fm. Basin 31°25'N 117°45'W 6' Sigsbee tr. May 30, 1971 2001-2025m R/V Agassiz C. Hubbs, S. Luke
- E 1691 MV66-I-6 off N.W. Baja Calif., Norte, Mex. 31°05'N 118°W 40' ott. tr. Mar. 31, 1966 1463-1728m R/V Agassiz C. Hubbs
- E 1714 HR-3 Santa Cruz Basin, Calif. 33°40.5'N 119°29.3'W 16' ott. tr. May 11, 1960 1880-1936m R. Parker (P-145-60)
- E 1727 M-8, Sta. 5 off San Diego, Calif. 32°33'N 118°06'W 40' ott. tr. Nov. 3, 1971 1829m R/V Agassiz T. Matsui
- E 1732 Ichts & Herpe Sta. 3 San Diego Trough 32°35.5'N 117°28.5'W Isaak's fish trap 1189m June 21, 1959 R. Parker, Dietz
- E 1749 Oconostota trawl #9 San Clemente Basin 32°25.8'N 117°51'W 16' ott. tr. Sept. 5, 1974 1596-1600m R/V Oconostota J.F. Siebenaller
- E 1752 MV65-III-14 Basin N.W. of 60 Mile Bank 32°17'N 118°33'W 10' IKMT Dec. 24, 1965 1615-1664m R/V Agassiz C. Hubbs, W. Newman
- E 1759 trawl 10 off La Jolla, Calif. 32°52'N 117°36'W 16' ott. tr. Sept. 6, 1974 896m R/V Oconostota J. Siebenaller
- E 1765 MV73-I-46 S. of Champerico, Guatemala 13°54'N 92°02.5'W 40' ott. tr. Apr. 13, 1973 91-104m R/V Agassiz C. Hubbs, S. Luke
- E 1788 Sta. 16 Catalina Basin, Calif. Dec. 10, 1972 32°20'N 118°17'W IKMT 1097m R/V Agassiz R. Hessler
- E 1805 M-7, Sta. 1 San Diego Trough 32°29'N 117°30'W 40' ott. tr. Sept. 14, 1971 1225-1244m R/V Agassiz T. Matsui
- E 1811 H52-14 San Diego Trough, Calif. 32°33'N 117°37'W deep water dredge 1234m Feb. 28, 1952 R/V Horizon J. Isaacs
- E 1831 A-17 Afterthot II W. Cortez Basin 32°25'N 119°30'W 25' ott. tr. May 7, 1975 1362m R/V Agassiz J.F. Siebenaller
- E 1852 H52-15 San Diego Trough 32°30'N 117°37'W Feb. 28, 1952 1207m L. Kidd
- E 1855 H51-148 San Diego Trough 32°44'N 117°40'W April 20, 1951 1006m 10' midwater trawl Al Allanson
- E 1862 VS-54 Vermillion Sea Exped. N. of Islas Tres Marias, Mex. 22°06'N 106°29'W 730m May 18, 1959 S.F. Baird (SI075-568) (Calcofi 1606.35)
- E 1865 SI063-11 San Diego Trough Nov. 1, 1963 32°24.5'N 117°27.7'W free vehicle 1244m R/V Agassiz
- E 1903 M-15 OT-14 off San Simeon, Calif. 35°34'N 121°18'W 25' ott. tr. Apr. 1, 1974 256m R/V Agassiz T. Matsui
- E 1945 TP-66 Trans. Pac. Sta. 4 Kyushu, Japan 33°N 134°55'E dredge 1298m Oct. 23, 1953 T.J. Walker (SI053-366)
- E 2113 MV72-II-27 off Arica, Chile 18°35'S 70°32'W May 7, 1972 768-968m 25' ott. tr. R/V T. Washington S. Luke
- E 2116 R-3 San Diego Trough Oct. 26, 1970 32°23'N 117°29'W 25' ott. tr. 1243-1258m R/V Agassiz F. Rokop, S. Luke
- E 2163 MV66-III-7 W. of Bahia Descanso, Baja Calif., Norte, Mex. 32°04'N 117°13'W 1332-1244m 40' ott. tr. Dec. 8, 1966 C. Hubbs (SI066-537)
- E 2714 Oconostota trawl #2 San Diego Trough 32°34'N 117°31'W Sept. 3, 1974 1188-1194m 16' ott. tr. J.F. Siebenaller
- Ophioplocus esmarki Lyman
- E 227 in front of caves, La Jolla Cove, La Jolla, Calif. coll. Nov. 19, 1915
- E 587 Point Loma Light, Point Loma, San Diego, Calif. May 26, 1966 coll. Taylor-Hoese
- E 803 SI059-354 off Bird Rock, La Jolla, Calif. Sept. 25, 1959 40-45 ft. 600' wall net, pro-noxfixh, diving C. Hubbs
- E 1156 off Pt. La Jolla, La Jolla, Calif. Nov. 17, 1958 SCUBA 50 ft. rocks R. Kiwala
- E 1845 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner
- E 1880 MV71-I-28 Isla San Benitos del Oeste, Baja Calif., Norte, Mex. 28°18'N 115°33'W intertidal May 26, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2186 Tip of Pt. Loma, San Diego, Calif. Oct. 31, 1955 P. Johnson
- Ophiozona sp.
- E 1799 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 1157-1454m 10' IKMT R/V Agassiz C. Hubbs, S. Luke
- Gen. Indet.
- E 270 Baja Calif. abyssal Plain MV69-VI-9 31° 19.7'N 119°34.2'W 31°08.2'N 119°35.5'W 3600-3676m 25' otter trawl Dec. 18, 1969 R/V Melville coll. C. Hubbs, S. Luke (SI070-22)
- E 675 MU72-II-32 Peru-Chile Trench, off Pta. San Juan, Peru 25' otter trawl May 10, 1972 15°45'S 76°07'W R/V T. Washington 3475m coll. S. Luke
- E 829 MV72-II-27 off Arica, Chile May 7, 1972 18°35'S 70°37'W 25' otter trawl 768-968m R/V T. Washington S. Luke
- E 821 MV72-II-26 off Arica, Chile May 7, 1972 18°42'S 70°32'W 25' otter trawl 1097-1152m R/V T. Washington S. Luke
- E 838 STYX-7 680826 Sta. #2 Horizon Guyot 19°29'N 168°45'W Aug. 26, 1968 1662-1820m 25' otter trawl R/V Agassiz W. Newman
- E 839 SYTX-7 MPE 680828 Sta. 1 Horizon Guyot 19°24'N 168°50'W 41' otter trawl 2195-1551m Aug. 27-28, 1968 R/V Agassiz W. Newman
- E 840 STYX-7 MPE 68091 Sta. 3 Hess Guyot 17°53'N 174°23'W Sept. 1, 1968 1763-1719m Sigsbee trawl R/V Agassiz W. Newman

- E 842 STYX-7 MPE 68093 Sta. 1 Hamilton Guyot 18°27'N 179°31'W 25' otter trawl 1435-1672m Sept. 3, 1968 R/V Agassiz W. Newman
- E 848 STYX-7 MPE 68097 Sta. 4 Agassiz Guyot 18°N 178°15'E Sept. 7, 1968 1582-1617m 5' Sigsbee trawl R/V Agassiz W. Newman
- E 864 SS72-115DB N. Pacific R/V Sea Scope 38°56.39'N 178°37.26'W June 28, 1972 5396m dredge box Global Marine
- E 879 SS-72, 41-DB Central E. Pacific 12°31.8'N 122°27.5'W dredge box 4481m Apr. 14, 1972 R/V Sea Scope
- E 883 SS-72, 98-DB N. Mid-Pacific 31°16.5'N 174°01.8'W dredge box 5359m June 16, 1972 R/V Sea Scope
- E 887 SS-72, 103-DB N. Mid-Pacific 31°39.5'N 175°35.7'W dredge box 5121m June 18, 1972 R/V Sea Scope
- E 903 SS-72, 140-DB S. of Kauai, Hawaii 21°49.54'N 159°23.85'W dredge box 732m July 10, 1972 R/V Sea Scope
- E 906 SS-72, 104-DB N. Mid-Pacific 31°58.4'N 177°19.55'W dredge box 5194m June 19, 1972 R/V Sea Scope
- E 908 SS-72, 123-DB N. Mid-Pacific 35°50.22'W 171°41.44'W dredge box 5750m July 2, 1972 R/V Sea Scope
- E 915 Seven Tow 123-D E. of Palmyra Is. 05°52.3'N 160°50.9'W dredge 1640m June 11, 1970 R/V T. Washington
- E 916 R/V Prospector 14°54.5'N 124°28.3'W 4390m dredge Aug. 1975 R. Dick
- E 1432 MARA II dredge 58 Mariana Trench 16°00.8'N 145°24.22'E July 19, 1979 4177m R/V T. Washington B. Shor
- E 1601 MV65-I-51 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°45'N 110°23'W 30' ott. tr. 1917-2014m June 28, 1965 R/V Horizon C. Hubbs
- E 1616 S.O.B.-III-5 W. of Pta. Banda, Baja Calif., Norte, Mex. 31°18'N 117°36'W Feb. 13, 1960 2068-2086m 30' ott. tr. R. Parker (P-137-60)
- E 1619 Baja Slope Exped. BS-1 S.W. of Cabo Colnett, Baja Calif., Norte 30°45'N 116°51'W 1986-1975m 30' ott. tr. Apr. 28, 1961 R. Parker (P-274-61)
- E 1626 MV70-III-6 W. of Patton Escarpment 31°20'N 120°09'W Mar. 23, 1970 25' ott. tr. 3706-3806m R/V Melville S. Luke
- E 1709 MV70-III-8 W. of Patton Escarpment 31°35'N 120°18.3'W 25' ott. tr. Mar. 23, 1970 3916-3950m R/V Melville S. Luke
- E 1720 MV65-I-57 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°35'N 110°12'W 2889-2505m 6' Sigsbee tr. June 29, 1965 R/V Horizon C. Hubbs
- E 1721 MV65-I-57 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°35'N 110°12'W 2889-2505m 6' Sigsbee tr. June 29, 1965 R/V Horizon C. Hubbs
- E 1722 MV65-I-57 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°35'N 110°12'W 2889-2505m 6' Sigsbee tr. June 29, 1965 R/V Horizon C. Hubbs
- E 1723 MV65-I-57 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°35'N 110°12'W 2889-2505m 6' Sigsbee tr. June 29, 1965 R/V Horizon C. Hubbs
- E 1779 Monsoon Exped. P-239-60 N.E. of Timor, top of guyot 08°31'S 128°22.8'E 1618-1666m rock dredge Oct. 24, 1960 Rowland
- E 1794 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 1152-1454m 10' IKMT R/V Agassiz C. Hubbs, S. Luke
- E 1795 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 1157-1454m 10' IKMT R/V Agassiz C. Hubbs, S. Luke
- E 1796 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 1157-1454m 10' IKMT R/V Agassiz C. Hubbs, S. Luke
- E 1973 MV65-I-55 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°33'N 110°08'W 2714-2886m 45' ott. tr. June 29, 1965 R/V Horizon C. Hubbs (SI065-238)
- E 2103 MV72-II-26 off Arica, Chile 18°42'S 70°37'W May 7, 1972 1097-1152m 25' ott. tr. R/V T. Washington S. Luke
- E 2104 MV72-II-26 off Arica, Chile 18°42'S 70°37'W May 7, 1972 1097-1152m 25' ott. tr. R/V T. Washington S. Luke
- E 2108 MV72-II-32 off Pta. San Juan, Peru 15°47'S 76°07'W May 10, 1972 3475m 25' ott. tr. R/V T. Washington S. Luke
- E 2114 MV72-II-27 off Arica, Chile 18°35'S 70°32'W May 7, 1972 768-968m 25' ott. tr. R/V T. Washington S. Luke
- E 2146 Monsoon - off Soembawa Is. Oct. 27, 1960 08°02.0'N 118°08.5'E orange peel grab 57m Parker & Rowland (P-240-60)
- E 2159 NAGA 9A Sta. No 60-1065 coll. No. CN 613a Gulf of Siam 11°13'50"N 99°41'30"E 39m 16' beam trawl Dec. 11, 1960 T. Matsui
- E 2185 Monsoon Exped. - ridge on N. side of Java Trench 09°21.0'S 109°15.2'E 1474m Peterson grap Box A-10 (P-243-60) Nov. 10, 1960
- E 2791 Hutton Cliffs, McMurdo Sound, Antarctica 130 ft. coble bottom Dec. 5, 1974 P.K. Dayton

## Family Ophioleucidae

Ophiurus seminudus Lutken & Mortensen

- E 2109 MV72-II-32 off Pta. San Juan, Peru 15°47'S 76°07'W May 10, 1972 3475m 25' ott. tr. R/V T. Washington S. Luke

## Gen. Indet.

- E 2105 MV72-II-26 off Arica, Chile 18° 42'S 70°37'W May 7, 1972 1097-1152m 25' ott. tr. R/V T. Washington S. Luke

## Family Ophiocomidae

Ophiocoma aethiops Lutken

- E 1124 TEPE78-17 Isla Grande, Guerrero, Mex. 17°40.3'N 101°40.4'W rocky intertidal Apr. 10, 1978 R/V A. Helix W. Newman, S. Luke
- E 1834 Isla San Lorenzo, Gulf of Calif., Mexico
- E 1841 6108-B-9 Islas Tres Marias, Mexico 21°44'N 106°42.3'W Aug. 14, 1961 3 ft. Pro-noxifish F.H. Berry
- E 1847 RR61 Los Frailes Cove, Baja Calif., Sur, Mex. ca. 23°20'N 109°20'W 3-20 ft. SCUBA June 17, 1961 rocks D. Leighton
- E 1896 SI068-166 Bahia Algodones, N. of Bahia San Carlos, Sonora, Mexico Mar. 17, 1968 10 ft. in Porites californica J. McCoaker JEM68-3
- E 1901 Shore of Isla del Cano, Costa Rica March 21, 1920
- E 1927 TEPE70-5 Isla Jicaron, Panama 07°17'20"N 81°47'15"W Sept. 16, 1980 1-2 ft. SCUBA R/V A. Helix W. Newman, S. Luke
- E 1929 Lagoon inside Pta. Tosco, Isla Sta. Margarita, Baja Calif., Sur, Mexico 15 ft. Feb. 2, 1964 sponge fauna

- E 1956 TEPE70-17 N.E. bays of Isla Cavada, Islas Secas, Panama 07°59.3'N 82°01.5'W intertidal SCUBA Sept. 21-23, 1970 R/V A. Helix W. Newman, S. Luke
- E 2268 RR61-31 Bahia Muertos, Baja Calif., Sur, Mexico 23°59.5'N 109°48.8'W 30 ft. diving June 20, 1961 R. Rosenblatt (SI061-253)

Ophiocoma alexandri Lyman

- E 1138 TEPE78-23 Bahia Chamela, Jalisco, Mex. 19°35'N 105°08.5'W SCUBA 15-20 ft. Apr. 12, 1978 R/V A. Helix W. Newman, S. Luke
- E 1148 TEPE78-26 S.E. end of Isla Cerralvo, Baja Calif., Sur, Mex. 24°08'N 109°47.5'W SCUBA 20-25 ft. Apr. 14, 1978 R/V A. Helix W. Newman, S. Luke
- E 1833 Bahia Magdalena, Baja Calif., Sur, Mexico April 2, 1920
- E 1836 RR59-30 Bahia de Los Angeles, Baja Calif., Norte, Mex. 28°53.7'N 113°30.8'W 2-6 ft. Apr. 7, 1959 R. Rosenblatt
- E 1840 6108-B-9 Islas Tres Marias, Mexico 21°44'N 106°42.3'W Aug. 14, 1961 3 ft. Pro-noxfish F. H. Berry
- E 1842 SI067-37 Pearl Is., Isla San Jose, Panama ca. 08°20'N 79°20'W 0-4 ft. Mar. 28, 1967 rotenone & diving R. Rosenblatt
- E 1848 RR61 Los Frailes Cove, Baja Calif., Sur, Mex. ca. 23°20'N 109°20'W 3-20 ft. SCUBA June 17, 1961 rocks P. Leighton
- E 1897 SI068-166 Bahia Algodones, N. of Bahia San Carlos, Sonora, Mexico Mar. 17, 1968 10 ft. in Porites californica J. McCosker JEM68-3
- E 1912 TEPE78-15 Isla Sacrificios, Oaxaca, Mex. 15°40.8'N 96°14.6'W SCUBA 40 ft. Apr. 7 1978, R/V A. Helix W. Newman, S. Luke
- E 1915 SB 51 Tombola, S.W. tip of Isla San Jose, Gulf of Calif., Mex. ca. 24°45'N 110°35'W intertidal Apr. 14-15, 1960 'Orca' A. Fleschig, Clutter
- E 1926 Shore of Isla Cano, Costa Rica March 2, 1920
- E 1928 TEPE70-5 Isla Jicaron, Panama 07°17'20"N 81°47'15"W Sept. 16, 1970 1-2 ft. SCUBA R/V A. Helix W. Newman, S. Luke
- E 2057 Magdalena Bay, Baja Calif., Sur, Mexico Apr. 2, 1920

Ophiocoma sp.

- E 1913 Aquin Island, [Haiti ?] March to May, 1920 Capt. Crandall & E. Michael trip from Florida to San Diego

Ophiopteris papillosa (Lyman)

- E 1101 La Jolla, Calif. spring 1966
- E 1155 off Pt. La Jolla, La Jolla, Calif. Nov. 17, 1958 SCUBA 50 ft. rocks R. Kiwala
- E 1839 Kelp holdfast - La Jolla, Calif. Dec. 4, 1915 H.O. Falk, P.S. Barnhart
- E 1882 Pt. Loma, San Diego, Calif. 25-80 ft. SCUBA Nov. 7, 1957 Boyd, Clark, Fager, Limbaugh, Gherlardi
- E 1895 MV71-I-14 Lobster Camp, E. side of Guadalupe Is., Baja Calif., Norte, Mex. 29°00.1'N 118°13.6'W to 80 ft. SCUBA May 21, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 1933 Bahia Tortugas, Baja Calif., Sur, Mex. ca. 27°41'N 114°53'W Nov. 20, 1959 stipe holdfast #33

Gen. Indet.

- E 2145 Monsoon - in port Honolulu, Hawaii Sept. 7, 1960 skindiving afternoon 10 ft. R/V Argo Rowland (P-225-60)

- E 2177 Capricorn Exped. Sta. 35 Ocean Is., S.E. reef 00°52'S 169°35'E intertidal rocks Nov. 30, 1952 Martin Johnson
- E 2178 Capricorn Exped. Haul #34 Ocean Is., S.E. reef 00°52'S 169°35'E intertidal Nov. 30, 1952 R/V Horizon Martin Johnson

## Family Ophionereididae

Ophionereis annulata (LeConte)

- E 807 San Ignacio Lagoon, Baja Calif., Sur, Mexico ca. 226°45'N 113°12'W rocky intertidal Mar. 23, 1976 S. Luke
- E 1843 SI068-45 Campo Uno, 1 mi. N. of San Felipe, Baja Calif., Norte, Mexico ca. 31°03'N 114°48'W intertidal rocks rotenone, dipnets Jan. 20, 1968 D. Hoese
- E 1846 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner
- E 1850 Rocks S. of La Jolla Beach & Tennis Club, La Jolla, Calif. intertidal Feb. 2, 1970 R. Bauer
- E 1885 S. of Marine Room, La Jolla Beach & Tennis Club, La Jolla, Calif. intertidal May 20, 1969 T. Cukr
- E 1893 13 mi. S. of San Felipe, Baja Calif., Norte, Mexico intertidal March, 1968
- E 1916 Bahia Magdalena, Baja Calif., Sur, Mexico April 2, 1920
- E 1950 tip of Pt. Loma, San Diego, Calif. Nov. 14, 1955 Paul W. Johnson

Ophiochiton carinatus Lutken & Mortensen

- E 2061 VS-BII-28 off Rio Elata, Sinaloa, Mex. 23°38'N 107°46'W May 11, 1959 1366-1385m ott. tr. R. Parker Vermillion Sea Exped. (SI059-265)

Ophiochiton sp.

- E 822 MV72-II-26 off Arica, Chile May 7, 1972 18°42'S 70°37'W 25' otter trawl 1097-1152m R/V T. Washington S. Luke
- E 1617 S.O.B.-III-5 W. of Pta. Banda, Baja Calif., Norte, Mex. 31°18'N 117°36'W Feb. 13, 1960 2068-2086m 30' ott. tr. R. Bauer (P-137-60)
- E 1645 MV71-I-44 off Rio San Vincente, Baja Calif., Norte, Mex. 31°18'N 117°23'W 6' Sigsbee tr. 1984-1957m May 30, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 1693 MV66-I-6 off N.W. Baja Calif., Norte, Mex. 31°05'N 118°W 40' ott. tr. Mar. 31, 1966 1463-1728m R/V Agassiz C. Hubbs

Ophiodesmus amphilogus Ziesenhenné

- E 2014 Haul 3181 off San Diego, Calif. 32°28.5'N 117°15.3'W Feb. 10, 1912 55m "Agassiz"

Gen. Indet.

- E 964 RR70-3 rocky area 1/2 mi. S. of Cerro Colorado, Sonora, Mex. chemfish & diving 0-4 ft. Mar. 17, 1970 R. Rosenblatt (SI070-69)
- E 1899 Baja 69-23 Ranger Bank, Baja Calif., Norte, Mex. 28°33.4'N 115°29.6'W Feb. 25, 1969 146m pipe dredge R/V Oconostota
- E 1917 SI057-187 Melpomene Cove, Isla Guadalupe, Baja Calif., Mexico 28°52'N 118°16.9'W 49-57m 15' Try net Oct. 28, 1957 'Orca' C. Hubbs
- E 1934 Bahia Tortugas, Baja Calif., Sur, Mexico ca. 27°41'N 114°53'W Nov. 20, 1959 stipe holdfast #33

- 2102 MV71-I-2 Isla Guadalupe, Baja Calif., Mex.  
28°52.0'N 118°15'W 6' Sigsbee tr. 102-99m  
May 18, 1971 R/V Agassiz C. Hubbs, S. Luke
- 2077 H50-72 off old whaling station, Laguna San  
Ignacio, Baja Calif., Sur, Mex. 5 ft.  
Feb. 11, 1950 shrimp dredge (S1) C. Hubbs

## Family Ophiidermatidae

hioderma panamense Lutken

- 927 Puerto Penasco, Sonora, Mexico S. of rocky  
point, tidepools Oct. 19, 1968 T. Cukr
- 1469 Bahia Tortugas & Bahia Asuncion, Baja  
Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft.  
SCUBA Mia Tegner
- 1837 Bahia Tortugas, Baja Calif., Sur, Mexico  
27°41'N 114°53'W Nov. 1959
- 1851 Rocks S. of La Jolla Beach & Tennis Club,  
La Jolla, Calif. intertidal Feb. 2, 1970 R.  
Bauer
- 1890 P-22-60 off Tijuana River, San Diego,  
Calif. 32°33.4'N 117°13.2'W 31m deep diving  
dredge Mar. 8, 1960

hioderma cf. pentacanthum Clark

- 1905 Bahia Concepcion, Bahia Calif., Sur, Mexico  
ca. 26°45'N 111°55'W July 19, 1980 0-15 ft.  
snorkel S. Luke

hioderma terea (Lyman)

- 489 SIO67-37 Pearl Is., Isla San Jose, pocket  
beach 1/4 mi. N. of Pta. Cruz ca. 08°20'N  
79°20'W March 28, 1967 0-4 ft. Rotenone &  
diving coll. R. Rosenblatt
- 1835 Isla San Lorenzo, Gulf of Calif., Mexico
- 1892 13 mi. S. of San Felipe, Baja Calif.,  
Norte, Mexico intertidal March, 1968
- 2699 SIO48-232 Bahia Descanso, Baja Calif.,  
Norte, Mex. ca. 32°20'N 117°05'W 18-24m  
pipe dredge Aug. 13, 1948 'E.W. Scripps'  
C. Hubbs

hioderma variegata Lutken

- 1830 RR-61 Los Frailes Cove, Baja Calif., Sur,  
Mexico ca. 23°20'N 109°20'W June 17, 1961  
3-20 ft. SCUBA D. Leighton
- 1932 Baja Tortugas, Baja Calif., Sur, Mexico ca.  
27°41'N 114°53'W Nov. 20, 1959 stipe  
holdfast #33
- 2775 P-109-59 Bahia de Los Angeles, Baja Calif.,  
Norte, Mex. 28°55.0'N 113°31.0'W intertidal  
Apr. 7, 1959 R. Parker & Lemche

iopederma danianum (Verrill)

- 796 El Golfo II BT-157 Guerrero, Mex. 17°34'N  
101°31.2'W 20' otter trawl June 4, 1965  
coll. T. Matsui 27-49m
- 805 El Golfo II BT-161 OT #2 Golfo de  
Tehuantepec, Mexico 15°47'N 96°59'W 31m 20'  
otter trawl June 6, 1965 T. Matsui
- 1879 MV73-I-96 Golfo de Nicoya, Costa Rica  
09°27.5'N 84°31'W 25' ott. tr. 31m Apr. 22,  
1973 R/V Agassiz C. Hubbs, S. Luke
- 1891 MV73-I-95 Golfo de Nicoya, Costa Rica  
09°28'N 84°23.5'W 25' ott. tr. 26-24m  
Apr. 22, 1973 R/V Agassiz C. Hubbs, S. Luke
- 1904 MV73-I-38 Golfo de Tehuantepec, Mexico  
15°30.5'N 93°22.8'W 40' ott. tr. Apr. 10,  
1973 22m R/V Agassiz C. Hubbs, S. Luke
- 2055 SIO63-501 off Salina Cruz, Mexico 16°06'N  
95°08'W July 8, 1963 0-27m 12' Try net B-3

Ophioncus granulatus Ives

- E 2068 Due West of Scripps Inst. of Ocean., La  
Jolla, Calif. July 14, 1916 ca. 62m  
trawling

Schizoderma diplax Nielsen

- E 533 MV68-I-28 Isla Espiritu Santo, La Paz  
24°23.1'N 21.5'W 24°23.7'N 110°22.6'W 59-  
77m 40' otter trawl Jan. 28, 1968 R/V  
T. Washington coll. C. Hubbs
- E 779 RR65-3 Bahia de La Paz, Mexico 24°19'N  
110°26'W July 5, 1965 55-80m 40' otter  
trawl W. Baldwin (SIO65-257)
- E 810 B6411-3 TR #112 Pta. Marquis, Baja Calif.,  
Sur, 23°34'N 110°23'W 16' otter trawl 64m  
Nov. 9, 1964 R/V B. Douglas (SIO64-867)
- E 1150 TEPE78-27 off Boca de La Trinidad, Baja  
Calif., Sur, Mex. 23°36.2'N 109°31.5'W 49-  
46m 16' otter trawl Apr. 14, 1978 R/V  
A. Helix W. Newman, S. Luke
- E 1868 VSS-103 Vermillion Sea Exped. E. of Angel  
de La Guarda, Mex. 29°24.3'N 113°19.0'W  
229-110m shell dredge Apr. 10, 1959  
R. Parker (P70-59)
- E 1869 VSS-104 Vermillion Sea Expedition, Bay E.  
side of Angel de La Guardia April 10, 1959  
ca. 29°17'N 113°21'W shell dredge 73m  
R. Parker (P71-59)
- E 1871 VSS-27 Vermillion Sea Exped. off Pescadero  
Pt., Baja Calif., Sur, Mex. 23°48.0'N  
109°40.5'W 54m shell dredge Mar. 28, 1959  
R. Parker (P46-59)
- E 1873 P-212-60 off Cabo Tepoca, Sonora, Mex.  
30°20.5'N 113°20.5'W Mar. 31, 1960 67-57m  
10' ott. tr.
- E 1876 P-164-60 off Estero de Tastiota, Sonora,  
Mex. 28°14.5'N 111°47.5'W Mar. 21, 1960  
75-64m 10' ott. tr.
- E 1894 MV65-I-67 Canal de Cerralbo, Baja Calif.,  
Sur, Mex. 24°11'N 109°59'W 45' ott. tr.  
81-84m July 2, 1965 R/V Horizon C. Hubbs  
(SIO65-250)

## Gen. Indet.

- E 2148 Monsoon rock dredge 76-D Sta. VI-7 E. of  
New Zealand 43°38'S 177°26'E 161m Jan. 31,  
1961 Russell, Menard (SIO61-153)

## Family Ophiacanthidae

Ophiacantha cf. cosmica Lyman

- E 1539 MET Sta. 123 W. of Patton Escarpment  
32°25'N 120°35'W 40' ott. tr. Feb. 5, 1981  
3634-3713m R/V N. Horizon K. Smith, S. Luke
- E 1605 Baja Slope Exped. BS-12 Basin off Bahia  
Magdalena, Baja Calif., Sur, 23°59.5'N  
113°11.9'W 3481-3518m 10' beam trawl May 3,  
1961 R. Parker (P-285-61)
- E 1628 MV70-III-6 W. of Patton Escarpment 31°20'N  
120°09'W Mar. 23, 1970 25' ott. tr. 3706-  
3806m R/V Melville S. Luke
- E 1685 MV65-I-13 Cedros Trench, Baja Calif.,  
Norte, Mex. 28°05'N 116°45'W 6' Sigsbee tr.  
4414-4425m June 13, 1965 R/V Horizon  
C. Hubbs
- E 1688 MV66-III-21 W.S.W. of Cortes Bank 32°04'N  
120°30'W 40' ott. tr. Dec. 11, 1966 3777-  
3792m C. Hubbs (SIO66-547)
- E 1699 MV70-III-3 W. of Patton Escarpment 31°27'N  
120°11'W 25' ott. tr. Mar. 21, 1970 3880m  
R/V Melville S. Luke
- E 1731 BS-14 Cedros Trench, Baja Calif., Sur, Mex.  
27°10'N 115°20'W May 6, 1961 4188-4161m 10'  
beam tr. R. Parker (P-287-61)

- E 1733 Baja Slope BS-2 off Pta. Baja, Baja Calif., Norte, Mex., 29°59.5'N 116°33.2'W 2782-2779m 30' ott. tr. Apr. 29, 1961 R. Parker (P-275-61)
- E 1735 MV69-VI-9 W. of Patton Escarpment 31°12'N 120°36.5'W 25' ott. tr. Dec. 18, 1969 3600-3676m R/V Melville C. Hubbs, S. Luke
- E 1745 MV67-II-22 W. of Pioneer Seamount 37°18'N 123°53'W 41' ott. tr. June 15, 1967 3592-3799m R/V T. Washington C. Hubbs
- E 1768 SI067-103 S. of Davidson's Seamount, Calif. 35°N 122°52'W 25' ott. tr. June 10, 1967 3908-3972m R/V T. Washington C. Hubbs
- E 1776 MV66-II-4 off Eureka, Calif. May 22, 1966 40°30.5'N 125°45.2'W 16' ott. tr. 2999-3017m R. Wisner (SI066-52)
- E 1949 MV68-I-85 Farallon Basin, Golfo de Calif., Mexico 25°17'N 110°19.5'W ott. tr. 1810-1908m Jan. 23, 1968 R/V T. Washington C. Hubbs
- E 1960 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1965 MV65-I-26 off Bahia San Cristobal, Baja Calif., Norte, Mex., 27°08'N 115°10'W 4085-4096m 10' IKMT June 21, 1965 R/V Horizon C. Hubbs (SI065-209)
- E 2005 MV66-I-6 off N.W. Baja Calif., Norte, Mex. 31°05'N 118°W 40' ott. tr. Mar. 31, 1966 1463-1728m R/V Agassiz C. Hubbs
- E 2031 MV71-I-43 N.W. Baja Calif., Norte, Mex. 31°25'N 117°45'W 6' Sigsbee tr. May 29, 1971 2001-2025m R/V Agassiz C. Hubbs, S. Luke
- E 2086 SOB-5 W. of Pta. Banda, Baja Calif., Norte, Mex. 31°18'N 117°36'W 2068-2086m 30' ott. tr. Feb. 13, 1960 R. Parker (P-137-60)
- E 2088 MV65-I-38 Basin off Bahia Magdalena, Baja Calif., Sur, Mex. 24°35'N 113°35'W 3563-3621m 6' Sigsbee tr. June 24, 1965 R/V Horizon C. Hubbs
- E 2089 MET Sta. 133 W. of Patton Escarpment 32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981 3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 2095 MV65-I-57 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°35'N 110°10'W 2889-2505m 6' Sigsbee tr. June 29, 1965 R/V Horizon C. Hubbs

Ophiacantha diplasia Clark

- E 708 Shepard No. 69 40 mile Bank 32°N 117°56.2'W June 10, 1938 183m dredge 'E.W. Scripps'
- E 781 No. 202 Monterey, Calif. 36°41'N 122°00.8'W Sept. 9, 1938 dredge haul F.P. Shepard

Ophiacantha eurypona Clark

- E 1753 MV65-III-14 Basin N.W. of 60 Mile Bank 32°17'N 118°33'W 10' IKMT Dec. 24, 1965 1615-1664m R/V Agassiz C. Hubbs, W. Newman

Ophiacantha phragma Ziesenhene

- E 1824 TEPH70-7 Isla Jicarón, Panama 07°15.7'N 81°45.3'W rock dredge 64m Sept. 16, 1970 R/V A. Helix W. Newman, S. Luke
- E 1898 Baja 69-23 Ranger Bank, Baja Calif., Norte, Mex. 28°33.4'N 115°29.6'W Feb. 25, 1969 146m pipe dredge R/V Oconostota
- E 2098 MV71-I-2 Isla Guadalupe, Baja Calif., Mex. 28°52.0'N 118°15'W 102-99m 6' Sigsbee tr. May 18, 1971 R/V Agassiz C. Hubbs, S. Luke

Ophiacantha sp.

- E 2099 MV71-I-2 Isla Guadalupe, Baja Calif., Mex. 28°52.0'N 118°15'W 6' Sigsbee tr. 102-99m May 18, 1971 R/V Agassiz C. Hubbs, S. Luke

- E 2327 TO-58-2, D-5 off Salina Cruz, Oaxaca, Mexico Nov. 19, 1958 3539-3610m R. Parker, R. Wisner
- E 2514 Saucer Dive #335 ca. 9 mi. W. of Pt. Loma, Calif. April 6, 1965 175m A. Flechsig

Ophiolimna bairdi (Lyman)

- E 2037 MV72-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 10' IKMT 1157-1454m R/V Agassiz C. Hubbs, S. Luke
- E 2085 MV68-I-85 Farallon Basin, Golfo de Calif., Mex. 25°17'N 110°19.5'W Jan. 23, 1968 1810-1908m otter trawl R/V T. Washington C. Hubbs
- E 1821 MV66-I-34 on seamount N.E. of Isla Guadalupe, Baja Calif., Norte, Mexico 29°28.3'N 117°17.3'W hagfish trap 1719m April 6-7, 1966 R/V Agassiz C. Hubbs

Ophiomitra partita Lutken & Mortensen

- E 1640 M-7, Sta. 3 San Clemente Basin, Calif. 32°28'N 118°07'W 40' ott. tr. Sept. 16, 1971 1792-1866m R/V Agassiz T. Matsui
- E 1995 Oconostota #9 San Clemente Basin, Calif. 32°25.8'N 117°51'W 16' ott. tr. Sept. 5, 1974 1596-1600m R/V Oconostota J.F. Siebenaller

Ophiomitra granifera Lutken & Mortensen

- E 1767 SOB-5 W. of Pta. Banda, Baja Calif., Norte, Mex. 31°18'N 117°37'W 20' ott. tr. Feb. 13, 1960 2068-2086m R. Parker (P-137-60)
- E 1864 VS-54 Vermillion Sea Exped. N. of Islas Tres Marias, Mex. 22°06'N 106°29'W 730m May 18, 1959 S.F. Baird (SI075-568) (CalCofi 1606.35)

Ophiophthalmus normani (Lyman)

- E 352 Sta. 15 Catalina Basin, Calif. 32°58.4'N 118°26.8'W 32°55.4'N 118°22.3'W 1121-1137m 16' otter trawl Dec. 10, 1972 R/V Agassiz coll. P. Jumars
- E 356 Sta. 19 Santa Cruz Catalina Basin, Calif. 32°59.3'N 118°26.2'W-32°57.4'N 118°23.3'W 1116m 16' otter trawl Dec. 11, 1972 R/V Agassiz coll. P. Jumars
- E 612 A-15 Afterthot II East Cortez Basin 32°32.0'W 118°53.1'W-32°32.7'N 118°53.6'W 1298m 25' otter trawl May 6, 1975 R/V Agassiz coll. J.F. Siebenaller
- E 626 A-17 Afterthot II West Cortez Basin 32°25.3'N 119°30.4'W-32°24.8'N 119°29.9'W 1362m 25' otter trawl May 7, 1975 R/V Agassiz coll. J. Siebenaller
- E 638 A-24 Afterthot II San Diego Trough 32°52.1'N 117°42.1'W-32°52.3'N 117°41.9'W 1057m 25' otter trawl May 8, 1975 R/V Agassiz coll. J. Siebenaller
- E 683 Allozyme A-28 Catalina Basin, Calif. 32°56'N 118°24'W 25' otter trawl 1143m Aug. 6, 1975 R/V Agassiz coll. J. Siebenaller
- E 766 H53-21 off E. side of San Clemente Is., Calif. 32°58.3'N 118°21.5'W ca. 466m Isaacs Kidd diving dredge April 28, 1953 L. Kidd
- E 947 H53-227 San Diego Trough 32°33'N 117°28'W 5' IK diving dredge 1207-1216m Dec. 12, 1953 M/V Horizon C. Hubbs
- E 1446 SnaFu SI080-8 San Diego Trough 32°36.5'N 117°32'W 40' ott. tr. #1 1171m Feb. 29, 1980 R/V Horizon R. Rosenblatt
- E 1475 NoFac #5 San Nicholas Basin 33°20'N 119°15'W July 6, 1980 1738m 25' ott. tr. R. Wilson R/V Melville



- E 1520 MET Sta. 109 Catalina Basin, Calif. 33°11'N 118°30'W 40' ott. tr. Jan. 31, 1981 1198-1234m R/V N. Horizon K. Smith, S. Luke
- E 1629 MET Sta. 117 Catalina Basin, Calif. 33°13'N 118°32'W 40' ott. tr. Feb. 3, 1981 1262-1235 R/V N. Horizon K. Smith, S. Luke
- E 1632 MET Sta. 105 Catalina Basin, Calif. 33°08'N 118°35.5'W 25' ott. tr. Jan. 30, 1981 1280-1271m R/V N. Horizon K. Smith, S. Luke
- E 1641 M-7, Sta. 3 San Clemente Basin, Calif. 32°28'N 118°07'W 40' ott. tr. Sept. 16, 1971 1792-1866m R/V Agassiz T. Matsui
- E 1649 Oconostota trawl #8 San Clemente Basin, Calif. 32°27.8'N 117°52'W 16' ott. tr. Sept. 5, 1974 1527-1545m R/V Oconostota J.F. Siebenaller
- E 1651 Oconostota trawl #4 Santa Catalina Basin, Calif. 32°59'N 118°25'W 16' ott. tr. Sept. 4, 1974 1099-1104m R/V Oconostota J.F. Siebenaller
- E 1656 Oconostota trawl #6 Tanner Basin, Calif. 32°48'N 119°30'W 16' ott. tr. Sept. 5, 1974 1362m R/V Oconostota J.F. Siebenaller
- E 1663 Oconostota Sta. 4 San Diego Trough 32°38'N 117°30'W 4' pipe stem dredge 1097-1180m Nov. 7, 1969 R/V Oconostota F. Rokop, S. Luke
- E 1668 MV71-I-62 San Diego Trough June 2, 1971 32°28'N 117°30'W 25' ott. tr. R/V Agassiz 1235m C. Hubbs, S. Luke
- E 1674 M-15 OT-2 off Encinitas, Calif. 33°02'N 117°19'W 25' ott. tr. Mar. 29, 1974 51m R/V Agassiz T. Matsui
- E 1679 M-15 OT-1 San Diego Trough Mar. 27, 1974 32°27'N 117°30'W 25' ott. tr. R/V Agassiz 1225m T. Matsui
- E 1681 A-20 Afterthot II San Nicholas Basin, Calif. 32°02.5'N 119°02.7'W 25' ott. tr. May 7, 1975 1746m R/V Agassiz J. Siebenaller
- E 1710 MV68-I-76 W. slope of Carmen Basin, Baja Calif., Sur, Mex. 25°56'N 110°35'W 1321-1344m 25' ott. tr. Jan. 22, 1968 R/V T. Washington C. Hubbs
- E 1715 HR-3 Santa Cruz Basin, Calif. 33°40.5'W 119°29.3'W 16' ott. tr. May 11, 1960 1880-1936m R. Parker (P-145-60)
- E 1747 M-8, Sta. 5 off San Diego, Calif. 32°33'N 118°06'W 40' ott. tr. Nov. 3, 1971 1829m R/V Agassiz T. Matsui
- E 1750 Oconostota trawl #9 San Clemente Basin 32°25.8'N 117°51'W 16' ott. tr. Sept. 5, 1974 1596-1600m R/V Oconostota J.F. Siebenaller
- E 1755 South Tow 0.5 SOTW-0-WT-1D 33°01'N 118°22'W Rock Dredge 1000-875m Dec. 10, 1971 R/V T. Washington
- E 1758 A-11 Afterthot II San Clemente Basin 32°29'N 118°06'W 25' ott. tr. 1829m May 5, 1975 R/V Agassiz J.F. Siebenaller
- E 1760 trawl 10 off La Jolla, Calif. 32°52'N 117°36'W 16' ott. tr. Sept. 6, 1974 896m R/V Oconostota J. Siebenaller
- E 1777 M-8, Sta. 1 San Diego Trough Nov. 1, 1971 32°28'N 117°32'W 40' ott. tr. R/V Agassiz 1207-1244m T. Matsui
- E 1782 R-3 San Diego Trough, Calif. Oct. 26, 1970 32°24'N 117°29'W 25' ott. tr. 1243-1258m R/V Agassiz F. Rokop, S. Luke
- E 1789 Sta. 16 Catalina Basin, Calif. Dec. 10, 1972 32°20'N 118°17'W IKMT 1097m R/V Agassiz R. Hessler
- E 1806 M-7, Sta. 1 San Diego Trough 32°29'N 117°30'W 40' ott. tr. 1225-1244m Sept. 14, 1971 R/V Agassiz T. Matsui
- E 1808 H53-20 E. side of San Clemente Is., Calif. 32°59'N 118°23'W Apr. 28, 1953 1207m Isaacs dredge haul #3 Lewis Kidd
- E 1809 Rebathyl Sta. 108 Catalina Basin, Calif. 33°21'N 118°45'W 25' ott. tr. Jan. 24, 1980 1300m R/V N. Horizon K. Smith
- E 1812 H52-14 San Diego Trough, Calif. 32°33'N 117°37'W deep water dredge 1234m Feb. 28, 1952 R/V Horizon J. Isaacs
- E 1814 M-15 OT-11 off Pta. Piedras Blancas, Calif. 35°28'N 121°50'W 25' ott. tr. Mar. 31, 1974 1189-1170m R/V Agassiz T. Matsui
- E 1853 H52-15 San Diego Trough 32°30'N 117°37'W Feb. 28, 1952 1207m L. Kidd
- E 1856 H51-148 San Diego Trough 32°44'N 117'W April 20, 1951 1006m 10' midwater trawl Al Allanson
- E 1866 SI063-872 San Diego Trough Nov. 1, 1963 32°24.5'N 117°27.7'W free vehicle 1244m R/V Agassiz
- E 1937 MV68-I-75 Guaymas Basin, Gulf of Calif., Mexico 26°45'N 111°02'W 25' ott. tr. 1684-1723m Jan. 22, 1968 R/V T. Washington C. Hubbs
- E 1948 MV68-I-85 Farallon Basin, Golfo de Calif., Mexico 25°17'N 110°19.5'W ott. tr. 1810-1908m Jan. 23, 1968 R/V T. Washington C. Hubbs
- E 1996 CalCofi 7412/II off Piedras Blancas, Calif. 35°37'N 121°44.6'W 25' ott. tr. #5 915m Dec. 10, 1974 R/V Agassiz T. Matsui
- E 2056 MV68-I-55 Guaymas Basin, Golfo de Calif., Mex. 27°42.6'N 112°17.0'W 1097m free vehicle trap Jan 16-17, 1968 R/V T. Washington C. Hubbs
- E 2121 R-41 Tanner Basin 25' ott. tr. 32°48'N 119°30'W July 13, 1971 1390m R/V Agassiz F. Rokop
- E 2125 R-27 Tanner Basin 25' ott. tr. 32°48'N 119°31.5'W Jan. 21, 1971 1390-1372m R/V Agassiz F. Rokop
- E 2130 R-24 Tanner Basin 25' ott. tr. 32°45'N 119°31'W Jan. 20, 1971 1317-1362m R/V Agassiz F. Rokop
- E 2134 R-9 Tanner Basin 25' ott. tr. 32°51'N 119°33'W Oct. 28, 1970 1397m R/V Agassiz F. Rokop, S. Luke
- E 2155 R-35 Tanner Basin Apr. 20, 1971 32°49'N 119°32'W 25' ott. tr. 1391-1372m R/V Agassiz F. Rokop
- E 2165 MV66-III-7 W. of Bahia Descanso, Baja Calif., Norte, Mex. 32°04'N 117°13'W 1332-1244m 40' ott. tr. Dec. 8, 1966 C. Hubbs (SI066-537)
- E 2180 Oconostota trawl #7 Tanner Basin 32°44'N 119°31'W Sept. 5, 1974 ca. 1200-1300m 16' ott. tr. J.F. Siebenaller
- E 2715 Oconostota trawl #2 San Diego Trough 32°34'N 117°31'W Sept. 3, 1974 1188-1194m 16' ott. tr. J.F. Siebenaller
- Gen. Indet.
- E 2096 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon Ken Smith, S. Luke
- E 2097 A-11 Afterthot II San Clemente Basin, Calif. 32°29'N 118°06.2'W 25' ott. tr. 1829m May 5, 1975 R/V Agassiz J.F. Siebenaller
- E 2150 Criss-Cross - N.E. of Isla de Malpelo, Colombia 04°10'N 81°17'W Mar. 7, 1963 366m dredge T. Chase R/V S.F. Baird

- E 2169 ANTIPODE 8 144D near Seychelles 08°17.6'S  
58°55.1'E Feb. 4, 1971 490m chain rock  
dredge R/V Melville J. Coatsworth
- E 2184 STYX-7 MPE 68097 Sta. 4 Agassiz Guyot, Mid  
Pacific 18°N 178°15'E Sept. 7, 1968 1582-  
1617m 5' Sigsbee tr. #3 R/V Agassiz  
W. Newman
- E 2523 MB-37 ARV S. of Santa Cruz, Is., Calif.  
33°57'45"N 119°28'52"W 166m Set #2 shrimp  
trap July 19, 1969 R. Green U.S.F.W.S.
- E 2705 MV65-I-29 off Bahia Asuncion, Baja Calif.,  
Sur, Mex. 27°02.1'N 114°22'W 104-113m 45'  
ott. tr. June 21, 1965 R/V Horizon C. Hubbs
- E 2792 Hutton Cliffs, McMurdo Sound, Antarctica  
130 ft. coble bottom Dec. 5, 1974  
P.K. Dayton

## Family Amphilepididae

Amphilepis patens Lyman

- E 1597 MV65-I-38 Basin off Bahia Magdalena, Baja  
Calif., Sur, Mex. 24°35'N 113°35'W 3563-  
3621m 6' Sigsbee tr. June 24, 1965 R/V  
Horizon C. Hubbs
- E 1646 MV71-I-44 off Rio San Vincente, Baja  
Calif., Mex. 31°18'N 117°23'W 6' Sigsbee  
tr. 1984-1957m May 30, 1971 R/V Agassiz  
C. Hubbs, S. Luke
- E 1702 MV65-I-50 S.W. of Cabo San Lucas, Baja  
Calif., Sur, Mex. 22°42'N 110°15'W 1893-  
1957m 6' Sigsbee tr. June 28, 1965 R/V Hor-  
izon C. Hubbs
- E 1797 MV73-I-81 S. of Pta. Guiones, Costa Rica  
09°35'N 85°41'W Apr. 20, 1973 1157nes,  
Costa Rica 09°35'N 85°41'W Apr. 20, 1973  
1157-1454m 10' IKMT R/V Agassiz C. Hubbs,  
S. Luke
- E 2030 MV71-I-43 off N.W. Baja Calif., Norte, Mex.  
31°25'N 117°45'W 6' Sigsbee tr. May 29,  
1971 2001-2025m R/V Agassiz C. Hubbs,  
S. Luke
- E 2038 MET Sta. 129 W. of Patton Escarpment  
32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981  
3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 2062 MV66-I-6 off N.W. Baja Calif., Norte, Mex.  
31°05'N 118°0W 40' ott. tr. 1463-1728m Mar.  
31, 1966 C. Hubbs R/V Agassiz
- E 2064 MV69-VI-9 W. of Patton Escarpment 31°10'N  
119°37'W Dec. 18, 1969 25' ott. tr. 3600-  
3676m R/V Melville C. Hubbs, S. Luke  
(SI070-22)
- E 2087 MV66-II-4 off Eureka, Calif. 40°30.5'N  
125°45.2'W 16' ott. tr. 2999-3017m May 22,  
1966 R. Wisner (SI066-52)
- E 2090 MET Sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' otter tr. 3689-3632m  
Feb. 7, 1981 R/V N. Horizon K. Smith,  
S. Luke
- E 2093 MV70-III-6 W. of Patton Escarpment 31°20'N  
120°09'W Mar. 23, 1970 25' ott. tr. 3706-  
3806m R/V Melville S. Luke
- E 2094 MV70-III-1 W. of Patton Escarpment 31°25'N  
120°14'W IKMT on bottom 3950-3880m Mar. 21,  
1970 R/V Melville F. Rokop, S. Luke
- E 2110 MV72-II-32 off Pta. San Juan, Peru 15°47'S  
76°07'W May 10, 1972 3475m 25' ott. tr. R/V  
T. Washington S. Luke
- E 2115 MV72-II-27 off Arica, Chile 18°35'S 70°32'W  
May 7, 1972 768-968m 25' ott. tr. R/V  
T. Washington S. Luke

## Family Ophiactidae

Ophiactis simplex (LeConte)

- E 225 Scripps Pier piles, La Jolla, Calif.  
Nov. 6, 1915
- E 233 La Jolla, Calif. from bunches of mussels  
taken from reef off Scripps Inst. Oct. 25,  
1916
- E 679 'ECCE' B.T.-22 Bahia Tortugas, Baja Calif.,  
Sur, Mexico ca. 27°41'N 114°53'W intertidal  
July 31, 1975 G. Hemingway, S. Luke
- E 1165 S. of Puerto San Jose, Baja Calif. Norte,  
Mex. ca. 29°15'N 114°50'W rocky intertidal,  
open coast at low tide -1.1 Mar. 26, 1979  
1400 S. Luke
- E 1911 TEPE78-15 Isla Sacrificios, Oaxaca, Mex.  
15°40.8'N 96°14.6'W SCUBA 40 ft. Apr. 7,  
1978 R/V A. Helix W. Newman, S. Luke
- E 1939 Bird Rock, Isthmus, Catalina Is., Calif.  
March 8, 1973 20-30 ft. SCUBA R. Bauer
- E 1940 'ECCE' SR-34 Santa Rosalillita, Baja  
Calif., Norte, Mex. ca. 28°40'N 114°14'W  
intertidal Aug. 6, 1975 G. Hemingway,  
S. Luke

Ophiactis savignyi (Muller & Troschel)

- E 1129 TEPE78-18 Isla Grande, Guerrero, Mex.  
17°40.3'N 101°40.4'W Apr. 10, 1978 SCUBA  
15-20 ft. R/V A. Helix W. Newman, S. Luke
- E 1906 Bahia Concepcion, Baja Calif., Sur, Mexico  
ca. 26°45'N 111°55'W July 19, 1980 0-15 ft.  
snorkel S. Luke
- E 1910 TEPE78-15 Isla Sacrificios, Oaxaca, Mexico  
15°40.8'N 96°14.6'W SCUBA 40 ft. Apr. 7,  
1978 R/V A. Helix W. Newman, S. Luke
- E 1935 MV73-I-1 La Paz Pier, La Paz, Baja Calif.,  
Sur, Mex. 24°11'46"N 110°18'07"W on pier  
pilings March 29, 1973 R/V Agassiz  
C. Hubbs, S. Luke
- E 2012 H51-18 N. side of Pta. Banda, Bahia Todos  
Santos, Baja Calif., Norte, Mexico ca.  
31°45'N 116°40'W Feb. 2, 1951 70-59m 'Orca'  
C. Hubbs
- E 2017 SB-39 Sea Breeze, 5 mi. N. of Guaymas,  
Sonora, Mex. ca. 27°55'N 111°W intertidal,  
diving, Apr. 10-11, 1960 'Orca'  
A. Flechsig, Clutter
- E 2078 H50-72 off old whaling station, Laguna San  
Ignacio, Baja Calif., Sur, Mex. 5 ft. Feb.  
11, 1950 shrimp dredge (SI) C. Hubbs

Ophiactis sp.

- E 671 'ECCE' P.A-11 rocky point E. of Pta. Abreo-  
jos, Baja Calif. w. side of Bahia La Baliza  
26°44'N 113°35'W deep pools MLLW July 25,  
1975 coll. Hemingway, Luke
- E 1433 Sta. 1 Clipperton Is., reef flat in front  
of barracks 10°17'N 109°13'W intertidal  
Mar. 13, 1980 J. Cousteau, S. Luke
- E 1919 SI057-187 Melpomene Cove, Isla Guadalupe,  
Baja Calif., Mexico 28°52'N 118°16.9'W 49-  
57m 15' Try net Oct. 28, 1957 'Orca'  
C. Hubbs
- E 1941 Palomar St. Reef, La Jolla, Calif. interti-  
dal Jan. 8, 1974 S. Luke

Ophiopholis bakeri McClendon

- E 226 Off Scripps Inst., La Jolla, Calif. trawl  
caught on soft rock July 11, 1916
- E 777 SI065-113 Coronado Bank, San Diego Co.  
32°40'30"N 117°27'20"W 230m diving saucer  
April 22, 1965 C. Hubbs
- E 959 Saucer Dive #345 Due W. of Bird Rock, La  
Jolla, Calif. Apr. 17, 1965 110-200m  
R. Ford

- E 1826 W. of Pt. La Jolla, San Diego, Calif. 101-183m 16' ott. tr. #1 Jan. 28, 1965 ST-908 Fager
- E 1829 Top of Coronado Bank, due W. of Silver Strand, San Diego, Calif. Boyd dredge ca. 165m Jan. 21, 1965 ST-908 Fager
- E 1908 Off Coronado Bank, San Diego, Calif. ca. 61m on crinoids & black coral Deepstar R. Church 1967, R. Grigg donat.
- E 1909 Holt Exped. Sta. #10 San Quintin Bay, Baja Calif., Norte, Mex. 30°17'N 116°04'W 118m 10' ott. tr. Dec. 4, 1960 C. Boyd, D. Dockins (SI060-468) (P-267-60)
- E 1914 Shepard No. 69 40 mile bank, off San Diego, Calif. 32°N 117°56.2'W dredge 183m June 10, 1938 "E.W. Scripps" Shepard
- E 1943 W. of Pt. La Jolla, Calif. 282m Jan. 29, 1973 R/V Oconostota A. Flechsig
- E 2013 Haul 3181 off San Diego, Calif. 32°28.5'N 117°15.3'W Feb. 10, 1912 55m "Agassiz"
- E 2081 Baja 69-16 Baja Calif., Sur, Mexico 27°32.5'N 114°52.7'W Feb. 24, 1969 102m rock dredge R/V Oconostota
- E 2444 N. of Scripps Canyon, La Jolla, Calif. Nov. 16, 1964 Diving saucer R.F. Ford
- E 2513 Saucer Dive #335 ca. 9 mi. W. of Pt. Loma, Calif. April 6, 1965 175m A. Flechsig
- E 2522 MB-37 ARV S. of Santa Cruz Is., Calif. 33°57'45"N 119°28'52"W 166m Set #2 shrimp trap July 19, 1969 R. Green U.S.F.W.S.

Ophiopholis longispina H.L. Clark

- E 1631 MBT Sta. 117 Catalina Basin, Calif. 33°13'N 118°32'W 40' ott. tr. Feb. 3, 1981 1262-1235m R/V N. Horizon K. Smith, S. Luke
- E 1634 MBT Sta. 105 Catalina Basin, Calif. 33°08'N 118°35.5'W 25' ott. tr. Jan. 30, 1981 1280-1271m R/V N. Horizon K. Smith, S. Luke
- E 1638 MBT Sta. 109 Catalina Basin, Calif. 33°11'N 118°30'W 40' ott. tr. Jan. 31, 1981 1198-1234m R/V N. Horizon K. Smith, S. Luke
- E 1652 Oconostota trawl #4 Catalina Basin, Calif. 32°59'N 118°25'W 16' ott. tr. Sept. 4, 1974 1099-1104m R/V Oconostota J.F. Siebenaller
- E 1654 Allozyme A-28 Catalina Basin, Calif. 32°56'N 118°24'W 25' ott. tr. Aug. 6, 1975 1143m R/V Agassiz J.F. Siebenaller
- E 1658 Sta. 15 Catalina Basin, Calif. Dec. 10, 1972 32°56'N 118°24'W 16' ott. tr. 1121-1137m R/V Agassiz P. Jumars
- E 1675 M-15 OT-2 off Encinitas, Calif. 33°02'N 117°19'W 25' ott. tr. Mar. 29, 1974 51m R/V Agassiz T. Matsui
- E 1680 M-15 OT-1 San Diego Trough Mar. 27, 1974 32°27'N 117°30'W 25' ott. tr. R/V Agassiz 1225m T. Matsui
- E 1682 A-20 Afterthot II San Nicholas Basin, Calif. 32°02.5'N 119°02.7'W 25' ott. tr. May 7, 1975 1746m R/V Agassiz J. Siebenaller
- E 1703 M-6, Sta. 2 San Diego Trough 32°53'N 117°31'W 25' ott. tr. 732-860m Aug. 13, 1971 R/V Agassiz T. Matsui
- E 1713 M-1, Sta. 2 San Diego Trough 32°57'N 117°32'W 25' ott. tr. Feb. 3, 1971 768m R/V Agassiz T. Matsui
- E 1737 M-15, OT-22 off Del Mar, Calif. 32°59'N 117°38'W 25' ott. tr. 920m Apr. 4, 1974 R/V Agassiz T. Matsui
- E 1761 Trawl 10 off La Jolla, Calif. 32°52'N 117°36'W 16' ott. tr. Sept. 6, 1974 896m R/V Oconostota J. Siebenaller
- E 1952 Baja 69-11B off Bahia Asuncion, Baja Calif., Sur, Mexico 27°01'N 114°21.1'W 201m dredge Feb. 23, 1969 R/V Oconostota

- E 1967 A-27 Afterthot II off Encinitas, Calif. 33°N 117°34.4'W 25' ott. tr. May 9, 1975 750m R/V Agassiz J.F. Siebenaller

Gen. Indet.

- E 1921 Bahia Tortugas, Baja Calif., Sur, Mexico ca. 27°41'N 114°53'W Nov. 29, 1959 stipe holdfast #21
- E 1922 Bahia Tortugas, Baja Calif., Sur, Mexico ca. 27°41'N 114°53'W Nov. 29, 1959 stipe holdfast #21
- E 2018 Top of Coronado Bank, due W. of Silver Strand, Coronado, Calif. Jan. 21, 1965 ca. 165m Boyd dredge ST-908 Fager
- E 2076 M-15 OT-8 N. of Dana Pt., Calif. 33°32.5'N 117°48.5'W March 29, 1974 53-48m 40' ott. tr. R/V Agassiz T. Matsui
- E 2173 Monsoon (P-234-60) Torres Strait 10°11.0'S 139°31.0'E Oct. 12, 1960 51m rock dredge Rowland
- E 2080 SI067-133 Ensenada Camp, San Felipe, Baja Calif., Norte, Mexico ca. 31°N 114°48'W 0-2 ft. May 22, 1967 D. Hoese (DFH67-5&6)

Family Amphiuroidae

Amphiura acrystata Clark

- E 2229 P-201-60 Gulf of Calif., Mexico 28°30.0'N 112°22.0'W March 27, 1960 230m shell dredge R. Parker & Curnay

Amphiura assimilis Lutken & Mortensen

- E 1591 VS-B-II-35 N.W. of Islas Tres Marias 22°20'N 107°48'W 40' ott. tr. May 15, 1959 2999-2996m R. Parker, Rowland (P-96-59) (SI059-269)

Amphiura koreae Duncan

- E 1657 Oconostota trawl #6 Tanner Basin, Calif. 32°48'N 119°30'W 16' ott. tr. Sept. 5, 1974 1362m R/V Oconostota J.F. Siebenaller
- E 1832 A-17 Afterthot II W. Cortez Basin 32°25'N 119°30'W 25' ott. tr. May 7, 1975 1362m R/V Agassiz J.F. Siebenaller
- E 1974 A-15 Afterthot II E. Cortez Basin, Calif. 32°32.5'N 118°53.5'W 25' ott. tr. 1298m May 6, 1975 R/V Agassiz J. Siebenaller
- E 1998 CalCofi 74126/II off Piedras Blancas, Calif. 35°37'N 121°44.6'W 25' ott. tr. #5 915m Dec. 10, 1974 R/V Agassiz T. Matsui
- E 2000 A-24 Afterthot II San Diego Trough 32°52'N 117°42'W 25' ott. tr. May 8, 1975 1057m R/V Agassiz J.F. Siebenaller
- E 2019 Oconostota trawl #9 San Clemente Basin, Calif. 32°25.8'N 117°51'W 16' ott. tr. 1596-1600m R/V Oconostota J. Siebenaller Sept. 5, 1974
- E 2021 Sta. 1 Catalina Basin Calif. Dec. 10, 1972 32°20'N 118°17'W IKMT 1097m R/V Agassiz R. Hessler
- E 2022 M-8, sta. 5 off San Diego, Calif. Nov. 3, 1971 32°33'N 118°06'W 40' ott. tr. 1829m R/V Agassiz T. Matsui (SI071-202)
- E 2025 Oconostota trawl #8 San Clemente Basin, Calif. 32°27.8'N 117°53'W 16' ott. tr. 1527-1545m Sept. 5, 1974 R/V Oconostota J.F. Siebenaller
- E 2026 MV66-II-4 off Eureka, Calif. 40°30.5'N 125°45.2'W 16' ott. tr. 2999-3017m May 22, 1966 R. Wisner (SI066-52)
- E 2028 MV71-I-44 off Rio San Vicente, Baja Calif., Norte, Mex. 31°18'N 117°23'W 1984-1957m 6' Sigsbee tr. May 30, 1971 R/V Agassiz C. Hubbs, S. Luke

- E 2032 MV71-I-43 off N.W. Baja Calif., Norte, Mex. 31°25'N 117°45'W 6' Sigsbee tr. May 29, 1971 2001-2025m R/V Agassiz C. Hubbs, S. Luke
- E 2035 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 10' IKMT 1157-1454m R/V Agassiz C. Hubbs, S. Luke
- E 2045 69/06/1 Dredge #15 S.E. San Nicolas Is., Calif. 1189-732m R/V Agassiz Edwin Allison Oconostota Sta. 4 San Diego Trough 32°38'N 117°30'W 4' pipe stem dredge 1097-1180m Nov. 7, 1969 R/V Oconostota F. Rokop, S. Luke
- E 2120 MV71-I-62 San Diego Trough 32°27'N 117°29'W June 2, 1971 1235m 25' ott. tr. R/V Agassiz C. Hubbs, S. Luke
- E 2122 R-41 Tanner Basin 25' ott. tr. 32°48'N 119°30'W July 13, 1971 1390m R/V Agassiz F. Rokop
- E 2126 R-27 Tanner Basin 25' ott. tr. 32°48'N 119°31.5'W Jan. 21, 1971 1390-1372m R/V Agassiz F. Rokop
- E 2133 R-24 Tanner Basin 25' ott. tr. 32°45'N 119°31'W Jan. 20, 1971 1317-1362m R/V Agassiz F. Rokop
- E 2137 R-9 Tanner Basin 25' ott. tr. 32°51'N 119°33'W Oct. 28, 1970 1397m R/V Agassiz F. Rokop, S. Luke
- E 2158 R-35 Tanner Basin Apr. 20, 1971 32°49'N 119°32'W 25' ott. tr. 1391-1372m R/V Agassiz F. Rokop
- E 2183 Oconostota trawl #7 Tanner Basin 32°44'N 119°31'W Sept. 5, 1974 ca. 1200-1300m 16' ott. tr. J.F. Siebenaller
- E 2194 MET Sta. 109 Catalina Basin, Calif. 33°11'N 118°30'W 40' ott. tr. Jan. 31, 1981 1198-1234m R/V N. Horizon K. Smith, S. Luke
- Amphiura seminuda Lutken & Mortensen
- E 1540 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1642 M-7, Sta. 3 San Clemente Basin, Calif. 32°28'N 118°07'W 40' ott. tr. Sept. 16, 1971 1792-1866m R/V Agassiz T. Matsui
- E 1659 Sta. 15 Catalina Basin, Calif. Dec. 10, 1972 32°56'N 118°24'W 16' ott. tr. 1121-1137m R/V Agassiz P. Jumars
- E 1687 MV66-III-21 W.S.W. of Cortez Bank 32°04'N 120°30'W 40' ott. tr. Dec. 11, 1966 3777-3792m C. Hubbs (SI066-547)
- E 1724 MV65-I-57 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°35'N 110°12'W 2889-2505m 6' Sigsbee tr. June 29, 1965 R/V Horizon C. Hubbs
- E 1746 MV67-II-22 W. of Pioneer Seamount 37°18'N 123°53'W 41' ott. tr. June 15, 1967 3592-3799m R/V T. Washington C. Hubbs
- E 1770 AG 69/06/1 Sta. 2 dredge-2 off S. Calif. 32°21'N 119°36.5'W chain dredge 914-1061m June 20, 1969 R/V Agassiz Allison, Winterer
- E 1773 MV66-II-4 off Eureka, Calif. May 22, 1966 40°30.5'N 125°45.2'W 16' ott. tr. 2999-3017m R. Wisner (SI066-52)
- E 1791 Sta. 16 Catalina Basin, Calif. Dec. 10, 1972 32°20'N 118°17'W IKMT 1097m R/V Agassiz R. Hessler
- E 1817 M-15 OT-11 off Pta. Piedras Blancas, Calif. 35°28'N 121°50'W 25' ott. tr. 1189-1170m Mar. 31, 1974 R/V Agassiz T. Matsui
- E 1858 H51-148 San Diego Trough 32°44'N 117°40'W April 20, 1951 1006m 10' midwater trawl Al Allanson
- E 1860 MV65-III-12 Basin N.W. of Sixty Mile Bank 32°15.6'N 118°26.4'W Sept. 23, 1965 1573-1836m 10' IKMT R/V Agassiz C. Hubbs
- E 1944 W. of Pt. La Jolla, Calif. 282m Jan. 29, 1973 R/V Oconostota A. Flechsig
- E 1966 MV65-I-26 off Bahia San Cristobal, Baja Calif., Norte, Mexico 27°08'N 115°10'W 4085-4096m 10' IKMT June 21, 1965 R/V Horizon C. Hubbs (SI065-209)
- E 1999 MV65-III-14 N.W. of 60 mi. Bank 32°17'N 118°33'W 10' IKMT Dec. 24, 1965 1615-1664m R/V Agassiz C. Hubbs, W. Newman
- E 2020 Oconostota trawl #9 San Clemente Basin, Calif. 32°25.8'N 117°51'W Sept. 5, 1974 1596-1600m 16' ott. tr. R/V Oconostota J. Siebenaller
- E 2023 M-8, Sta. 5 off San Diego, Calif. 32°33'N 118°06'W 40' ott. tr. Nov. 3, 1971 1829m R/V Agassiz T. Matsui (SI071-202)
- E 2024 Oconostota trawl #8 San Clemente Basin, Calif. 32°27.8'N 117°53'W 16' ott. tr. 1527-1545m Sept. 5, 1974 R/V Oconostota J.F. Siebenaller
- E 2029 MV71-I-44 off Rio San Vicente, Baja Calif., Norte, Mex. 31°18'N 117°23'W May 30, 1971 1984-1957m 6' Sigsbee tr. R/V Agassiz C. Hubbs, S. Luke
- E 2033 MV71-I-43 off N.W. Baja Calif., Norte, Mex. 31°25'N 117°45'W 6' Sigsbee tr. May 29, 1971 2001-2025m R/V Agassiz C. Hubbs, S. Luke
- E 2036 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 10' IKMT 1157-1454m R/V Agassiz C. Hubbs, S. Luke
- E 2043 R-3 San Diego Trough Oct. 26, 1970 32°24'N 117°29'W 25' ott. tr. 1244-1259m R/V Agassiz F. Rokop, S. Luke
- E 2091 MET Sta. 133 W. of Patton Escarpment 32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981 3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 2119 MV71-I-62 San Diego Trough 32°27'N 117°29'W 25' ott. tr. 1235m June 2, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2166 MV66-III-7 W. of Bahia Descanso, Baja Calif., Norte, Mex. 32°04'N 117°13'W 1332-1244m 40' ott. tr. Dec. 8, 1966 C. Hubbs (SI066-537)
- E 2189 TO-58-2, D-5 off Salina Cruz, Oaxaca, Mexico Nov. 19, 1958 3539-3610m R. Parker, R. Wisner
- E 2193 MET Sta. 109 Catalina Basin, Calif. 33°11'N 118°30'W 40' ott. tr. Jan. 31, 1981 1198-1234m R/V N. Horizon K. Smith, S. Luke
- E 2717 Oconostota trawl #2 San Diego Trough 32°34'N 117°31'W Sept. 3, 1974 1188-1194m 16' ott. tr. J.F. Siebenaller
- Amphiura serpentina Lutken & Mortensen
- E 2034 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 10' IKMT 1157-1454m R/V Agassiz C. Hubbs, S. Luke
- Amphiura cf. serpentina Lutken & Mortensen
- E 250 MV68-I-50 S. of Isle San Pedro, Mex. 27°40.0'N 111°22.6'W-27°38.1'N 111°20.1'W 931-952m 40' otter trawl Jan. 16, 1968 R/V T. Washington coll. C. Hubbs
- Amphiura sp.
- E 1708 MV70-III-8 W. of Patton Escarpment 31°35'N 120°18.3'W 25' ott. tr. Mar. 23, 1970 3916-3950m R/V Melville S. Luke
- E 1785 SnaFu SI080-10 off San Diego, Calif. 32°40.2'N 117°21.6'W 25' ott. tr. #3 201m Feb. 29, 1980 R/V N. Horizon R. Rosenblatt

- E 1863 VS-54 Vermillion Sea Exped. N. of Islas Tres Marias, Mex. 22°06'N 106°29'W 730m May 18, 1959 S.F. Baird (SI075-568) (Cal-Cofi 1606.35)
- E 1961 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1968 A-27 Afterthot II off Encinitas, Calif. 33°N 117°34.4'W 25' ott. tr. May 9, 1975 750m R/V Agassiz J.F. Siebenaller
- E 1985 M-15 OT-6 off San Onofre, Calif. Mar. 29, 1974 33°16'N 117°31'W 25' ott. tr. 54m R/V Agassiz T. Matsui
- E 2027 MV66-I-6 off N.W. Baja Calif., Norte, Mex. 31°05'N 118°W 40' ott. tr. Mar. 31, 1966 1463-1728m R/V Agassiz C. Hubbs
- E 2083 W. of Pt. La Jolla, Calif. 282m Jan. 29, 1973 R/V Oconostota A. Flechsig
- E 2092 MET Sta. 133 W. of Patton Escarpment 32°25'N 120°40'W 40' ott. tr. 3689-3632m Feb. 7, 1981 R/V N. Horizon K. Smith, S. Luke
- E 2161 Monsoon 77-D S. of New Zealand 49°31'S 170°32'E Rook dredge 583m Feb. 11, 1961 Sta. VI-8

Amphichondrius granulatus Nielsen

- E 1978 M-15 OT-15 off Morro Bay, Calif. Apr. 2, 1974 35°10'N 121°02'W 25' ott. tr. 99m R/V Agassiz T. Matsui
- E 1993 M-15 OT-17 Pt. Sal, Calif. Apr. 2, 1974 34°53'N 120°49'W 25' ott. tr. 132m R/V Agassiz T. Matsui

Amphichondrius laevis Ziesenhenn

- E 760 H51-18 S. side of Bahia Todos Santos, Baja Calif. Norte ca. 31°45'N 116°40'W 70-59m Feb. 2, 1951 coll. C. Hubbs on 'Orca'
- E 1951 Baja 69-11B off Bahia Asuncion, Baja Calif., Sur, Mexico 27°01'N 114°21.1'W 201m dredge Feb. 23, 1969 R/V Oconostota
- E 2047 MV73-I-12 Bahia Chamela, Jalisco, Mex. 19°34'N 105°11'W Apr. 2, 1973 40' ott. tr. 66-71m R/V Agassiz C. Hubbs, S. Luke

Amphiodia digitata Nielsen

- E 1784 SnaFu SI080-10 off San Diego, Calif. 32°40.2'N 117°21.6'W 25' ott. tr. #3 201m Feb. 29, 1980 R/V N. Horizon R. Rosenblatt
- E 2009 off Pt. La Jolla, Calif. ca. 6 mi. West 229m Jan. 29, 1973 R/V Oconostota A. Flechsig
- E 2016 Oconostota Sta. 3 off La Jolla, Calif. 32°52'N 117°18'W Van Veengrab ca. 155m Nov. 6, 1969 F. Rokop, S. Luke
- E 2048 W. of Pt. La Jolla, Calif. Jan. 28, 1965 16' ott. tr. #1 101-183m Fager

Amphiodia occidentalis (Lyman)

- E 2050 Point Loma, San Diego, Calif. silt bottom July 18, 1963 62m

Amphiodia urtica (Lyman)

- E 212 N.W. of La Jolla, Calif. 183-366m June 19, 1908
- E 2040 H51-18 N. side of Pta. Banda, Baja Calif., Norte, Mex. ca. 31°45'N 116°40'W 70-59m Feb. 2, 1951 'Orca' C. Hubbs
- E 2042 Oconostota Sta. 1 off La Jolla, Calif. 32°52.2'N 117°17.4'W Nov. 4, 1969 73m Van Veengrab F. Rokop, S. Luke

Amphiodia sp.

- E 566 M52-8 off Tijuana River Mouth 32°31'N 117°12'W 38m Feb. 26, 1952 Deepwater dredge coll. J. Isaacs R/V Horizon
- E 1971 H48-215-222 S. Coronado Is., Baja Calif., Norte, Mex. 32°23'N 117°10'W 15-55m pipe stem dredge Aug. 11, 1948 'E.W. Scripps' C. Hubbs
- E 2011 H51-18 N. side of Pta. Banda, Bahia Todos Santos, Baja Calif., Norte, Mexico ca. 31°45'N 116°40'W Feb. 2, 1951 70-59m 'Orca' C. Hubbs
- E 2049 W. of Pt. La Jolla, Calif. Jan. 28, 1965 16' ott. tr. #1 101-183m Fager

Amphipholis elevata Nielsen

- E 559 H52-7 off mouth of Tijuana River 32°33'N 117°12'W deep diving dredge 36m Feb. 26-27, 1952 coll. J. Isaacs

Amphipholis pugetana (Lyman)

- E 337 Top of Coronado Bank, due W. of Silver Strand, San Diego, Calif. Jan. 21, 1965 +165m Boyd dredge coll. Fager ST-908
- E 711 Haul 3181 off San Diego, Calif. 32°28.5'N 117°15.3'W 55m Feb. 10, 1912 coll. "Agassiz"
- E 951 SI062-522 off Bahia San Quintin, Baja Calif., Norte 30°13'N 116°05'W 183m 16' otter trawl Apr. 1, 1962 B6203-18 Perkins
- E 1580 Diving Saucer #345 off San Diego, Calif. April 17, 1965 Art Flechsig 110-200m

Amphipholis squamata (delle Chaije)

- E 328 Straight off W. of Pt. La Jolla, San Diego, Calif. Jan. 28, 1965 16' otter trawl #1 101-183m coll. Fager ST-908
- E 1980 H51-27 Bahia Todos Santos, Baja Calif., Norte, Mex. ca. 31°45'N 116°40'W dredge 37m Feb. 5, 1951 'Orca' C. Hubbs

Amphipholis platydisca Nielsen

- E 2041 P-195-60 S. of Isla Tiburon, Gulf of Calif., Mex. 28°50.5'N 112°11.0'W Mar. 27, 1960 22m shell dredge

Amphipholis sp.

- E 1104 TEPF78-5 Golfo de Papagayo, Costa Rica 10°42.4'N 85°55'W Apr. 2, 1978 91-86m 16' otter trawl R/V A. Helix W. Newman, S. Luke
- E 1988 M-15 OT-9 Long Beach, Calif. 33°53.3'N 118°08'W Mar. 29, 1974 49m 40' ott. tr. R/V Agassiz T. Matsui
- E 2046 MV73-I-12 Bahia Chamela, Jalisco, Mex. 19°34'N 105°11'W Apr. 2, 1973 40' ott. tr. 66-71m R/V Agassiz C. Hubbs, S. Luke
- E 2066 La Jolla Cove Kelp Bed, La Jolla, Calif. 25-35 ft. on Macrocystis pyrifera July 4, 1958 R. Gerhhardt
- E 2069 HF4 La Jolla Cove Kelp Bed, La Jolla, Calif. 25-30 ft. on Macrocystis pyrifera June 23, 1958 R. Gerhhardt
- E 2073 SI057-187 Melpomene Cove, Isla Guadalupe, Baja Calif., Mex. 49-57m 28°52'N 118°16.9'W Oct. 28, 1957 15' Trynet 'Orca' C. Hubbs
- E 2079 SI054-222 S. of Isla Guadalupe, Baja Calif., Norte, Mex. Nov. 18, 1954 49-37m pipe dredge 'Orca' C. Hubbs
- E 2230 P-201-60 Gulf of Calif., Mexico 28°30.0'N 112°22.0'W Mar. 27, 1960 230m shell dredge R. Parker & Curray
- E 2515 Saucer Dive #335 ca. 9 mi. W. of Pt. Loma April 6, 1965 A. Flechsig 175m

Amphioplus hexacanthus Clark

E 2052 N.W. of La Jolla, Calif. 183-366m June 19, 1908

Amphioplus sp.

E 2051 P-218-60 off San Diego, Calif. 32°51.2'N 117°16.3'W May 30, 1960 231m Petersen grab, silty sand, R. Parker

cf. Ophiocnida hispida (LeConte)

E 1923 P-184-60 S. of Pta. Kino, Sonora, Mexico 28°26.0'N 111°55.4'W 15m shell dredge Mar. 25 1960 R. Parker

Dougaloplus amphacantha (McClendon)

E 213 N.W. of La Jolla, Calif. 183-366m June 19, 1908

Dougaloplus notacantha (Lutken & Mortensen)

E 2138 R-9 Tanner Basin 25' ott. tr. 32°51'N 119°33'W Oct. 28, 1970 1397m R/V Agassiz F. Rokop, S. Luke

## Gen. Indet.

- E 201 Redondo Canyon, Redondo, Calif. 33°18.2'N 118°30.2'W May, 1938 485-229m 'E.W. Scripps' W.P. Shepard
- E 334 Loma Sea Valley, due W. of Pt. Loma 326-351m otter trawl #1 Jan. 21, 1965 coll. Fager ST-908
- E 549 MV68-I-34 Bahia Santa Inez, Baja Calif., Sur, Mex. 26°56'N 111°55.4'W 42-49m ott. tr. Jan. 14, 1968 R/V T. Washington C. Hubbs
- E 731 SB-39 beach 5 mi. N. of Guaymas, Sonora, Mexico ca. 27°55'N 111°W intertidal April 10, 1960 coll. A. Flechsig on 'Orca'
- E 912 SB#27-35 Bahia de Los Angeles, Baja Calif., Norte core sample 9-55 ft. Apr. 7-9, 1960 M/V 'Orca' A. Flechsig
- E 1066 La Jolla Cove Kelp Bed, Calif. July 18, 1958 30-35 ft. on Macrocystis pyrifera R. Gerhlaridi
- E 1453 Bahia Concepcion, Baja Calif., Sur, Mexico 0-15 ft. snorkel, sand & rock July 19, 1980 S. Luke
- E 2010 off Pt. La Jolla, Calif. ca. 6mi West 229m Jan. 29, 1973 R/V Oconostota A. Flechsig
- E 2053 MV71-I-31 between Isla San Benitos and Isla Cedros, Baja Calif., Norte, Mex. 28°17.4'N 115°28'W 6' Sigsbee tr. 329-311m May 27, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2082 TEPE70-7 Isla Jicaron, Panama 07°15.7'N 81°45.3'W rock dredge 64m Sept. 16, 1970 R/V A. Helix W. Newman, S. Luke
- E 2084 W. of Pt. La Jolla, Calif. 282m Jan. 29, 1973 R/V Oconostota A. Flechsig
- E 2101 MV71-I-2 Isla Guadalupe, Baja Calif., Mex. 28°52.0'N 118°15'W 6' Sigsbee tr. 102-99m May 18, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2111 MV72-II-32 off Pta. San Juan, Peru 15°47'S 76°07'W May 10, 1972 3475m 25' ott. tr. R/V T. Washington S. Luke
- E 2144 University of Miami Marine Laboratory Beach, Miami Beach, Fla. 2-4 ft. May 2, 1958 C. Limbaugh
- E 2174 Monsoon (P-234-60) Torres Strait 10°11.0'S 139°31.0'E Oct. 12, 1960 51m rock dredge Rowland
- E 2190 TO-58-2, D-5 off Salina Cruz, Oaxaca, Mexico Nov. 19, 1958 3539-3610m R. Parker, R. Wisner
- E 2191 TO-58-2, D-5 off Salina Cruz, Oaxaca, Mexico Nov. 19, 1958 3539-3610m R. Parker, R. Wisner

- E 2192 TO-58-2, D-5 off Salina Cruz, Oaxaca, Mexico Nov. 19, 1958 3539-3610m R. Parker, R. Wisner
- E 2203 P-198-60 off Bahia Kino, Sonora, Mexico 28°41.6'N 112°11.0'W Mar. 27, 1960 92m shell dredge R. Parker
- E 2222 P-196-60 Gulf of Calif., Mexico 28°45.8'N 112°04.4'W Mar. 27, 1960 24m shell dredge Curray & R. Parker
- E 2588 MV71-I-32 E. of Islas San Benitos, Baja Calif., Norte, Mex. 28°18'N 115°23.5'W 265-247m 6' Sigsbee Tr. May 27, 1971 R/V Agassiz C. Hubbs, S. Luke

## Family Ophiotrichidae

Ophiotrix mirabilis (Verrill)

E 1828 TEPE78-23 Bahia Chamela, Jalisco, Mex. 19°35'N 105°08.5'W SCUBA 15-20 ft. Apr. 12, 1978 R/V A. Helix W. Newman, S. Luke

Ophiotrix rudis Lyman

- E 588 Point Loma Lite, Point Loma, San Diego, Calif. May 26, 1966 coll. Taylor-Hoese
- E 659 'ECCE' P.A.-1 Pta. Abreojos, rocky point E. of Baja Calif., Sur, W. side of Bahia La Baliza, W. of Campo Media 26°44'N 113°35'W intertidal hand collection July 23, 1975 coll. Hemingway, Luke
- E 662 'ECCE' P.A.-3 rocky point E. of Pta. Abreojos Baja Calif., Sur, W. side of Bahia La Baliza W. of Campo Media 26°44'N 113°35'W upper mid-intertidal hand collection sandstone July 24, 1975 coll. Hemingway, Luke
- E 664 'ECCE' P.A.-2-B rocky point E. of Pta. Abreojos Baja Calif., Sur, W. side of Bahia La Baliza 26°44'N 113°35'W mid-tide zone hand collected July 24, 1975 coll. Hemingway, Luke
- E 665 'ECCE' P.A.-7 rocky point E. of Pta. Abreojos, Baja Calif., W. side of Bahia La Baliza, mid-tide zone 26°44'N 113°35'W July 25, 1975 coll. Hemingway, Luke
- E 667 'ECCE' P.A.-9 rocky point E. of Pta. Abreojos, Baja Calif., Sur, W. side of Bahia La Baliza, tide pools MLLW July 25, 1975 26°44'N 113°35'W coll. Hemingway, Luke
- E 669 'ECCE' P.A.-10 rocky point E. of Pta. Abreojos, Baja Calif. W. side of Bahia La Baliza 26°44'N 113°35'W mid-intertidal July 25, 1975 coll. Hemingway, Luke
- E 802 Bahia Tortugas, Baja Calif., Sur, Mex. ca. 27°41'N 114°53'W Nov. 1959
- E 1119 TEPE78-15 Isla Sacrificios, Oaxaca, Mex. 15°40.8'N 96°14.6'W Apr. 7, 1978 40 ft. SCUBA R/V A. Helix W. Newman, S. Luke
- E 1822 off Pt. Loma, San Diego, Calif. 64m Aug. 12, 1916
- E 1930 Lagoon inside Pta. Tosco, Isla Sta. Margarita, Baja Calif., Sur, Mexico Feb. 2, 1964 15 ft. sponge fauna
- E 2071 HF-6 La Jolla Cove Kelp Bed, La Jolla, Calif. July 18, 1958 30-35 ft. on Macrocystis pyrifera R. Gerhlaridi
- E 2074 Bird Rock, La Jolla, Calif., intertidal Feb. 4, 1970 R. Bauer

Ophiotrix spiculata LeConte

- E 192 Pacific Grove, Calif. Feb. 1921 M. Johnson
- E 229 off Scripps Pier 3/4 mi. to Los Penasquitos Lagoon Valley, La Jolla, Calif. 62-31m July 14, 1916 trawl
- E 231 off Pt. Loma, San Diego, Calif. 64m Aug. 12, 1916

- E 557 H48-314 S. Coronado Is. on E. side about midway between saddle and S. edge 18m small mollusk dredge Dec. 5, 1948 'Orca' coll. J.W. Sefton
- E 682 'ECCE' LM-26 Laguna Manuela, Point, Baja Calif. 28°13.5'N 114°11'W rocky high intertidal Aug. 4, 1975 Hemingway, Luke
- E 692 'ECCE' SR-34 Pta. Santa Rosalia, Baja Calif. 28°40'N 114°14'W rocky intertidal Aug. 6, 1975 coll. Hemingway, Luke
- E 699 'ECCE' Pta. Pequeña, Baja Calif., Sur, Mexico 26°14'N 112°28.5'W rocky intertidal July 20, 1975 coll. Hemingway, Luke
- E 702 'ECCE' PB-38 Pta. Baja, Baja Calif. 29°57'N 115°48'W mid intertidal-rocky Aug. 9, 1975 coll. Hemingway, Luke
- E 704 H51-32 S. side of Bahia Todos Santos, Baja Calif. ca. 31°45'N 116°35'W pipe dredge 27-46m Feb. 6, 1951 coll. C. Hubbs on 'Orca'
- E 720 SB-51 Tombola at S.W. tip of Isla San Jose ca. 24°45'N 110°35'W intertidal April 15, 1960 coll. A. Flechsig on 'Orca'
- E 751 H51-27 Bahia Todos Santos, Baja Calif. Norte ca. 31°45'N 116°40'W 37m dredge Feb. 5, 1951 coll. C. Hubbs on 'Orca'
- E 770 Farnsworth Bank, Catalina Is., Calif. 80-90 ft. SCUBA Dec. 14, 1969 J. McCosker
- E 984 SI054-222 S. of Isla Guadalupe, Baja Calif. Norte pipe dredge 49-37m Nov. 18, 1954 M/V Orca C. Hubbs
- E 1061 6-8 mi. W. of Scripps Inst. of Ocean., La Jolla, Calif. on Macrocystis floating on surface, dip net, skiff Sept. 7, 1976 G. Boehlert
- E 1064 Holdfast #1 La Jolla Kelp beds, Calif. Oct. 10, 1957 35 ft. on Macrocystis pyrifera holdfast R. Gerhlaridi
- E 1065 La Jolla Cove Kelp bed, Calif. July 4, 1958 25-35 ft. on Macrocystis pyrifera R. Gerhlaridi
- E 1067 La Jolla Cove Kelp bed, Calif. June 23, 1958 25-30 ft. on Macrocystis pyrifera R. Gerhlaridi
- E 1068 Dolphin 76, Sta. 2 Lobos Rocks, S. end of Isla San Marcos, Golfo de Calif. ca. 27°15'N 112°10'W 0-15 ft. rotenone May 6, 1976 R. Rosenblatt (SI076-273)
- E 1838 Kelp holdfast - La Jolla, Calif. Dec. 4, 1915 H.O. Falk, P.S. Barnhart
- E 1844 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner
- E 1870 VSS-104 Vermillion Sea Exped. Bay E. side of Angel de La Guarda, Mex. Apr. 10, 1959 ca. 29°17'N 113°21'W shell dredge 73m R. Parker (P71-59)
- E 1878 P-195-60 S. of Isla Tiburón, Gulf of Calif., Mex. 28°50.5'N 112°11.0'W Mar. 27, 1960 22m shell dredge
- E 1881 Pt. Loma, San Diego, Calif. 25-80 ft. SCUBA Nov. 7, 1957 Boyd, Clark, Fager, Limbaugh, Gherlardi
- E 1889 P-222-60 off Tijuana River, San Diego, Calif. 32°33.4'N 117°13.2'W 31m deep diving dredge Mar. 8, 1960
- E 1907 Bahia Concepcion, Baja Calif., Sur, Mexico ca. 26°45'N 111°55'W July 19, 1980 0-15 ft. snorkel S. Luke
- E 1918 SI057-187 Melpomene Cove, Isla Guadalupe, Baja Calif., Mexico 28°52'N 118°16.9'W 49-57m 15' Try net Oct. 28, 1957 'Orca' C. Hubbs
- E 1920 Bahia Tortugas, Baja Calif., Sur, Mexico ca. 27°41'N 114°53'W Nov. 20, 1959 stipe holdfast #21
- E 1924 Miasion Bay, San Diego, Calif. intertidal on mussels April, 1969 R. Kiwala, T. Scanland
- E 1925 from holdfast of Elk Kelp, Pelagophycus porra, La Jolla, Calif. Nov. 23, 1915
- E 1931 SB-39 Sea Breeze Exped. Beach 5 mi. N. of Guaymas, Sonora, Mex. ca. 27°55'N 111°0'W intertidal diving April 10-11, 1960 'Orca' A. Flechsig, Clutter
- E 1936 MV73-I-1 La Paz Pier, La Paz, Baja Calif., Sur, Mex. 24°11'46"N 110°18'07"S on pier pilings March 29, 1973 R/V Agassiz C. Hubbs, S. Luke
- E 1938 MV71-I-1 Isla de Guadalupe, Baja Calif. Mex. 28°51.5'N 118°16.3'W 6' Sigsbee trawl 95-81m May 18, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 1942 Palomar St. Reef, La Jolla, Calif. intertidal Jan. 8, 1974 S. Luke
- E 1969 H48-215-222 S. Coronado Is., Baja Calif., Norte, Mex. 32°23'N 117°10'W 15-55m pipe stem dredge Aug. 11, 1948 'E.W. Scripps' C. Hubbs
- E 1989 M-15 OT-9 Long Beach, Calif. 33°53.3'N 118°08'W Mar. 29, 1974 49m 40' ott. tr. R/V Agassiz T. Matsui
- E 2067 Due West of Scripps Inst. of Ocean. Pier, La Jolla, Calif. July 14, 1916 ca. 62m trawling
- E 2070 HF-6 La Jolla Cove Kelp bed, La Jolla, Calif. July 18, 1958 30-35 ft. on Macrocystis pyrifera R. Gerhlaridi
- E 2072 H49-167 off S. end of S. Coronado Is., Baja Calif., Norte, Mex. ca. 32°24.2'N 117°12'W 27-31m CAS pipe dredge Nov. 27, 1949 'Orca' C. Hubbs
- E 2075 M-15 OT-8 N. of Dana Pt., Calif. 33°32.5'N 117°48.5'W March 29, 1974 53-48m 40' ott. tr. R/V Agassiz T. Matsui
- E 2100 MV71-I-2 Isla Guadalupe, Baja Calif., Mex. 28°52.0'N 118°15'W 6' Sigsbee tr. 109-99m May 18, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2204 P-198-60 off Bahia Kino, Sonora, Mexico 28°41.6'N 112°11.0'W Mar. 27, 1960 92m shell dredge R. Parker
- E 2254 Los Arcos, Puerto Vallarta, Jalisco, Mexico 3-12 ft. reef collection May 26, 1959 R. Parker
- E 2658 E. of Bridge rock, La Jolla, Calif. 85 ft. under rocks Sept. 1964 T. Hopkins
- E 2700 SI048-232 Bahia Descanso, Baja Calif., Norte, Mex. ca. 32°20'N 117°05'W 18-24m pipe dredge Aug. 13, 1948 'E.W. Scripps' C. Hubbs

## OPHIUROIDEA

## Incertae Sedis

- E 203 Santa Marga Is., bay side July 27, 1947
- E 236 Japanyon (JYN) III-51 off Yokohama, Japan 34°54.30'N 139°43.40'E Dredge July 16, 1961 512m R/V Spencer F. Baird coll. Shepard
- E 255 Monsoon 71-D E. of New Zealand 43°10'S 175°15'E Rock Dredge 119m Jan. 29, 1961 coll. Russell SI061-150
- E 256 Monsoon 71-D E. of New Zealand 43°10'S 175°15'E Rock Dredge 119m Jan. 29, 1961 coll. Russell SI061-150
- E 811 Eniwetak Atoll, Marshall Is., rotenone & SCUBA 11°22.5'N 162°25'E 1972-1974 0-25 ft. R. Nolan (RSN)
- E 812 Eniwetak Atoll, Marshall Is., rotenone & SCUBA 11°22.5'N 162°25'E 1972-1974 0-25 ft. R. Nolan (RSN)

- E 845 STYX-7 MPB68095 Sta. 1 Hamilton Guyot  
18°27'N 179°17'W Sept. 5, 1968 ca. 1790m  
IKMT R/V Agassiz W. Newman
- E 847 STYX-7 MPE 68096 Sta. 1 Agassiz Guyot  
18°02'N 178°23'E Sept. 6, 1968 rock dredge  
1673-1975m R/V Agassiz W. Newman
- E 855 STYX-7 MPE 680921 Sta. 2 Kure Atoll 28°23'N  
178°22'W Sept. 21, 1968 55m rock dredge R/V  
Agassiz W. Newman
- E 857 CRS-302 Carmarsal W. of Ulul Is., Namonuito  
Atoll, Caroline Is. Feb. 12, 1967 70-25 ft.  
SCUBA R/V Horizon W. Newman
- E 910 SS-72, 6-DB S.W. of Isla Clarion 13°40.43'N  
122°18.4'W dredge box 4252m Feb. 13, 1972  
R/V Sea Scope
- E 913 SB#59-65 Santa Cruz Beach, 33 mi. N.W. of  
San Blas, Nayarit, Mex. 9-32 ft. grabs  
Apr. 21, 1960 M/V Orca A. Flechsig
- E 914 Seven Tow 128D S. of Hawaii 09°17.5'N  
158°38.3'W June 14, 1970 2121m (correc.)  
R/V T. Washington
- E 957 CIRCE Rodrigues Is., Indian Ocean 19°43'S  
63°30'E hand collection 12-15 ft. Montipora  
reef Aug. 29, 1968 Donovan
- E 1168 NAGA SS-II V362 61-252 Timor Sea 10°25.3'S  
128°28.0'E shell dredge 77m Apr. 20, 1961
- E 1195 NAGA S9A 60-1059 Gulf at Thailand  
11°33'25"N 100°53'30"E 7' Beam T. Dec. 11,  
1960 46m Cat. #52-01587
- E 1204 NAGA S1 59-0052 Gulf of Thailand 08°40'00"N  
102°18'30"E 40' Otter T. Oct. 24, 1959 70m  
cat. #52-00339
- E 1205 NAGA S3 60-0102 Gulf of Thailand 12°33'00"N  
100°44'00"E 6' Beam T. Jan. 19, 1960 27m  
cat. #52-00503
- E 1206 NAGA S3 60-0102 Gulf of Thailand 12°33'00"N  
100°44'00"E 6' Beam T. Jan. 19, 1960 27m  
cat. #52-00490
- E 1208 NAGA S3 60-0104 Gulf of Thailand 09°37'00"N  
100°21'00"E 6' Beam T. Jan. 20, 1960 26-31m  
cat. #52-00839
- E 1209 NAGA S3 60-0104 Gulf of Thailand 09°37'00"N  
100°21'00"E 6' Beam T. Jan. 20, 1960 26-31m  
cat. #52-00344
- E 1210 NAGA S3 60-0110 Gulf of Thailand 06°22'15"N  
102°14'00"E 6' Beam T. Jan. 22, 1960 27m  
cat. #52-00841
- E 1211 NAGA S3 60-0120 Gulf of Thailand 09°06'00"N  
104°14'00"E 2' Bio dredge Jan. 23, 1960 22m  
cat. #52-01401
- E 1212 NAGA S3 60-0120 Gulf of Thailand 09°06'00"N  
104°14'00"E 2' Bio dredge Jan. 23, 1960 22m  
cat. #52-00355
- E 1213 NAGA S3 60-0127 Gulf of Thailand 08°37'00"N  
102°21'30"E 40' Otter T. Jan. 24, 1960 73m  
cat. #52-00358
- E 1214 NAGA S3 60-0127 Gulf of Thailand 08°37'00"N  
102°21'30"E 40' Otter T. Jan. 24, 1960 73m  
cat. #52-00356
- E 1215 NAGA S3 60-0151 Gulf of Thailand 10°41'15"N  
103°03'00"E 6' Beam T. Jan. 27, 1960 25m  
cat. #52-00371
- E 1216 NAGA S3 60-0175 Gulf of Thailand 12°04'30"N  
100°46'00"E 6' Beam T. Jan. 30, 1960 27m  
cat. #52-00374
- E 1217 NAGA S4 60-0264 Gulf of Thailand 10°31'30"N  
109°25'00"E 10' Beam T. Mar. 9, 1960 183m  
cat. #52-00851
- E 1218 NAGA S4 60-0212 S. China Sea 15°40'00"N  
109°22.9'E 10' Beam T. Feb. 27, 1960 110-  
198m cat. #53-00466
- E 1220 NAGA S4 60-0212 S. China Sea 15°40'00"N  
109°22.9'E 10' Beam T. Feb. 27, 1960 110-  
198m cat. #50-00453
- E 1221 NAGA S4 60-0216 S. China Sea 15°40'00"N  
109°43'30"E 10' Beam T. Feb. 28, 1960 479m  
cat. #52-00230
- E 1222 NAGA S4 60-0232 S. China Sea 13°26'15"N  
109°31'10"E 10' Beam T. Mar. 3, 1960 141m  
cat. #52-00502
- E 1224 NAGA S4 60-0260 S. China Sea 10°23.8'N  
108°53.2'E 2' dredge Mar. 10, 1960 49m cat.  
#52-01416
- E 1225 NAGA S5 60-0363 Gulf of Thailand 08°39'45"N  
100°14'45"E 6' Beam T. Apr. 27, 1960 17m  
cat. #52-00854
- E 1226 NAGA S8 60-0711 S. China Sea 09°03'00"N  
106°26'00"E 2.5' dredge Sept. 8, 1960 24m  
cat. #52-00429
- E 1227 NAGA S8 60-0777 S. China Sea 12°09'40"N  
109°24'00"E 6' Beam T. Sept. 20, 1960 93m  
cat. #52-00414
- E 1228 NAGA S8 60-0828 S. China Sea 05°28'50"N  
106°37'40"E 2.5' dredge Oct. 4, 1960 55m  
cat. #52-00419
- E 1229 NAGA S8 60-0833 S. China Sea 06°14'50"N  
105°47'10"E 6' Beam T. Oct. 5, 1960 49m  
cat. #52-00423
- E 1230 NAGA S9 60-0845 Gulf of Thailand 12°54'30"N  
100°26'30"E 6' Beam T. Nov. 9, 1960 20m  
cat. #52-01497
- E 1231 NAGA S9 60-0845 Gulf of Thailand 12°54'30"N  
100°26'30"E 6' Beam T. Nov. 9, 1960 20m  
cat. #52-00255
- E 1233 NAGA S9 60-0845 Gulf of Thailand 12°54'30"N  
100°26'30"E 6' Beam T. Nov. 9, 1960 20m  
cat. #52-01491
- E 1234 NAGA S9 60-0853 Gulf of Thailand 10°04'10"N  
100°19'10"E 6' Beam Nov. 10, 1960 57m cat.  
#52-00928
- E 1235 NAGA S9 60-0895 Gulf of Thailand 10°12'48"N  
103°32'30"E 6' Beam T. Nov. 13, 1960 26m  
cat. #52-01099
- E 1236 NAGA S9 60-0895 Gulf of Thailand 10°12'48"N  
103°32'30"E 6' Beam T. Nov. 13, 1960 26m  
cat. #52-01462
- E 1237 NAGA S9 60-0895 Gulf of Thailand 10°12'48"N  
103°32'30"E 6' Beam T. Nov. 13, 1960 26m  
cat. #52-01328
- E 1238 NAGA S9 60-0895 Gulf of Thailand 10°12'48"N  
103°32'30"E 6' Beam T. Nov. 13, 1960 26m  
cat. #52-01327
- E 1239 NAGA S9A 60-1046 Gulf of Thailand  
11°25'00"N 102°12'12"E 7' Beam T. Dec. 10,  
1960 cat. 60m #52-00788
- E 1240 NAGA S9A 60-1049 Gulf of Thailand  
11°36'42"N 102°26'00"E 7' Beam T. Dec. 10,  
1960 33m cat. #52-01570
- E 1241 NAGA S9A 60-1059 Gulf of Thailand  
11°33'25"N 100°53'30"E 7' Beam T. Dec. 11,  
1960 46m cat. #52-01348
- E 1242 NAGA S9A 60-1062 Gulf of Thailand  
11°20'48"N 100°14'50"E 16' Otter T.  
Dec. 11, 1960 46m cat. #52-01525
- E 1243 NAGA S9A 60-1071 Gulf of Thailand  
11°51'15"N 99°54'45"E 16' Otter T. Dec. 12,  
1960 20m cat. #52-01535
- E 1244 NAGA S9A 60-1077 Gulf of Thailand  
12°21'18"N 101°31'55"E 16' Otter T.  
Dec. 12, 1960 31m cat. #52-01631
- E 1245 NAGA S9A 60-1077 Gulf of Thailand  
12°21'18"N 101°31'55"E 16' Otter T.  
Dec. 12, 1960 31m cat. #52-01612
- E 1246 NAGA S9A 60-1094 Gulf of Thailand  
12°16'45"N 100°07'15"E 16' Otter T.  
Dec. 13, 1960 24m cat. #52-00905
- E 1247 NAGA S9A 60-1094 Gulf of Thailand  
12°16'45"N 100°07'15"E 16' Otter T.  
Dec. 13, 1960 24m cat. #52-00908



- E 1248 NAGA S9A 60-1103 Gulf of Thailand 13°05'50"N 100°26'10"E 16' Otter T. Dec. 13, 1960 20m cat. #52-01058
- E 1249 NAGA S9A 60-1106 Gulf of Thailand 13°21'45"N 100°32'43"E 16' Otter T. Dec. 14, 1960 11m cat. #52-00545
- E 1250 NAGA S9A 60-1106 Gulf of Thailand 13°21'45"N 100°32'43"E 16' Otter T. Dec. 14, 1960 11m cat. #52-01060
- E 1251 NAGA S10 61-0113 Gulf of Thailand 10°00'00"N 103°50'15"E 16' Otter T. Feb. 10, 1961 20m cat. #52-00448
- E 1252 NAGA S10 61-0113 Gulf of Thailand 10°00'00"N 103°50'15"E 16' Otter T. Feb. 10, 1961 20m cat. #52-01306
- E 1253 NAGA S10 61-0113 Gulf of Thailand 10°00'00"N 103°50'15"E 16' Otter T. Feb. 10, 1961 20m cat. #52-00449
- E 1255 NAGA SSII 61-0248 Timor Sea 10°55.4'S 128°54.8'E shell dredge Apr. 19, 1961 40m cat. #52-01234
- E 1256 NAGA SSII 61-0248 Timor Sea 10°55.4'S 128°54.8'E shell dredge Apr. 19, 1961 40m cat. #52-00877
- E 1263 NAGA S4 60-0212 S. China Sea 15°40'00"N 109°22.9'E 10' Beam T. Feb. 27, 1960 110-198m cat. #52-00464
- E 1265 NAGA S4 60-0216 S. China Sea 15°40'00"N 109°43'30"E 10' Beam T. Feb. 28, 1960 479m cat. #52-00229
- E 1273 NAGA S10 61-0113 Gulf of Thailand 10°00'00"N 103°50'15"E 16' Otter T. Feb. 10, 1961 20m cat. #52-0309
- E 1304 NAGA S10 61-0246 Timor Sea 10°55.8'S 129°15.5'E shell dredge Apr. 19, 1961 27m cat. # N/A
- E 1314 NAGA S3 #11 Gulf of Thailand 08°37'N 102°20'E Otter T. Jan. 24, 1960 73m
- E 1326 NAGA S3 60-0137 Gulf of Thailand 08°25'30"N 100°44'40"E 6' Beam T. Jan. 26, 1960 27m cat. #52-00362
- E 1335 NAGA S4 60-0219 S. China Sea 15°39'00"N 111°51'00"E 10' Beam T. Feb. 29, 1960 1264m cat. #52-00381
- E 1348 NAGA S7 60-0563 Gulf of Thailand 12°59'30"N 100°35'15"E TROLL Aug. 2, 1960 24m cat. #52-00222
- E 1354 NAGA S8 60-0711 S. China Sea 09°03'00"N 106°26'00"E 2.5' dredge Sept. 8, 1960 22m cat. #52-00403
- E 1375 NAGA S9A 60-1097 Gulf of Thailand 12°39'25"N 100°15'45"E 16' Otter T. Dec. 13, 1960 28m cat. #52-00441
- E 1388 NAGA S11A 61-0226 Timor Sea 11°00.0'S 128°33.8'E chain dredge Apr. 12, 1961 342m CN1029
- E 1392 NAGA S10 61-0113 Gulf of Thailand 10°00'00"N 103°50'15"E 16' Otter T. Feb. 10, 1961 21m CN837d
- E 1394 NAGA S8 60-0833 Nhatrang Bay 06°14'50"N 105°47'10"E 6' Beam T. Oct. 5, 1960 49m cat. #52-00424
- E 1395 NAGA SSII V-356 61-0246 Timor Sea 10°56.3'S 129°25.9'E shell dredge Apr. 19, 1961 71m CN1050
- E 1396 NAGA SSII V-356 61-0246 Timor Sea 10°56.3'S 129°25.9'E shell dredge Apr. 19, 1961 71m CN1050
- E 1398 NAGA S11A 61-0245 Timor Sea 10°56'24"S 126°36'18"E shell dredge Apr. 19, 1961 28m CN1048a
- E 1399 NAGA S11A 61-0245 Timor Sea 10°56'24"S 126°36'18"E shell dredge Apr. 19, 1961 28m CN1048a
- E 1401 NAGA SSII V-364 61-0253 Timor Sea 10°15.9'S 128°44.3'E shell dredge Apr. 20, 1961 56m CN1057a
- E 1402 NAGA SSII V-364 61-0253 Timor Sea 10°15.9'S 128°44.3'E shell dredge Apr. 20, 1961 56m CN1057a
- E 1403 NAGA SSII V-364 61-0253 Timor Sea 10°15.9'S 128°44.3'E shell dredge Apr. 20, 1961 56m CN1057a
- E 1406 NAGA SSII V-356 61-0250 Timor Sea 10°51.0'S 128°42.0'E shell dredge Apr. 19, 1961 34m CN1054
- E 1410 NAGA S9A 60-1062 Gulf of Thailand 11°21'48"N 100°14'50"E 16' Otter T. Dec. 11, 1960 37m CN611a
- E 1425 NAGA S9A 60-1059 Gulf of Thailand 11°33'25"N 100°53'30"E 7' Beam T. Dec. 11, 1960 20m cat. #28-01355
- E 1436 Sta. 2 Clipperton Is., reef flat at N. end 10°18'N 109°13'W intertidal mar. 15, 1980 J. Cousteau, S. Luke
- E 1483 Ferrar Glacier, Antarctica, 90-120 ft. SCUBA Jan. 7, 1976 O'Connor
- E 1488 New Harbor, Antarctica, 130 ft. SCUBA Dec. 3, 1974
- E 1492 New Harbor, Antarctica, 100 ft. SCUBA Dec. 3, 1974
- E 1496 Staten Is., Vancouver Is., Argentina May 7, 1973 SCUBA 20-45 ft.
- E 1500 Staten Is., Vancouver Is., Argentina May 4, 1973 10m
- E 1706 MV70-III-8 W. of Patton Escarpment 31°35'N 120°18.3'W 25' ott. tr. Mar. 23, 1970 3916-3950m R/V Melville S. Luke
- E 1780 Monsoon Exped. P-239-60 N.E. of Timor, top of guyot 08°31'S 128°22.8'E 1618-1666m rock dredge Oct. 24, 1960 Rowland
- E 1783 R-3 San Diego Trough, Calif. Oct. 26, 1970 32°24'N 117°29'W 25' ott. tr. 1243-1258m R/V Agassiz F. Rokop, S. Luke
- E 1787 MV70-III-1 W. of Patton Escarpment 31°25'N 120°14'W IKMT Mar. 21, 1970 3950-3880m R/V Melville S. Luke
- E 1946 TP-66 Trans. Pac. Sta. 4 Kyushu, Japan 33°N 134°55'E dredge 1298m Oct. 23, 1953 T.J. Walker (SI053-366)
- E 1955 Holt Exped. Sta. #10 Bahia San Quintin, Baja Calif., Norte, Mex. 30°17'N 116°04'W 118m 10' ott. tr. Dec. 4, 1960 C. Boyd, D. Dockins (P-267-60) (SI060-468)
- E 2006 MV66-I-6 off N.W. Baja Calif., Norte, Mex. 31°05'N 118°W 40' ott. tr. Mar. 31, 1966 1463-1728m R/V Agassiz C. Hubbs
- E 2140 TEPE70-30 San Blas Is., Panama 09°35'54"N 78°46'58"W Sept. 27, 1970 0-60 ft. SCUBA coral reef W. Newman, S. Luke
- E 2141 Onotua Atoll - outer reef flat - low tide 1000 hours windward side (N.E.) R/V Spencer F. Baird K. Macdonald
- E 2142 Capricorn 76 dredge 70m 20°36'S 174°57.5'W Dec. 27, 1952
- E 2143 J 418 off Freeport, (Texas?) Gulf of Mexico. June 6, 1956 42-53m rock dredge R. Parker
- E 2147 RED-81 N. of Sibutu Passage, S.W. of Pearl Bank, N.E. of Borneo, pipe dredge 559m Sept. 4, 1961 Cable Ship "Recorder"
- E 2149 Japanyon III-51 off Yokohama, Japan 34°54.30'N 139°43.40'E July 16, 1961 512m dredge R/V Spencer F. Baird, Shepard
- E 2152 Japanyon III-63 off Yokohama, Japan 34°56.7'N 140°12.2'E pipe dredge 1646-1020m July 20, 1961 R/V S.F. Baird Shepard

- E 2153 Monsoon Sta. VI-28 Rock dredge 101-D E. of New Zealand 49°42'S 178°52'E 274m Feb. 20, 1961 Russell, Menard
- E 2154 Lusiad LSD-H16 Seychelles 04°31'S 54°30'E dredge Oct. 19, 1962 R/V Horizon G. Shor
- E 2160 Monsoon 72-D off New Zealand 43°26'S 176°43'E Rock dredge 245m Jan. 29, 1961
- E 2170 RED-71 Recorder Exped., REC 14 Basilan Strait 06°50.1'N 122°19.6'E 64m Sept. 1, 1961 dredge
- E 2179 Japanyon (JYN) III-50 off Yokohama, Japan 34°53.5'N 139°44.25'E dredge 460m July 17, 1961 R/V S.F. Baird, Shepard
- E 2642 Monsoon Sta. VI-6 E. of New Zealand ca. 43°30'S 178°E rock dredge 75-D Jan. 31, 1961 0906-1153 Russell & Menard
- E 2793 Hutton Cliffs, McMurdo Sound, Antarctica 130 ft. coble bottom Dec. 5, 1974 P.K. Dayton

## Class ECHINOIDEA

## Subclass PERISCHOECHINOIDEA

## Order CIDAROIDA

## Family Cidaridae

Aporocidaris milleri (Agassiz)

- E 240 MV65-I-39 off Bahia Magdalena, Baja Calif. 24°37.5'N 113°29.0'W-24°21.3'N 113°12.5'W 3427-3621m 45' otter trawl June 25, 1965 R/V Horizon coll. C. Hubbs
- E 1593 MV65-I-38 Basin off Bahia Magdalena, Baja Calif., Sur, Mex. 24°35'N 113°25'W June 24, 1965 3563-3621m 6' Sigsbee tr. R/V Horizon C. Hubbs

Prionocidaris bispinosa bispinosa Lamarck

- E 1305 NAGA S5 60-0325 Gulf of Thailand 06°24'12"N 102°13'00"E 6' Beam T. Apr. 24, 1960 27m cat. #54-00398

Prionocidaris baculosa annulifera Lamarck

- E 1306 NAGA S10 61-0245 Timor Sea 10°56'24"S 129°36'18"E shell dredge Apr. 19, 1961 28m cat. #54-01670

Acanthocidaris maculicollis deMeijere

- E 1307 NAGA S8 60-0778 Nhatrang Bay 12°00'35"N 109°37'40"E 6' Beam T. Sept. 20, 1960 139m cat. #54-00427

Centrocidaris doderleini (Agassiz)

- E 2151 Criss-Cross N. of Galapagos Is. 03°18'N 90°33.5'W Mar. 3, 1963 dredge sample #1 basalt & coral R/V S.F. Baird, T. Chase

Eucidaris thouarsii (Valenciennes)

- E 718 SB-51 Tombola at S.W. tip of Isla San Jose ca. 24°45'N 110°35'W intertidal April 15, 1960 coll. A. Flechsig on 'Orca'
- E 792 RR65-75 Ildefonso Is., S. end ca. 26°38'N 111°26.5'W July 19, 1965 80-105 ft. chem-fish & SCUBA R. Rosenblatt
- E 938 Islas Galapagos, Ecuador, Isla Baltra July 15, 1969
- E 1120 TEPE78-16 Isla Sacrificios, Oaxaca, Mex. 15°40.8'N 96°14.6'W intertidal Apr. 7, 1978 R/V A. Helix W. Newman, S. Luke
- E 1122 TEPE78-17 Isla Grande, Guerrero, Mex. 17°40.3'N 101°40.4'W rocky intertidal Apr. 10, 1978 W. Newman, S. Luke R/V A. Helix

- E 1134 TEPE78-23 Bahia Chamela, Jalisco, Mex. 19°35'N 105°08.5'W SCUBA 15-20 ft. Apr. 12, 1978 R/V A. Helix W. Newman, S. Luke
- E 1147 TEPE78-26 S.E. end of Isla Cerralvo, Baja Calif., Sur, Mex. 24°08'N 109°47.5'W 20-25 ft. SCUBA Apr. 14, 1978 R/V A. Helix W. Newman, S. Luke
- E 1471 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner
- E 2248 RR-61 Isla Espiritu Santo, Baja Calif., Sur, Mexico ca. 24°40'N 110°40'W 10-40 ft. SCUBA June 23, 1961 D. Leighton
- E 2255 Los Arcos, Puerto Vallarta, Jalisco, Mexico 3-12 ft. reef collection May 26, 1959 R. Parker
- E 2260 RR-61 Los Frailes Cove, Baja Calif., Sur, Mexico ca. 23°20'N 109°20'W 3-20 ft. SCUBA June 17, 1961 D. Leighton
- E 2261 RR65-71 Canal de San Jose, Baja Calif., Sur, Mexico 24°59.75'N 110°46.0'W 0-4 ft. snorkel July 8, 1965 B.W. Walker (SI065-271)
- E 2263 SI062-228 Bahia de Los Angeles, Baja Calif., Sur, Mex. 28°55.6'N 113°33.8'W 0-6 ft. chemfish & poison April 24, 1962 C. Hubbs
- E 2264 SI067-37 Pearl Is., Panama ca. 08°20'N 79°20'W Mar. 28, 1967 0-4 ft. rotenone & diving R. Rosenblatt
- E 2265 RR-61 Cabo San Lucas, Baja Calif., Sur, Mex. June 13, 1961 SCUBA 5-10 ft. D. Leighton
- E 2269 RR61-31 Bahia Muerto, Baja Calif., Sur, Mexico 23°59.5'N 109°48.8'W 30 ft. diving June 20, 1961 R. Rosenblatt (SI061-253)
- E 2277 TEPE70-4 Pacific side of Panama 07°19.3'N 81°45.4'W Sept. 15, 1970 22-24m small epibenthic sled R/V A. Helix W. Newman, S. Luke
- E 2439 H50-35 reef, W. anchorage, W. side of Isla Guadalupe, Baja Calif., Norte, Mex. 3-8 ft. Jan. 30, 1950 derrick & snorkel 'Orca' C. Hubbs

Eucidaris thouarsii galapagensis Doderlein

- E 953 Academy Bay, Santa Cruz Is., Galapagos Is., Ecuador, Aug. 10, 1952

Hesperocidaris panamensis (Agassiz)

- E 86 TEPE70-7 off Pta. David, Isla Jicarón, Panama 07°15.7'N 81°45.3'W Sept. 16, 1970 64m Rock Dredge 200 ft. terrace R/V Alpha Helix coll. W. Newman, T. Dana, S. Luke

Hesperocidaris perplexa (Clark)

- E 2278 MV65-I-67 Canal de Cerralvo, Baja Calif., Sur, Mex. 24°11'N 109°59'W 81-84m 45' ott. tr. July 2 1965 R/V Horizon C. Hubbs (SI065-250)
- E 2280 RR65-50&51 Bahia Santa Inez, Baja Calif., Sur, Mex. 26°59'N 111°57'W 40-82m 40' ott. tr. July 14, 1965 W. Baldwin (SI065-304 & 305)

Stylocidaris cf. annulosa Mortensen

- E 1262 NAGA S4 60-0212 South China Sea 15°40'00"N 109°22.9'E 10' Beam T. Feb. 27, 1960 110-198m cat. #54-00379

## Gen. Idet.

- E 186 ARIES VII 54D Milwaukee Seamount Group N.W. of Midway 32°17.4'N 172°47.7'E 732-375m Dredge haul Aug. 20, 1971 R/V T. Washington coll. R.V. Mead

- E 468 SIO66-525 Queensland, Australia, W. coast of Stanley Is. Flinders Group Dec. 26, 1966 14°09.3'S 144°12.2'E otter trawl R/V A. Helix 15-18m coll. C. Hubbs
- E 1069 TEPE70-30 Agualargana Is., Holandes Cay, San Blas Is., Panama, 09°35'54"N 78°46'58"W 10-35 ft. SCUBA Sept. 27 - Oct. 7, 1970 J. McCosker, S. Luke (JEM70-39)
- E 1417 NAGA S3 60-0151 Gulf of Thailand 10°41'15"N 103°03'00"E 1m net Jan. 27, 1960 26m cat. #54-00473
- E 1485 New Harbor, Antarctica, Nov. 15, 1975
- E 1489 New Harbor, Antarctica, 140 ft. SCUBA Oct. 29, 1974
- E 1495 Staten Is., Vancouver Is., Argentina May 7, 1973 SCUBA 20-45 ft.
- E 2210 S. Coronado Is., Baja Calif., Norte, Mexico ca. 32°22'N 117°10'W Nov. 9, 1946 'E.W. Scripps' C. Hubbs
- E 2246 RED-76 N.W. of Borneo 07°53.7'N 117°09.4'E dredge 146-163m Sept. 3, 1961 Cable Ship "Recorder"
- E 2252 RED-67 Basilan Strait, Philippines 06°50.3'N 122°04.8'E Aug. 31, 1961 108-112m dredge Cable Ship "Recorder"
- E 2271 Monsoon Sta. VI-6 E. of New Zealand ca. 43°30'S 178°30'E Rock dredge 75-D no depth Jan. 31, 1961 Russell & Menard
- E 2272 Capricorn 76 near Tonga 20°36'S 174°57.5'W Dec. 27, 1952 70m dredge R/V Horizon Martin Johnson
- E 2273 RED-71 Basilan Strait, Philippines 06°50.1'N 122°19.6'E Sept. 1, 1961 64m rock dredge, Cable Ship "Recorder"
- E 2274 TEPE70-35 San Blas Is., Panama 09°35'07"N 78°44'27"W Oct. 7, 1970 0-4 ft. snorkel R/V A. Helix W. Newman, S. Luke
- E 2281 SYTX-7 MPE 680921 Sta. 2 Kure Atoll, Mid Pacific 28°22.9'N 178°22'W 55m rock dredges #22 & 23 Sept. 21, 1968 R/V Agassiz W. Newman
- E 2307 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 1157-1454m IKMT R/V Agassiz C. Hubbs, S. Luke
- E 2342 MV67-II-22 S.W. of Farallon Is., Calif. 37°18'N 123°53'W June 14, 1967 3592-3799m 41' ott. tr. R/V T. Washington C. Hubbs
- E 2386 Monsoon Sta. VI-5 E. of New Zealand 43°21'S 179°30'E Jan. 30, 1961 425m rock dredge 74-D
- E 2386 Monsoon Sta. VI-5 E. of New Zealand 43°21'S 179°30'E Jan. 30, 1961 425m rock dredge 74-D
- E 2504 Capricorn Exped. Sta. 59 Extra B Alexa Bank, N. Fiji Basin Dec. 10, 1952 ca. 13°35.5'S 174°59'E 0-50m M.W. Johnson, J. Isaacs
- E 2773 R/V Prospector E. of Clipperton Is. 14°46'N 125°24'W Dec. 9, 1976 4389m free fall grab Roger Dick
- E 2776 NAGA S11A-V343 61-243 Timor Sea 10°42.0'S 130°11.5'E Apr. 19, 1961 24m shell dredge Bahia Thetis, Staten Island, Argentina
- E 2784 54°38.2'S 65°13.3'W May 14, 1973 in kelp bed

## Subclass EUECHINOIDEA

## Order ECHINOTHURIOIDA

## Family Echinothuriidae

Sperosoma crassispinum Mortensen

- E 103 MV66-I-6 off Cabo Colnett, Baja Calif., Norte, Mex. 31°04'N 118°W March 31, 1966 1463-1728m 40' ott. tr. R/V Agassiz C. Hubbs

Tromikosoma panamense (Agassiz)

- E 2409 MV65-I-31 off Bahia San Hipolito, Baja Calif., Sur, Mex. 26°31'N 114°15'W 2054-2136m 45' ott. tr. June 22, 1965 R/V Horizon C. Hubbs (SIO65-214)

Gen. Indet.

- E 104 MV73-I-81 S. of Pta. Guiones, Costa Rica 09°35'N 85°41'W Apr. 20, 1973 1157-1454m 10' IKMT R/V Agassiz C. Hubbs, S. Luke
- E 450 Luisad Sta. #175-36 W. of S. Africa 31°32.0'S 02°32.1'E 31°27.5'S 02°27.9'E 1496-1220m chain rock dredge June 8, 1963 coll. V. Vacquier (SIO63-541)
- E 2058 SIO53-338 Near Emperor Seamount 46°17'N 169°04'E Sept. 6-7, 1953 4892-4682m Diving Dredge #3 TP-38 R/V S.F. Baird W.S. Wooster
- E 2247 RED-76 N.W. of Borneo 07°53.7'N 117°09.4'E dredge 146-163m Sept. 3, 1961 Cable Ship "Recorder"
- E 2379 MV65-I-31 off Bahia San Hipolito, Baja Calif., Sur, Mexico 26°31'N 114°16'W 2054-2136m 45' ott. tr. June 22, 1965 R/V Horizon C. Hubbs (SIO65-214)
- E 2412 SIO63-17 San Diego Trough 32°24'N 117°30'W Feb. 8, 1963 732-1280m 10' IKMT R. Wisner
- E 2478 MV65-I-50 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°42'N 110°15'W 1893-1957m 6' Sigsbee tr. June 28, 1965 R/V Horizon C. Hubbs (SIO65-233)

## Order DIADEMATOIDA

## Family Diadematiidae

Diadema mexicanum Agassiz

- E 2266 RR-61 Cabo San Lucas, Baja Calif., Sur, Mex. June 13, 1961 SCUBA 5-10 ft. D. Leighton
- E 2316 TEPE70-11 Isla Montuosa, Panama 07°28'30"N 80°14'50"W intertidal Sept. 18, 1970 hand collection R/V A. Helix W. Newman, S. Luke

Astropyga pulvinata (Lamarck)

- E 2315 SIO70-70 off Cerro Colorado, Sonora, Mexico Mar. 17, 1970 37m from shrimp trawler R. McConnaughey
- E 2343 6108B-60 Islas Tres Marias, Mexico 21°28'N 106°31'W Aug. 23, 1961 35-41m 10' ott. tr. #14 F.H. Berry (SIO62-60)
- E 2352 MB-6904-4 Tiburon Is., Gulf of Calif., Mex. 28°49'N 112°10.5'W April 25, 1969 25m 17' ott. tr. #TR 149 Moser
- E 2644 Sta. 27 Bahia Magdalena, Baja Calif., Sur, Mexico received at Scripps July 16, 1975 from Jeff Moser N.M.F.S.-La Jolla

Centrostephanus coronatus (Verrill)

- E 1472 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner

- E 2360 E. shore of Isla Guadalupe, Baja Calif., Norte, Mexico Dec. 16, 1957 28°54.7'N C.F. Harbison
- E 2437 H50-35 reef, W. anchorage, W. side of Isla Guadalupe, Baja Calif., Norte, Mex. 3-8 ft. Jan. 30, 1950 derris & snorkel 'Orca' C. Hubbs

Chaetodiadema granulatum Mortensen

- E 1258 NAGA S3 60-0137 Gulf of Thailand 08°25'30"N 100°44'40"E 6' Beam T. Jan. 26, 1960 27m cat. #54-00363
- E 1260 NAGA S3 60-0175 Gulf of Thailand 12°04'30"N 100°46'00"E 6' Beam T. Jan. 30, 1960 27m cat. #54-00375
- E 1271 NAGA S9A 60-1065 Gulf of Thailand 11°13'50"N 99°41'30"E 16' Otter T. Dec. 11, 1960 35m cat. #54-00440
- E 1281 NAGA S3 60-0140 Gulf of Thailand 09°07'00"N 100°47'45"E 6' Beam T. Jan. 26, 1960 33m cat. #54-00367
- E 1298 NAGA S9 60-0863 Gulf of Thailand 09°23'30"N 101°15'12"E 6' Beam T. Nov. 11, 1960 55m cat. #54-00837
- E 1317 NAGA S3 60-0104 Gulf of Thailand 09°37'00"N 100°24'00"E 6' Beam T. Jan. 20, 1960 26-30m cat. #54-00343
- E 1351 NAGA S7 60-0636 Gulf of Thailand 10°19'50"N 102°25'50"E 6' Beam T. Aug. 7, 1960 60m cat. #54-00495
- E 2418 NAGA S1 59-33A Gulf of Thailand 09°44.7'N 100°22'00"E Oct. 20, 1959 53m 40' ott. tr.

Gen. Indet.

- E 1062 Quebrada 26-D off Mexico 15°16.3'N 104°37.4'W rock dredge 2509-2697m Dec. 15, 1969 R/V T. Washington J. Coatsworth

## Family Aspidodiadematidae

Aspidodiadema sp.

- E 1270 NAGA S8 60-0801 Nhatrang Bay 10°02'15"N 109°48'00"E 2.5' dredge Sept. 24, 1960 457.2m cat. #54-00426

## Order ARBACIOIDA

## Family Arbaciidae

Arbacia incisa (Blainville)

- E 672 'EECE' P.A.-18 Pta. Abreojos, Baja Calif., Sur, Mex. ca. 26°43.5'N 113°35.5'W intertidal July 27, 1975 G. Hemingway, S. Luke
- E 678 'ECCE' B.T.-23 rocky point 1 mi. E. of town, Bahia Tortugas, Baja Calif. July 31, 1975 27°41'N 114°53'W SCUBA 10-15 ft. July 31, 1975 coll. Hemingway, Luke
- E 691 'ECCE' SR-34 Pta. Santa Rosalia, Baja Calif. 28°40'N 114°14'N rocky intertidal Aug. 6, 1975 coll. Hemingway, Luke
- E 717 SB-71 Tombola at S.W. tip of Isla San Jose ca. 24°45'W 110°35'W intertidal April 15, 1960 coll. A. Flechsig on 'Orca'
- E 730 SB-39 beach 5 mi. N. of Guaymas, Sonora, Mexico ca. 27°55'N 111°W intertidal April 10, 1960 coll. A. Flechsig on 'Orca'
- E 773 El Golfo II BT-156 off Pta. San Telmo, Michoacan 18°27.3'N 103°36'W 27-30m 20' otter trawl June 3, 1965 T. Matsui
- E 808 RR65-81 N. of Mangles Pt. Gulf of Calif. 26°19.2'N 111°24.0'W chemfish & SCUBA 60-65 ft. July 20, 1965 R. Rosenblatt (SI065-335)

- E 1098 SI0M59-63-1 San Luis Gonzaga Bay, Baja Calif., Norte, ca. 29°46'N 114°20'W from beach July 12, 1957 C. Limbaugh U.C.B. (B-6741)
- E 1454 Bahia Concepcion, Baja Calif., Sur, Mexico 0-15 ft. snorkel, sand & rock July 19, 1980 S. Luke
- E 2267 RR-61 Cabo San Lucas, Baja Calif., Sur, Mex. June 13, 1961 SCUBA 5-10 ft. D. Leighton
- E 2270 RR61-31 Bahia Muertos, Baja Calif., Sur, Mexico 23°59.5'N 109°48.8'W 30 ft. diving June 20, 1961 R. Rosenblatt (SI061-253)
- E 2283 SI068-166 Algodones Bay, N. of San Carlos Bay, Sonora, Mexico hand collec. 10 ft. in Porites March 17, 1968 J. McCosker (JEM68-3)
- E 2293 MB-6904-4 TR #149 Tiburon Is., Gulf of Calif., Mex. 28°49'N 112°10.5'W 25m 17' ott. tr. Apr. 25, 1969 Moser
- E 2378 Ensenada Camp, N. of San Felipe, Baja Calif., Norte, Mex. ca. 31°N 114°48'W intertidal Aug. 1965
- E 2382 SI062-235 Bahía de Los Angeles, Baja Calif., Sur, Mexico 29°0.01'N 113°35.2'W 1.5m chemfish Apr. 26, 1962 C. Hubbs
- E 2434 RR61-28 N. of Los Frailes, Baja Calif., Sur, Mex. 23°25.25'N 109°25.5'W 10 ft. rotenone & diving June 19, 1961 sand, B. Walker (SI061-250)
- E 2436 1961-V:2A San Luis Gonzaga, Baja Calif., Norte, Mex. 29°49.3'N 114°24.4'W noxfish May 2, 1961 C. Hubbs
- E 2454 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner

## Order TEMNOPLEUROIDA

## Family Temnopleuridae

Temnopleurus alexandri (Bell)

- E 1301 NAGA S10 61-0211 Timor Sea 13°53.0'S 129°14.0'E shell dredge Apr. 7, 1961 24m cat. #54-01667

Salmaciella dussumieri L. Agassiz

- E 1288 NAGA S4 60-0208 S. China Sea 12°14.8'N 109°18.'E 10' Beam T. Feb. 25, 1960 85 ft. cat. #54-00396
- E 1356 NAGA S8 60-0711 S. China Sea 09°03'00"N 106°26'00"E 2.5' dredge Sept. 8, 1960 22m cat. #54-00446
- E 1379 NAGA S11 61-0213 Timor Sea 13°21.5'S 127°01.3'E shell dredge (no BT) Apr. 8, 1961 270m cat. #54-01661

Salmacis belli belli Doderlein

- E 1386 NAGA SSII V-352 61-0246 Timor Sea 10°56.3'S 129°25.9'E shell dredge Apr. 19, 1961 71m cat. #54-01668

Salmacis belli unicolor Mortensen

- E 1303 NAGA S10 61-0246 Timor Sea 10°55.8'S 129°15.5'E shell dredge Apr. 19, 1961 27m cat. #54-01666

Salmacis bicolor rarispina L. Agassiz

- E 1358 NAGA S8 60-0724 S. China Sea 15°40'35" 108°59'00"E 6' Beam T. Sept. 12, 1960 91m cat. #54-00412

Salmacis sphaeroides (Linnaeus)

- E 1302 NAGA S10 61-0246 Timor Sea 10°55.8'S 129°15.5'E shell dredge Apr. 19, 1961 27m cat. #54-01669

## Family Toxopneustidae

Toxopneustes roseus (Agassiz)

- E 1118 TEPE78-15 Isla Sacrificios, Oaxaca, Mex. 15°40.8'N 99°14.6'W Apr. 7, 1978 40 ft. SCUBA R/V A. Helix W. Newman, S. Luke
- E 1126 TEPE78-18 Isla Grande, Guerrero, Mex. 17°40.3'N 101°40.4'W Apr. 10, 1978 SCUBA 15-20 ft. R/V A. Helix W. Newman, S. Luke
- E 1133 TEPE78-23 Bahia Chamela, Jalisco, Mex. 19°35'N 105°08.5'W SCUBA 15-20 ft. Apr. 12, 1978 R/V A. Helix W. Newman, S. Luke
- E 1473 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner
- E 2323 RR-61 Los Frailes Cove, Baja Calif., Sur, Mexico ca. 23°20'N 109°20'W SCUBA 3-20 ft. June 17, 1961 D. Leighton
- E 2340 Cabo San Lucas, Baja Calif., Sur, Mexico 25 ft. sand bottom June 1967

Lytechinus anamesus Clark

- E 199 La Jolla Canyon south wall, La Jolla, Calif. Sept. 10, 1957 65m SCUBA coll. J. Stewart
- E 206 off San Diego, Calif. June 21, 1906 32°51.5'N 117°17'W 82m
- E 218 off Point Loma - record uncertain 32°38'N 117°14'W Nov. 3, 1907
- E 220 off Tijuana, Mexico July 17, 1908 92m 32°23.5'N 119°05.8'W
- E 329 Straight off W. of Pt. La Jolla, San Diego, Calif., Jan. 28, 1965 16' otter trawl #1 101-183m coll. Fager ST-908
- E 343 SL44 Sea Lab off Scripps Pier in Scripps Canyon Sept. 21, 1965
- E 346 SL4 Sea Lab off Scripps Pier in Scripps Canyon Sept. 2, 1965 coll. T. Clarke
- E 572 611B-4 TR #31 S.W. tip of Cedros Is. 28°08.8'N 115°27.3'W-27°07.2'N 115°29.5'W 16' otter trawl Nov. 25, 1961 coll. F.H. Berry (SI062-92) 83-119m
- E 712 Haul 3181 off San Diego, Calif. 32°28.5'N 117°15.3'W 55m Feb. 10, 1912 coll. "Agassiz"
- E 752 H51-27 Bahia Todos Santos, Baja Calif., Norte ca. 31°45'N 116°40'W 37m dredge Feb. 5, 1951 coll. C. Hubbs on 'Orca'
- E 763 H52-122 Bahia Sebastian Vizcaino, Baja Calif., Sur, 27°54'N 114°52.4'W 55m pipe stem dredge Aug. 11, 1952 K.S. Norris
- E 785 off Coal Oil Point, Goleta, Calif. ca. 34°40'N 119°50'W 165-201m beam trawl June 4, 1954
- E 809 SI057-223 Melpomene Cove, Guadalupe Is., Baja Calif. 28°51'N 118°16.8'W 27-73m pipe stem dredge Dec. 18, 1957 C. Hubbs on 'Stranger'
- E 890 Holt Exped. Sta. 13 W. of Pta. Cabras, Baja Calif., Norte 31°20'N 116°39.2'W 82m 10' otter trawl Dec. 4, 1960 (SI060-471) C. Boyd
- E 979 Holt Exped. Sta. #10 Bahia San Quintin, Baja Calif., Norte 30°17'N 116°04'W 118m 10' otter trawl Dec. 4, 1960 C. Boyd
- E 982 SI054-222 S. of Isla Guadalupe, Baja Calif., Norte, pipe dredge 49-37m Nov. 18, 1954 M/V Orca C. Hubbs
- E 1075 P-222-60 off San Diego, Calif. 32°33.4'N 117°13.2'W deep diving dredge 31m Mar. 8, 1960 R. Parker U.C.B. (B-7583)
- E 1772 SI062-519 off Bahia San Quintin, Baja Calif., Norte, Mex. 30°16.5'N 115°57'W 74-77m 16' ott. tr. April 1, 1962 H.C. Perkins U.S.F.W.S.

- E 2282 off China Point, San Clemente Is., Calif. 32°23.2'N 118°05.4'W 88m July 17, 1908
- E 2288 B6203-9 TR#51 Catalina Is., Calif. March 22, 1962 F.H. Berry (SI063-810)
- E 2289 SI062-521 off Bahia San Quintin, Baja Calif., Norte, Mex. 30°13'N 116°02'W 119-123m Apr. 1, 1962 ott. tr. H.C. Perkins
- E 2292 MV65-I-29 off Bahia Asuncion, Baja Calif., Sur, Mex. 27°02'N 114°22'W June 21, 1965 104-112 45' ott. tr. C. Hubbs (SI065-212)
- E 2294 Baja 69-16 off Bahia Tortugas, Baja Calif., Sur, Mexico 27°32.5'N 114°52.7'W 102m rock dredge Feb. 24, 1969 R/V Oconostota
- E 2295 Baja 69-19, S.W. of Cedros Is., Baja Calif., Norte, Mex. 28°00.0'N 115°29.5'W 112m pipe dredge Feb. 24, 1969 R/V Oconostota
- E 2300 Student Cruise trawl #4 off San Diego, Calif. 32°43.4'N 117°21.8'W June 1, 1974 101m 25' ott. tr. 'E.B. Scripps' R. Rosenblatt
- E 2304 SI074-191 Student Cruise off San Diego, Calif. 32°45'N 117°17.6'W 46-55m ott. tr. #1 June 1, 1974 'E.B. Scripps' R. Rosenblatt
- E 2305 M15-OT-10 Santa Monica, Calif. 33°52.5'N 118°34'W 25' ott. tr. 73m Mar. 29, 1974 R/V Agassiz T. Matsui
- E 2309 MV71-I-1 Isla de Guadalupe, Baja Calif., Norte, Mexico 28°51.5'N 118°16.3'W 95-81m 6' Sigbee tr. May 18, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2310 MV71-I-2 Isla de Guadalupe, Baja Calif., Norte, Mex. 28°52.0'N 118°15'W 102-99m 6' Sigbee tr. May 18, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2319 Cortes Bank, off S. Calif. May 16, 1963 32°30.2'N 119°13.7'W 16' ott. tr. 86m F. Berry U.S.F.W.S.
- E 2321 6111 B-2 San Benitos Is., Baja Calif., Norte, Mexico 28°17.5'N 115°34.6'W 16' ott. tr. #29 Nov. 25, 1961 (SI062-90)
- E 2336 D-22-24 1 mi. due W. of Scripps Inst. Pier, La Jolla, Calif. course N.N.W. 68-88m July 13, 1916
- E 2337 S. side of Bahia Todos Santos, Baja Calif., Norte, Mexico Feb. 6, 1957 48m dredge
- E 2344 M15 OT-8 N. of Dana Pt., Calif. 33°32.7'N 117°49'W Mar. 29, 1974 53-48m 40' ott. tr. R/V Agassiz T. Matsui
- E 2347 M15 OT-2 off Encinitas, Calif. 33°02'N 117°19'W March 29, 1974 51m 25' ott. tr. R/V Agassiz T. Matsui
- E 2348 M15 OT-4 off San Onofre, Calif. 33°13.5'N 117°30'W March 29, 1974 91m 25' ott. tr. R/V Agassiz T. Matsui
- E 2349 M15 OT-7 off San Clemente, Calif. 33°23.8'N 117°40'W March 29, 1974 64m 25' ott. tr. R/V Agassiz T. Matsui
- E 2357 off La Jolla, Calif. June 25, 1908 32°50.7'N 117°21.5'W
- E 2358 China Point, San Clemente Is., Calif. 32°23.7'N 119°06.0'W July 17, 1908 55-73m tan. trawl
- E 2361 S. rim of La Jolla Canyon, La Jolla, Calif. August 1957 90-130 ft. SCUBA R. Ghilardi & Fager
- E 2362 N. Coronado Is., Baja Calif., Norte, Mexico 50-120 ft. Feb. 9, 1956 C. Limbaugh
- E 2366 off San Diego, Calif. July 1, 1909 32°40.1'N 118°19.7'W trawling 121m
- E 2369 M15 OT-9 off Long Beach, Calif. 33°53.3'N 118°08'W 40' ott. tr. 49m Mar. 29, 1974 R/V Agassiz T. Matsui

- E 2371 M15 OT-15 off Morro Bay, Calif. 35°10'N 122°02'W April 2, 1974 99m 25' ott. tr. R/V Agassiz T. Matsui
- E 2383 B6203-13 off Bahia San Quintin, Baja Calif., Norte, Mexico 30°17.8'N 115°56'W 57m trawl #56 TR-56 April 1, 1962 H.C. Perkins (SI062-518)
- E 2415 #F-62-43 La Jolla Canyon, La Jolla, Calif. inter-Canyon shelf Sept. 8, 1963 43-49m 16' ott. tr. R. Ford
- E 2447 M-15 OT-16 off Pismo Beach, Calif. 35°06'N 120°46.8'W Apr. 2, 1974 70m 25' ott. tr. R/V Agassiz T. Matsui
- E 2450 M-15 OT-6 off San Onofre, Calif. 33°16'N 117°31'W Mar. 29, 1974 54m 25' ott. tr. R/V Agassiz T. Matsui

Lytechinus pictus (Verrill)

- E 223 San Pedro breakwater, Los Angeles, Calif. Oct. 9, 1915
- E 224 off Scripps Pier piles, La Jolla, Calif. Nov. 6, 1915
- E 757 H51-32 S. side of Bahia Todos Santos, Baja Calif., Norte ca. 31°45'N 116°35'W 27-46m pipe dredge Feb. 6, 1951 coll. C. Hubbs on 'Orca'
- E 2285 H48-215 to 222 S. Coronado Is., Baja Calif., Norte, Mex. 32°22'N 117°10'W 15-5m pipe dredge Aug. 11, 1948 'E.W. Scripps' C. Hubbs
- E 2302 CalCofi 74126/II Piedras Blancas, Calif. 35°48'N 121°25'W 16' ott. tr. #4 73m Dec. 10, 1974 R/V Agassiz T. Matsui
- E 2359 Pacific Cove, Mission Bay, San Diego, Calif. May 5, 1959 Tuthill & Rosenblatt

Lytechinus sp.

- E 2325 SI059-307 Punta Banda, Bahia Papalote, Baja Calif., Norte, Mexico 0-35 ft. SCUBA Kelp Aug. 10, 1959 C. Hubbs
- E 2364 Mission Bay, San Diego, Calif. mud flats Aug. 13, 1940
- E 2452 SI059-301 Bahia Todos Santos, Baja Calif., Norte, Mex. 16' ott. tr. 20-30 ft. Aug. 7, 1969 R. Rosenblatt
- E 2453 H48-229 Bahia Descanso, Baja Calif., Norte, Mex. ca. 32°20'N 117°05'W 20-26m pipe stem dredge Aug. 13, 1948 'E.W. Scripps' C. Hubbs
- E 2493 S. Coronado Is., Baja Calif., Norte, Mexico June 27, 1958 C. Limbaugh
- E 2458 H48-232 Bahia Descanso, Baja Calif., Norte, Mexico ca. 32°20'N 117°05'W 18-24m pipe dredge Aug. 13, 1948 'E.W. Scripps' C. Hubbs

Tripneustes ventricosus (Lamarck)

- E 1095 SI059-62-2 New Providence, Bahamas, ca. 25°05'N 77°25'W C. Limbaugh 1955 U.C.B. (B-3035)

Tripneustes gratilla (Linnaeus)

- E 1072 TeVega Exped. 1/2 mi. S.E. of Lahaina, Maui, Hawaii ca. 25 ft. in Acropora Aug. 14, 1965 A. Robinson

## Order ECHINOIDA

## Family Echinometridae

Echinometra lucunter (Linnaeus)

- E 1097 SI059-64-2 St. John Island, Virgin Islands ca. 18°18'N 64°40'W C. Limbaugh

Echinometra vanbrunti Agassiz

- E 976 RR61-Cabo San Lucas, Baja Calif., Sur, SCUBA 5 ft. June 13, 1961 D. Leighton
- E 1076 Pescadero Pt., Baja Calif., Sur, Mexico ca. 23°48'N 109°40.5'W strandline Mar. 28, 1959 R. Parker U.C.B. (B-394-b)
- E 1113 TEPE78-14 Isla Sacrificios, Oaxaca, Mex. 15°40.8'N 96°14.6'W rocky intertidal Apr. 7, 1978 R/V A. Helix W. Newman, S. Luke
- E 1123 TEPE78-17 Isla Grande, Guerrero, Mex. 17°40.3'N 101°40.4'W rocky intertidal Apr. 10, 1978 R/V A. Helix W. Newman, S. Luke
- E 1130 TEPE78-21 Bahia Chamela, Jalisco, Mex. 19°35'N 105°08.5'W intertidal Apr. 12, 1978 R/V A. Helix W. Newman, S. Luke
- E 1140 TEPE78-24 S.E. end of Isla Cerralvo, Baja Calif., Sur, Mex. 24°08'N 109°48'W intertidal Apr. 14, 1978 R/V A. Helix W. Newman, S. Luke
- E 2249 RR-61 Isla Espiritu Santo, Baja Calif., Sur, Mexico ca. 24°40'N 110°40'W 10-40 ft. SCUBA June 23, 1961 D. Leighton
- E 2262 RR65-17 Canal de San Jose, Baja Calif., Sur, Mexico 24°59.75'N 110°46.0'W 0-4 ft. snorkel July 8, 1965 B.W. Walker (SI065-271)
- E 2256 Los Arcos, Puerto Vallarta, Jalisco, Mexico 3-12 ft. reef collection May 26, 1959 R. Parker
- E 2287 6108B-9 Tres Marias Is., Mexico 21°44'N 106°42.3'W Pro-nox fish 3 ft. Aug. 14, 1961 F.H. Berry (SI062-9)
- E 2365 Bahia Magdalena, Baja Calif., Sur, Mexico Apr. 2, 1920
- E 2431 SI059-210 Bahia San Lucas, Baja Calif., Sur, Mexico 22°52.57'N 109°54'W 0-15 ft. rotenone & diving Mar. 22, 1959 R. Rosenblatt

Colobocentrotus atratus (Linnaeus)

- E 1071 TeVega Exped. 1/2 mi. S.W. of Lahaina, Maui, Hawaii, intertidal on rocky black volcanic surface Aug. 14, 1965 A. Robinson

Colobocentrotus sp.

- E 2176 Monsoon Exped., Oahu, Hawaii shore collection Sept. 10, 1960

Heterocentrotus mammillatus (Linnaeus)

- E 1070 TeVega Exped. 1/2 mi. S.E. of Lahaina, Maui, Hawaii 25 ft. in Acropora bed A. Robinson Aug. 14, 1965

## Family Strongylocentrotidae

Strongylocentrotus franciscanus (Agassiz)

- E 2346 M15 OT-8 N. of Dana Pt., Calif. 33°32.7'N 117°49'W Mar. 29, 1974 53-48m 40' ott. tr. R/V Agassiz T. Matsui
- E 2363 H48-232 Bahia Descanso, Baja Calif., Norte, Mex. ca. 32°20'N 117°05'W 18-24m pipe dredge Aug. 13, 1948 'E.W. Scripps' C. Hubbs
- E 2456 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner

Strongylocentrotus purpuratus (Stimpson)

- E 568 SI059-301 Pta. Banda, Bahia Todos Santos, Baja Calif., Norte, Mex. 6-9m 16' ott. tr. Aug. 7, 1959 R. Rosenblatt

- E 2286 H48-229 Bahia Descanso, Baja Calif., Norte, Mexico ca. 32°20'N 117°05'W pipe stem dredge 20-26m Aug. 13, 1948 'E.W. Scripps' C. Hubbs
- E 2341 #51 21.6 mi. S. of Tijuana, Baja Calif., Norte, Mexico Mar. 28, 1954 Paul W. Johnson
- E 2345 M15 OT-8 N. of Dana Pt., Calif. 33°32.7'N 117°49'W Mar. 29, 1974 53-48m 40' ott. tr. R/V Agassiz T. Matsui
- E 2367 Palomar Reef, La Jolla, Calif. intertidal Jan. 8, 1974 S. Luke
- E 2375 MV71-I-28 Isla San Benito del Oeste, Baja Calif., Norte, Mex. 28°18'N 115°33'W intertidal May 26, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2377 Dana Point, Calif. intertidal May 13, 1969 T. Cukr, F. Rokop
- E 2438 H50-35 reef, W. anchorage, W. side of Isla Guadalupe, Baja Calif., Norte, Mex. 3-8 ft. Jan. 30, 1950 derria & snorkel 'Orca' C. Hubbs
- E 2457 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner
- Alloccentrotus fragilis (Jackson)
- E 332 Loma Sea Valley, due W. of Pt. Loma 326-351m otter trawl #1 Jan. 21, 1965 coll. Fager ST-908
- E 364 MV68-I-65 E. of Angel de la Guarda, Gulf 29°19.9'N 113°10.4'W-29°20.4'N 113°12.0'W 265-284m 25' otter trawl Jan. 20, 1968 R/V T. Washington coll. C. Hubbs
- E 642 A-26 Aftershot II off Encinitas, Calif. 33°02.7'N 117°24.5'W-33°02.5'N 117°24.5'W 439m 25' otter trawl May 9, 1975 R/V Agassiz coll. J.F. Siebenaller
- E 648 A-27 Aftershot II off Encinitas, Calif. 32°59.6'N 117°34.1'W-33°00.3'N 117°34.5'W 750m 25' otter trawl May 9, 1975 R/V Agassiz coll. J. Siebenaller
- E 728 SI076-93 E. of Catalina Is., Calif. 33°28'N 118°27'W 25' otter trawl 397-355m March 8, 1976 R/V Agassiz coll. S. Luke
- E 776 SI065-113 Coronado Bank, San Diego Co., 32°40'30"N 117°27'20"W 230m diving saucer April 22, 1965 C. Hubbs
- E 960 Saucer Dive #345 due W. of Bird Rock, La Jolla, Calif. Apr. 17, 1965 110-200m R. Ford
- E 1074 P-223-60 off Cabo Colnett, Baja Calif., Norte, Mex. 31°04.5'N 116°29.5'W deep diving dredge 220m Mar. 9, 1960 R. Parker U.C.B. (B-7580)
- E 1449 SnaFu SI080-9 off San Diego, Calif. 32°43'N 117°24.4'W 25' ott. tr. #2 402-421m Feb. 29, 1980 R/V New Horizon R. Rosenblatt
- E 1460 SnaFu SI080-10 off San Diego, Calif. 32°40.2'N 117°21.6'W 25' ott. tr. #3 201m Feb. 29, 1980 R/V New Horizon R. Rosenblatt
- E 2290 Colnett-Nov. 64, Banco San Isidro, Baja Calif., Norte, Mex. ca. 31°07'N 116°35'W 212m mid-water trawl #19 Nov. 24, 1964 R/V Horizon Dan Brown, C.W. Jerde
- E 2291 SUC Cruise dredge 1, off San Diego, Calif. 32°05'N 118°20'W rock dredge 550-400m Mar. 19, 1964 Winterer
- E 2297 Cruise M-1, Sta. 2 San Diego Trough 32°57'N 117°32'W 25' ott. tr. Feb. 3, 1971 768m R/V Agassiz T. Matsui
- E 2299 MV71-I-31 Islas San Benitos, Baja Calif., Norte, Mex. 28°17.4'N 115°28'W 329-311m 6' Sigsbee tr. May 27, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2301 CalCofi 74126/II off San Luis Obispo, Calif. 35°49'N 121°28.5'W 16' ott. tr. #3 99m Dec. 10, 1974 R/V Agassiz T. Matsui
- E 2303 M15 OT-14 off San Simeon, Calif. 35°35'N 121°19'W April 1, 1974 256m 25' ott. tr. R/V Agassiz T. Matsui
- E 2312 69/06/1 S.E. of San Nicholas Is., Calif. dredge #15 1189-732m June, 1969 R/V Agassiz Edwin Allison
- E 2354 Off W. side of Catalina Is., Calif. 183m ott. tr. Mar. 7, 1973 R. Bauer
- E 2356 Forty Mile Bank off San Diego, Calif. 32°43'N 118°12'W Mar. 22, 1938 cf. 102m dredge 'E.W. Scripps' Shepard
- E 2368 M15 OT-6 off San Onofre, Calif. 33°16'N 117°31'W 25' ott. tr. 54m Mar. 29, 1974 R/V Agassiz T. Matsui
- E 2370 M15 OT-11 off Pta. Piedras Blancas, Calif. 35°28'N 121°48'W Mar. 31, 1974 1189-1170m 25' ott. tr. R/V Agassiz T. Matsui
- E 2372 M15 OT-22 off Del Mar, Calif. 33°0N 117°38'W Apr. 4, 1974 920m 25' ott. tr. R/V Agassiz T. Matsui
- E 2373 Oconostota trawl #10 off La Jolla, Calif. 32°52'N 117°36.5'W 896m 16' ott. tr. Sept. 6, 1974 J.F. Siebenaller
- E 2374 M-6, Sta. 2 San Diego Trough 32°52'N 117°31'W Aug. 13, 1971 732-860m 25' ott. tr. R/V Agassiz T. Matsui
- E 2376 MB-37 AVR Anacapa Is., Calif. 33°59'01"N 119°22'40"W shrimp trap 311m Set #3 July 20-21, 1969 U.S.F.W.S.
- E 2380 N. of Scripps Canyon, La Jolla, Calif. Nov. 16, 1964 Diving Saucer R.F. Ford
- E 2384 6203B Catalina Is., Calif. Mar. 22, 1962 229-238m ott. tr. F.H. Berry U.S.F.W.S.
- E 2411 SI063-870 San Diego Trough cruise SDTC TR-2 32°33'N 117°24'W 850-146m IKMT 10' Oct. 31, 1963 R/V Agassiz R. Wisner
- E 2427 Off S. Calif. June 6, 1938 439-274m W.P. Shepard
- E 2432 MV65-I-8 Ranger Bank, Baja Calif., Sur, Mexico 28°30.6'N 115°32.7'W 201m 100 hook set line June 11, 1965 R/V Horizon R. Wisner (SI065-195)
- E 2445 Straight W. of Pt. La Jolla, Calif. 101-183m 16' ott. tr. #1 Jan. 28, 1965 ST-908 Fager
- E 2446 M-15 OT-10 Santa Monica, Calif. 33°52.5'N 118°34'W 25' ott. tr. 73m Mar. 29, 1974 R/V Agassiz T. Matsui
- E 2448 M-15 OT-16 off Pismo Beach, Calif. 35°06'N 120°46.8'W Apr. 2, 1974 70m 25' ott. tr. R/V Agassiz T. Matsui
- E 2449 M-15 OT-15 off Morro Bay, Calif. 35°10'N 121°02'W Apr. 2, 1974 99m 25' ott. tr. R/V Agassiz T. Matsui
- E 2451 SI062-521 off Bahia San Quintin, Baja Calif., Norte, Mex. 30°13'N 116°02'W 119-123m Apr. 1, 1962 ott. tr. H.C. Perkins
- E 2462 M15 OT-17 Pt. Sal, Calif. Apr. 2, 1974 34°53'N 120°49'W 25' ott. tr. 132m R/V Agassiz T. Matsui
- E 2510 Saucer Dive #335 ca. 9 mi. W. of Pt. Loma April 6, 1965 A. Flechsig 175m

## Order HOLECTYOPOIDA

## Family Echinoneidae

Echinoneus cyclostomus Leske

- E 1092 SI059-62-1 New Providence, Bahamas, ca. 25°05'N 77°25'W 1955 C. Limbaugh U.C.B. (B-3035)

## Order CLYPEASTEROIDA

## Family Clypeasteridae

Clypeaster europacificus H.L. Clark

- E 788 RR65-96 Bahía de La Paz, Baja Calif., Sur, 24°27'N 110°38'W July 23, 1965 46m 40' otter trawl R. Rosenblatt
- E 1036 RR65-40 W. side of Isla Monserrate, Golfo de Calif., Mex. 25°38'N 111°04'W 91-73m 40' otter trawl July 12, 1965 R. Rosenblatt (SI065-294)
- E 2238 P-185-60 Gulf of Calif., Mexico 28°20.9'N 111°58.0'W March 25, 1960 57m shell dredge R. Parker & Curray
- E 2279 MV65-I-67 Canal de Cerralbo, Baja Calif., Sur, Mex. 24°11'N 109°59'W 81-84m 45' ott. tr. July 2, 1965 R/V Horizon C. Hubbs (SI065-250)
- E 2498 RR65-3 Bahía de La Paz, Baja Calif., Sur, Mexico 24°19'N 110°26'W 55-80m 40' ott. tr. July 5, 1965 W. Baldwin (SI065-257)

Clypeaster reticulatus (Linnaeus)

- E 852 STYX-7 MPE680920 Sta. 1 Nero Bank 27°58.8'N 177°56.5'W Sept. 20, 1968 60-73m rock dredge R/V Agassiz W. Newman
- E 1361 NAGA S8 60-0833 S. China Sea 06°14'50"N 105°47'10"E 6' Beam T. Oct. 5, 1960 49m Cat. #54-00425

Clypeaster rosaceus (Linnaeus)

- E 1099 Florida coll. T. Scanland
- E 2499 New Providence, Bahamas

Clypeaster rotundus Agassiz

- E 1034 MV73-I-39 Golfo de Tehuantepec, Mex. 14°43'N 92°55'W 40' ott. tr. Apr. 10, 1973 R/V Agassiz C. Hubbs, S. Luke
- E 1035 MV73-I-37 Golfo de Tehuantepec, Mex. 15°25'N 93°34'W 40' ott. tr. Apr. 10, 1973 46-48m R/V Agassiz C. Hubbs, S. Luke

Clypeaster cf. speciosus Verrill

- E 2764 611B-23 Bahía Magdalena, Baja Calif., Sur, Mex. 24°34'N 112°00.6'W 46-26m 16' ott. tr. #32 Nov. 29, 1961 F.H. Berry (SI062-111)

Clypeaster subdepressus (Gray)

- E 1093 SI059-62-6 New Providence, Bahamas, ca. 25°05'N 77°25'W C. Limbaugh 1955 U.C.B. (B-3035)

Clypeaster sp.

- E 2496 El Golfo II BT-157 Guerrero, Mexico 17°34'N 101°31.2'W 20' ott. tr. 27-49m June 4, 1965 T. Matsui

## Family Dendroasteridae

Dendroaster excentricus (Eschscholtz)

- E 714 San Diego Bay, San Diego, Calif. Navy base to end of Jetty June 19, 1923
- E 1032 Mission Bay, San Diego, Calif. Oct. 14, 1955 Paul W. Johnson
- E 1033 Rosarita Beach, Baja Calif., Norte, Feb. 4, 1955 U.W. Bingham
- E 1037 Drag with otter trawl N.E. to N.W. Lagoon C, Carlsbad, Calif. Mar. 30, 1957 J. Kenter
- E 2480 Coos Bay entrance, Charleston, Oregon Aug. 20, 1949 dredge haul 30-33m Jas. A. Macnab

Dendroaster laevis Clark

- E 561 H49-167a,b,c E. end of Coronado Is., ca. 32°24.2'N 117°12.0'W CAS pipe dredge 27-31m Nov. 27, 1949 'Orca' coll. C. Hubbs sand
- E 983 SI054-222 S. of Isla Guadalupe, Baja Calif., Norte pipe dredge 49-37m Nov. 18, 1954 M/V Orca C. Hubbs
- E 1073 La Jolla Shores, La Jolla, Calif. S. side of Canyon off Caves, 30-40 ft. in coarse sand May 2, 1966 T. Clarke
- E 2479 H48-215-222 S. Coronado Is., Baja Calif., Norte, Mex. 32°22'N 117°10'W 15-55m pipe stem dredge Aug. 11, 1948 'E.W. Scripps' C. Hubbs
- E 2481 H49-35 off S. Coronado Is., Baja Calif., Norte, Mex. 32°25'N 117°14.5'W 29-23m CAS dredge Apr. 23, 1949 'Orca' C. Hubbs
- E 2485 SI063-169 Melpomene Cove, Isla Guadalupe, Baja Calif., Mex. 28°53.0'N 118°16.7'W 24-31m tri-net Apr. 22, 1963 R/V Horizon C. Hubbs
- E 2488 MV67-IA-25 Isla Guadalupe, Baja Calif., Mex. 28°54.3'N 118°17.6'W in stomach of white fish *Caulolatilus princeps* caught by crew of R/V T. Washington C. Hubbs Apr. 27, 1967
- E 2490 MV71-I-1 Isla Guadalupe, Baja Calif., Mex. 28°51.5'N 118°16.3'W May 18, 1971 95-81m 6' Sigsbee tr. R/V Agassiz C. Hubbs
- E 2765 H51-231 off Little Harbor, Catalina Is., Calif. 32°23'N 118°29'W 29-28m pipe dredge R/V Orca June 25, 1951 A. Flechsig

Dendroaster mexicanus Clark

- E 693 'ECCE' SR-35 Sta. Rosalillito, Baja Calif. 28°40'N 114°14'W rocky intertidal Aug. 7, 1975 coll. Hemmingway, Luke
- E 1031 H52-165 Bahía Playa Maria, Baja Calif., Norte ca. 28°50'N 114°30'W 0-35 ft. try net, sand beach, Apr. 1, 1952 'Orca' K.S. Norris

Dendroaster sp.

- E 2643 'ECCE' BT-22 Bahía Tortugas, Baja Calif., Sur, Mex. ca. 27°41'N 114°53'W intertidal July 31, 1975 G. Hemmingway, S. Luke

## Family Echinarachniidae

Echinarachnius parma (Lamarck)

- E 975 Pt. Barrow, Alaska, dive collections, 40-120 ft. Aug. 3-8, 1974

## Family Mellitidae

Mellita grantii Mortensen

- E 2489 13 mi. S. of San Felipe, Baja Calif., Norte, Mex. intertidal March, 1968

Mellita longifissa Michelin

- E 2486 Mag Bay A-6 S.W. of Boca de Animas, Baja Calif., Sur, Mex. 25°39.5'N 112°07.6'W 13m 6' IKMT Jan. 28, 1964 R/V Horizon C. Hubbs

Mellita sexiesperforata (Leske)

- E 1094 SI059-62-7 New Providence, Bahamas, ca. 25°05'N 77°25'W C. Limbaugh 1955 U.C.B. (B-3035)

Mellita sp.

- E 1088 P-190-60 off Morro Colorado, Sonora, Mex. 28°24.6'N 111°48.0'W shell dredge 13m Mar. 25, 1960 R. Parker U.C.B. (B-7546)



Encope grandis Agassiz

- E 574 SI062-236 S. arm of Bahia de Los Angeles, Baja Calif., Norte, ca. 28°55'N 113°32'W 22-37m shrimp trawler Apr. 26, 1962 R. Rosenblatt
- E 911 SB#27-35 Bahia de Los Angeles, Baja Calif., Norte core samples 9-55 ft. Apr. 7-9, 1960 M/V 'Orca' A. Flechsigg
- E 2487 SI067-133 Ensenada Camp, N. of San Felipe, Baja Calif., Norte ca. 31°N 114°48'W 0-2 ft. hand net & sieve May 22-23, 1967 D. Hoese
- E 2494 SI062-236 S. arm of Bahia de Los Angeles, Baja Calif., Norte ca. 28°55'N 113°32'W 22-37m shrimp trawler Apr. 26, 1962 R. Rosenblatt

Encope micropora Agassiz

- E 88 TEPE70-4 Pacific side of Panama 07°19.3'N 81°45.5'W 07°19.3'N 81°45.3'W 22-24m small epibenthic sled Sept. 15, 1970 R/V Alpha Helix coll. W. Newman, T. Dana, S. Luke
- E 774 6108B-82 Magdalena Bay, Baja Calif., Sur 24°34'N 112°03'W Aug. 28, 1961 31m 16' otter trawl H. DeWitt
- E 1084 P-172-60 off Morro Colorado, Sonora, Mex. 28°23.3'N 111°39.8'W shell dredge 13m Mar. 22, 1960 R. Parker U.C.B. (B-7544)
- E 1085 P-165-60 off Morro Colorado, Sonora, Mex. 28°22.0'N 111°31.5'W rock dredge 7-9m sand Mar. 21, 1960 R. Parker U.C.B. (B-7545)
- E 1086 P-184-60 S. of Pta. Kino, Sonora, Mex. 28°26.0'N 111°55.4'W shell dredge 15m Mar. 25, 1960 R. Parker U.C.B. (B-7568)
- E 1087 P-190-60 off Morro Colorado, Sonora, Mex. 28°24.6'N 111°48.0'W shell dredge 13m Mar. 25, 1960 R. Parker U.C.B. (B-7546)
- E 2484 SI060-388 W. side of Bahia Magdalena, Baja Calif., Sur, Mex. Aug. 24, 1960 120-130 ft. 10' ott. tr. F.H. Berry
- E 2497 Mag Bay A-6 S.W. of Boca de Animas, Baja Calif., Sur, Mexico 25°39.5'N 112°07.6'W 6' IKMT 13m Jan. 28, 1964 R/V Horizon C. Hubbs

Encope cf. micropora Agassiz

- E 795 El Golfo II BT-157 Guerrero, Mexico 17°34'N 101°31.2'W 20' ott. trawl 27-49m June 4, 1965 T. Matsui

Encope cf. stokesii Agassiz

- E 2495 El Golfo II BT-157 Guerrero, Mexico 17°34'N 101°31.2'W 20' otter trawl 27-49m June 4, 1965 T. Matsui

Encope wetmorei Clark

- E 696 'ECCCE' SJ San Juanito Bay, Baja Calif., Sur, Mex. 26°12'N 112°28'W 4m ott. tr. to 20 ft. sandy bay July 20, 1975 Hemingway, Luke

## Order HOLASTEROIDA

## Family Urechinidae

Urechinus naresianus (Agassiz)

- E 2406 MV66-I-6 off Cabo Colnett, Baja Calif., Norte, Mex. 31°04'N 118°0'W Mar. 31, 1966 1463-1728m 40' ott. tr. R/V Agassiz C. Hubbs

Urechinus sp.

- E 30 MV70-III-3 W. of Patton Escarpment 31°27'N 120°11'W Mar. 21, 1970 3880m 25' ott. tr. R/V Melville S. Luke

- E 1542 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 2407 MV65-I-26 off Bahia San Cristobal, Baja Calif., Sur, Mex. 27°08'N 115°10'W 4085-4096m 10' IKMT June 21, 1965 R/V Horizon C. Hubbs (SI065-209)
- E 2433 H53-328 TP sta. 33 Bearing Sea, Alaska 52°20'N 177°08'W Aug. 24, 1953 3300m diving dredge #2 R. Wisner, W. Wooster
- E 2455 MV65-I-41 Basin off Bahia Magdalena, Baja Calif., Sur, Mex. 24°28'N 113°20'W 3497-3610m 10' IKMT June 25, 1965 R/V Horizon C. Hubbs (SI065-224)
- E 2475 MV70-III-6 W. of Patton Escarpment 31°20'N 120°09'W Mar. 23, 1970 3706-3806m 25' ott. tr. R/V Melville S. Luke
- E 2476 MV69-VI-9 W. of Patton Escarpment 31°12'N 119°37'W Dec. 18, 1969 3600-3676m 25' ott. tr. R/V Melville C. Hubbs, S. Luke (SI070-22)
- E 2477 MV70-III-1 W. of Patton Escarpment 31°25'N 120°14'W Mar. 21, 1970 3950-3880m IKMT R/V Melville S. Luke
- E 2771 MV65-I-57 S.W. of Cabo San Lucas, Baja Calif., Sur, Mex. 22°33'N 110°11'W 2889-2505m 6' Sigsbee tr. June 29, 1965 R/V Horizon C. Hubbs (SI065-240)

## Family Pourtalesiidae

Pourtalesia tanneri Agassiz

- E 2404 MV68-I-75 Guaymas Basin, Gulf of Calif. 26°45.5'N 111°01'W Jan. 22, 1968 1684-1723m 25' ott. tr. R/V T. Washington C. Hubbs

Echinocrepis sp.

- E 1541 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' otter trawl Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 2399 MV70-III-6 W. of Patton Escarpment 31°20'N 120°09'W March 23, 1970 3706-3806m 25' ott. tr. R/V Melville S. Luke
- E 2400 MV69-VI-9 W. of Patton Escarpment 31°12'N 119°37'W Dec. 18, 1969 3600-3676m 25' ott. tr. R/V Melville C. Hubbs, S. Luke (SI070-22)
- E 2474 MV70-III-3 W. of Patton Escarpment 31°27'N 120°11'W Mar. 21, 1970 3880m 25' ott. tr. R/V Melville S. Luke

## Gen. Indet.

- E 2397 MV70-III-1 W. of Patton Escarpment 31°25'N 120°14'W Mar. 21, 1970 3950-3880m IKMT R/V Melville S. Luke

## Order SPATANGOIDA

## Family Hemiasteridae

Hemiaster sp.

- E 2473 MV65-I-26 off Bahia San Cristobal, Baja Calif., Norte, Mex. 27°08'N 115°10'W 4085-4096m 10' IKMT Jan. 21, 1965 R/V Horizon C. Hubbs

## Family Palaeostomatidae

Palaeostoma mirabile (Gray)

- E 1364 NAGA S9 60-0853 Gulf of Thailand 10°04'10"N 100°19'10"E 6' Beam T. Nov. 10, 1960 55m Cat. #54-00932

## Family Schizasteridae

cf. *Tripylaster* cf. *philippii* (Gray)

- E 831 MV72-II-27 off Arica, Chile 18°35'S 70°32'W  
25' otter trawl 768-968m May 7, 1972 R/V  
T. Washington S. Luke

*Brisaster latifrons* (Agassiz)

- E 64 Cruise M-1 Sta. #2 San Diego Trough  
32°58.3'N 117°29.9'W 32°58.9'N 117°33.8'W  
768m 25' otter trawl Feb. 3, 1971 R/V  
Agassiz coll. T. Matsui
- E 79 Rokop 71-II-20 San Diego Trough 32°24.7'N  
117°27.75'W 32°29.2'N 117°30.2'W 1226-1204m  
25' otter trawl Jan. 18-19, 1971 R/V  
Agassiz coll. F. Rokop
- E 97 R-39 San Diego Trough July 12, 1971  
32°36.5'N 117°32.5'W R/V Agassiz 1162-1198m  
25' ott. tr. F. Rokop
- E 640 A-24 Afterthot II San Diego Trough  
32°52.1'N 117°42.1'W-32°52.3'N 117°41.9'W  
1057m 25' otter trawl May 8, 1975 R/V  
Agassiz coll. Siebenaller
- E 967 MV68-I-76 Carmen Basin, Baja Calif. Sur,  
25°56'N 110°35'W 1322m 25' otter trawl  
Jan. 22, 1968 R/V T. Washington C. Hubbs
- E 987 MV-68-I-59 N.W. of Angel de La Guarda,  
Golfo de Calif. 29°41'N 113°56'W 566-644m  
40' otter trawl Jan. 18, 1968 R/V  
T. Washington C. Hubbs
- E 1462 SnaFu SI080-10 off San Diego, Calif.  
32°40.2'N 117°21.6'W 25' ott. tr. #3 201m  
Feb. 29, 1980 R/V New Horizon R. Rosenblatt
- E 2306 M15-OT-17 Pt. Sal, Calif. 25' ott. tr.  
34°53'N 120°49'W Apr. 2, 1974 132m R/V  
Agassiz T. Matsui
- E 2381 SI063-870 San Diego Trough 32°33'N  
117°23.5'W Oct. 31, 1963 850-146m 10'IKMT  
#2 R/V Agassiz R. Wisner
- E 2387 M15 OT-12 off Pta. Piedras Blancas, Calif.  
35°33'N 121°40'W Apr. 1, 1974 906m 25' ott.  
tr. R/V Agassiz T. Matsui
- E 2388 M15 OT-15 off Morro Bay, Calif. 25°10'N  
121°02'W Apr. 2, 1974 99m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2389 M15 OT-13 off Pta. Piédras Blancas, Calif.  
35°35'N 121°28'W Apr. 1, 1974 567-603m 25'  
ott. tr. R/V Agassiz T. Matsui
- E 2391 CalCofi 74126/II off Piedras Blancas,  
Calif. 35°38'N 121°44.5'W Dec. 10, 1974  
915m 25' ott. tr. #5 R/V Agassiz T. Matsui
- E 2393 M10 Sta. 1A San Diego Trough 32°28'N  
117°34'W Feb. 9, 1972 1189m 25' ott. tr.  
R/V Oconostota T. Matsui
- E 2396 Cruise 52 Sta. 35 off N. Calif. 39°42.6'N  
123°52'W July 15, 1970 95m ott. tr.  
U.S.F.W.S. Hartman
- E 2405 MV68-I-73 Gulf of Calif., Mexico 28°50'N  
113°10'W Jan. 20, 1968 2000 M.W.O. IKMT R/V  
T. Washington C. Hubbs
- E 2424 Torrey Pines State Park to Scripps Inst.,  
La Jolla, Calif. Aug. 24, 1915 depth  
unknown
- E 2428 off S. Calif. June 6, 1938 439-274m  
W.P. Shepard
- E 2430 MV68-I-60 N.W. of Angel de La Guarda, Gulf  
of Calif., Mex. 29°42'N 113°58'W 567-603m  
40' ott. tr. Jan. 18, 1968 R/V  
T. Washington
- E 2435 H52-43 Santa Barbara Channel, Calif.  
34°13'N 119°45'W Apr. 3, 1952 220-252m 5'  
scoop dredge R/V Horizon C. Hubbs
- E 2442 R-8 Tanner Basin, Calif. Oct. 28, 1970  
32°44'N 119°27'W epibenthic sled 1298-1302m  
R/V Agassiz F. Rokop, S. Luke

- E 2443 M15 OT-11 off Pta. Piedras Blancas, Calif.  
35°28'N 121°50'W March 31, 1974 1189-1170m  
25' ott. tr. R/V Agassiz T. Matsui
- E 2461 MV71-I-31 Isla Cedros, Baja Calif., Norte,  
Mex. 28°17.4'N 115°28'W May 27, 1971 329-  
311m 6' Sigsbee tr. R/V Agassiz C. Hubbs,  
S. Luke
- E 2464 Cruise 52 Sta. 21 off S. Oregon 42°08.5'N  
124°32.8'W July 9, 1970 146m ott. tr.  
Hartman
- E 2466 A-27 Afterthot II off Encinitas, Calif.  
33°0N 117°34.3'W May 9, 1975 750m 25' ott.  
tr. R/V Agassiz J.F. Siebenaller
- E 2467 A-26 Afterthot II off Encinitas, Calif.  
33°02.6'N 117°24.5'W May 9, 1975 439m 25'  
ott. tr. R/V Agassiz J.F. Siebenaller
- E 2528 SnaFu SI080-9 off San Diego, Calif. 32°43'N  
117°24.4'W Feb. 29, 1980 402-421m 25' ott.  
tr. #2 R/V N. Horizon R. Rosenblatt
- E 2767 No. 249 Pt. Sur Canyon, Calif. 36°13.9'N  
121°54.7'W Sept. 28, 1938 366m F.P. Shepard

*Moira clotho* Michelin

- E 1081 P-148-60 N. of Mazatlan, Sinaloa, Mex.  
24°09.4'N 107°25.1'W 10' otter trawl 18m  
sand Mar. 16, 1960 R. Parker U.C.B. (B-  
7558)
- E 1082 P-149-60 N. of Mazatlan, Sinaloa, Mex.  
24°13.0'N 107°26.5'W 10' otter trawl 11m  
silty sand Mar. 17, 1960 R. Parker U.C.B.  
(B-7554)
- E 2465 beach 5 mi N. of Guaymas, Sonora, Mexico  
ca. 27°55'N 111°W intertidal Apr. 10, 1960  
A. Flechsig 'Orca'

## Family Brissidae

*Brissus latecarinatus* (Leske)

- E 1100 Hermes Reef, Midway Is., Pacific ca.  
28°12'N 117°23'W donated by G.H. Fosdick

*Brissus unicolor* (Leske)

- E 1089 SIOM-59-64-1 St. John Island, Virgin  
Islands ca. 18°18'N 64°40'W C. Limbaugh
- E 1091 SIOM59-62-4 New Providence, Bahamas ca.  
25°05'N 77°25'W C. Limbaugh 1955 U.C.B.  
(B-3035)

*Brissopsis luzonica* (Gray)

- E 1369 NAGA S9A 60-1052 Gulf of Thailand  
11°59'24"N 102°11'06"E 7' Beam T. Dec. 10,  
1960 26m Cat. #54-00439
- E 1373 NAGA S9A 60-1091 Gulf of Thailand  
12°17'28"N 100°18'40"E 16' Otter T.  
Dec. 13, 1960 29m Cat. #54-01018
- E 1376 NAGA S9A 60-1103 Gulf of Thailand  
13°05'50"N 100°26'10"E 16' Otter T.  
Dec. 13, 1960 20m Cat. #54-01053

*Brissopsis pacifica* (Agassiz)

- E 63 Cruise M-1 Sta. #2 San Diego Trough  
32°53.8'N 117°29.9'W 32°58.9'N 117°33.8'W  
768m 25' otter trawl Feb. 3, 1971 R/V  
Agassiz coll. Matsui
- E 205 off San Diego, Calif. 64-27m 32°51.6'N  
117°16.8'W June 20, 1906
- E 207 off San Diego, Calif. June 21, 1906  
32°51.5'N 117°17'W 82m
- E 330 Straight off W. of Pt. La Jolla, San Diego,  
Calif. Jan. 28, 1965 16' otter trawl #1  
101-183m coll. Fager ST-908
- E 333 Loma Sea Valley, due W. of Pt. Loma 326-  
351m otter trawl #1 Jan. 21, 1965 coll.  
Fager 908-ST

- E 547 MV-68-I-28 W. of Espiritu Santo Is.  
24°23.1'N 110°22.6'W-24°23.7'N 110°22.6'W  
59-77m 40' otter trawl Jan. 12, 1968 R/V  
T. Washington coll. C. Hubbs
- E 641 A-26 Afterthot II off Encinitas, Calif.  
33°02.7'N 117°24.5'W 33°02.5'N 117°24.5'W  
439m 25' otter trawl May 9, 1975 R/V  
Agassiz coll. J.F. Siebenaller
- E 649 A-27 Afterthot II off Encinitas, Calif.  
32°59.6'N 117°34.1'W-33°00.3'N 117°34.5'W  
750m 25' otter trawl May 9, 1975 R/V  
Agassiz coll. J. Siebenaller
- E 749 SIO76-96 N. of Catalina Is., Calif.  
33°33.5'N 118°38'W Mar. 9, 1976 556-585m  
40' ott. tr. R/V Agassiz S. Luke
- E 782 RR65-38 Isla Monserrate, Gulf of Calif.,  
Mex. 25°39'N 111°04.7'W July 11, 1965 40'  
otter trawl R. Rosenblatt
- E 1083 P-212-60 off Cabo Tepoca, Sonora, Mex.  
30°20.5'N 113°20.5'W 10' otter trawl 67-57m  
Mar. 13, 1960 R. Parker U.C.B. (B-7584)
- E 1448 SnaFu SIO80-0 off San Diego Feb. 29, 1980  
32°43'N 117°24.4'W 25' ott. tr. #2 402-421m  
R/V New Horizon R. Rosenblatt
- E 1509 MET Sta. 104 Catalina Basin, Calif. 33°24'N  
118°35.5'W 25' ott. tr. 550-640m Jan. 29,  
1981 R/V N. Horizon K. Smith, S. Luke
- E 2308 M6-2-1 off San Diego, Calif. 32°55'N  
117°30'W Aug. 12, 1971 700 M.W.O. 1m net  
hit bottom R/V Agassiz T. Matsui
- E 2390 M15 OT-22 off Del Mar, Calif. 32°59'N  
117°40'W Apr. 4, 1974 920m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2394 M6, Sta. 2 San Diego Trough 32°52'N  
117°31'W Aug. 13, 1971 732-860m 25' ott.  
tr. R/V Agassiz T. Matsui
- E 2395 MV71-I-33 W. of Isla Cedros, Baja Calif.,  
Norte, Mexico 28°22'N 115°20'W May 27, 1971  
221-203m 25' ott. tr. R/V Agassiz C. Hubbs,  
S. Luke
- E 2402 69/06/1 S.E. San Nicolas Is., Calif. Dredge  
#15 1189-732m R/V Agassiz Edwin Allison
- E 2408 SIO65-106 Coronado Bank, San Diego, Calif.  
32°33.2'N 117°22.5'W Apr. 19, 1965 155m  
Diving Saucer Dive #346 C. Hubbs
- E 2413 SIO63-17 San Diego Trough 32°24'N 117°30'W  
Feb. 8, 1963 732-1280m 10' IKMT R. Wisner
- E 2423 Torrey Pines State Park to Scripps Inst.,  
La Jolla, Calif. Aug. 24, 1915 238m
- E 2429 MV71-I-31 Islas San Benitos, Baja Calif.,  
Norte, Mexico 28°17.4'N 115°28'W 329-311m  
6' Sigsbee tr. May 27, 1971 R/V Agassiz  
C. Hubbs, S. Luke
- E 2460 SIO76-93 E. of Catalina Is., Calif. 33°28'N  
118°27'W Mar. 8, 1976 25' ott. tr. 397-355m  
R/V Agassiz S. Luke
- E 2698 R/V Propsector off Cardiff, Calif.  
33°08.2'N 117°40.3'W Feb. 4, 1977 793m  
spade core
- E 2752 MV71-I-32 Isla Cedros, Baja Calif., Norte,  
Mex. 28°18'N 115°23.5'W 265-247m 6' Sigsbee  
tr. May 27, 1971 R/V Agassiz C. Hubbs,  
S. Luke

Brissopsis cf. pacifica (Agassiz)

- E 2410 Mag Bay A-20 N.W. of Bahia Magdalena, Baja  
Calif., Sur, Mex. 24°54'N 113°08'W 1229-  
1147m 6' Sigsbee tr. Jan. 31, 1964 R/V  
Horizon C. Hubbs (SIO64-14)

cf. Brissopsis cf. pacifica (Agassiz)

- E 2472 SnaFu SIO80-10 off San Diego, Calif.  
32°40.2'N 117°21.6'W 201m 25' ott. tr. #3  
Feb. 29, 1980 R/V N. Horizon R. Rosenblatt

Brissopsis sp.

- E 1290 NAGA S4 60-0232 South China Sea 13°26'15"N  
109°31'10"E 10' Beam T. Mar. 3, 1960 141m  
Cat. #54-00386

Meoma ventricosa (Lamarck)

- E 1090 SIO59-62-5 New Providence, Bahamas, ca.  
25°05'N 77°25'W C. Limbaugh 1955 U.C.B.  
(B-3035)

Metalia nobilis Verrill

- E 716 SB-51 Tombola at S.W. tip of Isla San Jose  
ca. 24°45'N 110°35'W intertidal April 15,  
1960 coll. A. Flechsig on 'Orca'

Plagiobrissus grandis (Gmelin)

- E 1096 SIO59-62-8 New Providence, Bahamas ca.  
25°05'N 77°25'W C. Limbaugh 1955 U.C.B.  
(B-3035)

Family Spatangidae

Spatangus californicus Clark

- E 365 MV68-I-65 E. of Angel de La Guarda, Gulf  
29°19.9'N 113°10.4'W-29°20.4'N 113°12.0'W  
265-284m 25' otter trawl Jan. 20, 1968 R/V  
T. Washington coll. C. Hubbs
- E 727 SIO76-93 E. of Catalina Is., Calif. 33°28'N  
118°27'W 25' otter trawl 397-355m March 8,  
1976 R/V Agassiz coll. S. Luke
- E 729 40 mile bank dredge 32°43'N 118°12'W March  
22, 1938 110m coll. F.P. Shepard on "E.W.  
Scripps"
- E 986 MV68-I-59 N.W. Of Angel de La Guarda, Golfo  
de Calif. 29°41'N 113°56'W 566-644m 40'  
otter trawl Jan. 18, 1968 R/V T. Washington  
C. Hubbs
- E 2353 M15 OT-14 off San Simeon, Calif. 35°34.5'N  
121°19'W Apr. 1, 1974 256m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2355 off W. side of Catalina Is., Calif. 183m  
ott. tr. Mar. 7, 1973 R. Bauer
- E 2425 San Clemente Is., Calif. July 17, 1908  
32°23.7'N 119°06.0'W 55-73m 4' tan. trawl  
off La Jolla, Calif. Aug. 24, 1915 201m
- E 2426 MV68-I-60 Golfo de California, Mex. 29°42'N  
113°58'W Jan. 18, 1968 40' ott. tr. 567-  
603m R/V T. Washington C. Hubbs
- E 2527 SnaFu SIO80-9 off San Diego, Calif. 32°43'N  
117°24.4'W Feb. 29, 1980 402-421m 25' ott.  
tr. #2 R/V N. Horizon R. Rosenblatt
- E 2781 Menard's Student Cruise - off San Diego,  
Calif. 32°32.9'N 117°21.6'W 128-137m rock  
dredge Feb. 7.

Maretia cordata Mortensen

- E 1381 NAGA S11 61-0229 Timor Sea 11°15.2'S  
126°54.9'E shell dredge Apr. 14, 1961 70m  
Cat. #54-01662

Maretia planulata (Lamarck)

- E 1261 NAGA S4 60-0208 S. China Sea 12°14.8'N  
109°14.7'E 10' Beam T. Feb. 25, 1960 46m  
Cat. #54-00378
- E 1355 NAGA S8 60-0711 S. China Sea 09°03'00"N  
106°26'00"E 25' dredge Sept. 8, 1960 22m  
Cat. #54-00405

Nacospatangus depressus Clark

- E 366 MV68-I-65 E. of Angel de la Guarda, Gulf  
29°19.9'N 113°10.4'W-29°20.4'N 113°12.0'W  
265-284m 25' otter trawl Jan. 20, 1968 R/V  
T. Washington coll. C. Hubbs

cf. Nacospatangus cf. depressus Clark

- E 2491 MV71-I-1 Isla Guadalupe, Baja Calif., Mex.  
28°51.5'N 118°16.3'W May 18, 1971 95-81m 6'  
Sigsbee tr. R/V Agassiz C. Hubbs

Pseudomaretia interrupta (Studer)

- E 1383 NAGA SSII 61-0246 V-352 Timor Sea 10°56.3'S  
129°25.9'E shell dredge Apr. 19, 1961 71m  
Cat. #54-01665

## Family Loveniidae

Lovenia cordiformis Agassiz

- E 723 La Jolla Canyon, La Jolla, Calif. 46m  
Mar. 22, 1938 coll. F.P. Shepard on  
'E.W. Scripps'
- E 756 H51-32 Bahia Todos Santos, S. side Baja  
Calif., Norte ca. 31°45'N 116°35'W 27-46m  
pipe dredge Feb. 6, 1951 coll. C. Hubbs on  
'Orca'
- E 1077 P-191-60 off Bahia Kino, Sonora, Mex.  
28°41.0'N 112°06.0'W 10' otter trawl 35-26m  
Mar. 25, 1960 R. Parker U.C.B. (B-7585)
- E 1078 P-171-60 off Morro Colorado, Sonora, Mex.  
28°19.3'N 111°42.3'W shell dredge 42m  
Mar. 22, 1960 R. Parker U.C.B. (B-7555)
- E 1079 P-212-60 off Cabo Tepoca, Sonora, Mex.  
30°20.5'N 113°20.5'W 10' otter trawl 67-57m  
Mar. 31, 1960 R. Parker U.C.B. (B-7584)
- E 1080 P-208-60 off Cabo de Lobos, Sonora, Mex.  
29°53.8'N 112°45.5'W shell dredge 13m  
Mar. 30, 1960 R. Parker U.C.B. (B-7550)
- E 2237 P-185-60 Gulf of Calif., Mexico 28°20.9'N  
111°58.0'W March 25, 1960 57m shell dredge  
R. Parker & Curray
- E 2420 Rim of North Canyon July 22, 1951 Scotten  
ca. 52m
- E 2421 H52-8 off mouth of Tijuana River, San  
Diego, Calif. 32°31'N 117°12'W Feb. 26,  
1952 38m deep water dredge R/V Horizon  
J. Isaacs
- E 2422 H52-205 S.W. of Pta. Canoas, Baja Calif.,  
Norte, Mex. 29°20'N 115°02'W Sept. 6, 1952  
40m pipe stem dredge R/V Orca K.S. Norris
- E 2492 S. Coronado Is., Baja Calif., Norte, Mexico  
June 27, 1958 C. Limbaugh
- E 2511 Saucer Dive #335 ca. 9 mi. W. of Pt. Loma,  
Calif. April 6, 1965 175m A. Flechsigg

Lovenia subcarinata (Gray)

- E 1268 NAGA S5 60-0363 Gulf of Thailand 08°39'45"N  
100°14'45"E 6' Beam T. Apr. 27, 1960 17m  
Cat. #54-01251
- E 1272 NAGA S9A 60-1077 Gulf of Thailand  
12°21'18"N 101°31'55"E 16' otter t.  
Dec. 12, 1960 31m Cat. #54-01607
- E 1283 NAGA S5 60-0316 Gulf of Thailand 09°46'15"N  
100°10'30"E 6' Beam T. Apr. 22, 1960 25m  
Cat. #54-00487
- E 1294 NAGA S7 60-0628 Gulf of Thailand 09°17'30"N  
100°06'15"E 2.5' dredge Aug. 6, 1960 19m  
Cat. #54-00496
- E 1299 NAGA S9A 60-1052 Gulf of Thailand  
11°59'24"N 102°11'06"E 7' Beam T. Dec. 10,  
1960 26m Cat. #54-00439
- E 1324 NAGA S3 60-0137 Gulf of Thailand 08°25'30"N  
100°44'40"E 6' Beam T. Jan. 26, 1960 27m  
Cat. #54-01277
- E 1371 NAGA S9A 60-1071 Gulf of Thailand  
11°51'15"N 99°54'45"E 16' otter t. Dec. 12,  
1960 20m Cat. #54-01538
- E 1374 NAGA S9A 60-1094 Gulf of Thailand  
12°16'45"N 100°07'15"E 16' otter t.  
Dec. 13, 1960 23m Cat. #54-01031

- E 2419 NAGA S9A 60-1049 Gulf of Thailand  
11°36'42"N 102°26'00"E Dec. 10, 1960 33m 7'  
beam tr. Kokut

Breynia cf. desori Gray

- E 1274 NAGA SSII V-351 61-0246 Timor Sea 10°56.3'S  
129°25.9'E shell dredge Apr. 19, 1961 71m  
Cat. #54-01663
- E 1426 NAGA S11A 61-0213 Timor Sea 13°21.5'S  
127°01.3'E shell dredge Apr. 8, 1961 270m  
Cat. #54-01560

## ECHINOIDEA

Incertae Sedis

- E 469 ST066-525 Queensland Australia, W. coast of  
Stanley Is. Flinders Group Dec. 26, 1966  
14°09.3'S 144°12.2'E otter trawl R/V  
A. Helix 15-18m coll. C. Hubbs
- E 841 STYX-7 MPE 68091 Sta. 3 Hess Guyot 17°53'N  
174°23'W Sept. 1, 1968 1763-1719m Sigsbee  
trawl R/V Agassiz W. Newman
- E 843 STYX-7 MPE 68093 Sta. 1 Hamilton Guyot  
18°27'N 179°31'W 25' otter trawl 1435-1672m  
Sept. 3, 1968 R/V Agassiz W. Newman
- E 846 STYX-7 MPE 68095 Sta. 2 Hamilton Guyot  
18°37'N 179°34'W Sept. 5, 1968 1472-1582m  
25' otter trawl R/V Agassiz W. Newman
- E 849 STYX-7 MPE 680917 Sta. 1 Darwin Guyot  
22°01'N 171°34'E Sept. 17, 1968 1280m  
Sigsbee trawl R/V Agassiz W. Newman
- E 853 STYX-7 MPE 680921 Sta. 2 Kure Atoll 28°23'N  
178°22'W Sept. 21, 1968 55m rock dredge R/V  
Agassiz W. Newman
- E 854 STYX-7 MPE 680921 Sta. 2 Kure Atoll 28°23'N  
178°22'W Sept. 21, 1968 55m rock dredge R/V  
Agassiz W. Newman
- E 856 STYX-7 MPE 680924 Sta. 1 Midway Atoll  
28°13'N 177°23'W Sept. 24, 1968 Diving  
15 ft. T. Cukr
- E 902 SS-72, 140-DB S. of Kauai, Hawaii  
21°49.54'N 159°23.85'W dredge box 732m  
July 10, 1972 R/V Sea Scope
- E 955 CIRCE Rodrigues Is., Indian Ocean 19°43'S  
63°30'E hand collection 12-15 ft. Montipora  
reef Aug. 29, 1968 Donovan
- E 974 Point Barrow, Alaska, dove collections,  
40-120 ft. Aug. 3-8, 1958
- E 1316 NAGA S3 60-0104 Gulf of Thailand 09°37'00"N  
100°21'00"E 6' Beam T. Jan. 20, 1960 26-30m  
Cat. #54-00485
- E 1325 NAGA S3 60-0137 Gulf of Thailand 08°25'30"N  
100°44'40"E 6' Beam T. Jan. 26, 1960 27m  
Cat. #54-00340
- E 1327 NAGA S3 60-0140 Gulf of Thailand 09°07'00"N  
100°47'45"E 6' Beam T. Jan. 26, 1960 33m  
Cat. #54-00875
- E 1332 NAGA S4 60-0206 S. China Sea 12°09'30"N  
109°17'30"E 10' Beam T. Feb. 23, 1960 15m  
Cat. #54-00376
- E 1338 NAGA S4 60-0237 S. China Sea 12°09.7'N  
109°24.7'E 10' Beam T. Mar. 4, 1960 93m  
Cat. #54-00390
- E 1353 NAGA S7 60-0627 Gulf of Thailand 09°17'30"N  
100°06'15"E 6' Beam T. Aug. 6, 1960 17m  
Cat. #54-00249
- E 1362 NAGA S9 60-0828 S. China Sea 05°28'50"N  
106°37'40"E 2.5' dredge Oct. 4, 1960 55m  
Cat. #54-00420
- E 1363 NAGA S9 60-0853 Gulf of Thailand 10°04'10"N  
100°19'10"E 6' Beam T. Nov. 10, 1960 55m  
Cat. #54-00930
- E 1367 NAGA S9A 60-1046 Gulf of Thailand  
11°25'00"N 102°12'12"E 7' Beam T. Dec. 10,  
1960 58m Cat. #54-00787

- E 1368 NAGA S9A 60-1049 Gulf of Thailand  
11°36'42"N 102°26'00"E 7' Beam T. Dec. 18,  
1960 30m Cat. #54-01568
- E 1370 NAGA S9A 60-1059 Gulf of Thailand  
11°33'25"N 100°53'30"E 7' Beam T. Dec. 11,  
1960 50m Cat. #54-01354
- E 1378 NAGA S10 61-0128 Gulf of Thailand  
10°12'42"N 103°55'15"E 16' otter t. Feb. 2,  
1961 11m Cat. #54-01671
- E 1377 NAGA S10 61-0045 S. China Sea 51°41'00"N  
108°39'18"E 7' Beam T. Jan. 24, 1961 29m  
Cat. #54-00964
- E 1380 NAGA S11 61-0217 Timor Sea 12°34.0'S  
125°13.8'E shell dredge Apr. 9, 1961 87m  
Cat. #54-01673
- E 1382 NAGA SSII 61-0246 V-351 Timor Sea 10°56.3'S  
129°25.9'E shell dredge Apr. 19, 1961 71m  
Cat. #54-01664
- E 1384 NAGA S11 61-0247 Timor Sea 10°55.7'S  
129°05.0'E shell dredge Apr. 19, 1961 33m  
Cat. #54-01672
- E 1385 NAGA SSII 61-0252 Timor Sea 10°25.3'S  
128°28.0'E shell dredge Apr. 20, 1961 77m
- E 1405 NAGA SSII V-356 61-0250 Timor Sea 10°51.0'S  
128°42.0'E shell dredge Apr. 19, 1961 34m  
CN1054
- E 1487 New Harbor, Antarctica, 130 ft., SCUBA,  
Nov. 15, 1975 O'Connor
- E 1490 New Harbor, Antarctica, 130 ft. SCUBA  
Oct. 29, 1974
- E 1491 Garwood Valley, Antarctica, 80-100 ft.  
SCUBA Jan. 5, 1976 O'Connor & Oliver
- E 1493 New Harbor, Antarctica, 130 ft. SCUBA  
Nov. 15, 1975
- E 1502 Knocker Is., Magallanes, Chile 49°52.8'S  
75°13.3'W May 20, 1973 "Bareback"
- E 2259 MV68-I-65 Golfo de Calif., Mexico 29°20.2'N  
113°11.5'W Jan. 20, 1968 265-284m 25' ott.  
tr. R/V T. Washington C. Hubbs
- E 2275 TEPE70-35 San Blas Is., Panama 09°35'07"N  
78°44'27"W Oct. 7, 1970 0-4 ft. snorkel R/V  
A. Helix W. Newman, S. Luke
- E 2276 TEPE70-35 San Blas Is., Panama 09°35'07"N  
78°44'27"W Oct. 7, 1970 0-4 ft. snorkel R/V  
A. Helix W. Newman, S. Luke
- E 2284 Aquin Is., [Haiti?] collected on trip  
between Florida & San Diego, March to May  
1920 Capt. Crandell & E. Michael
- E 2296 TEPE70-30 San Blas Is., Panama 09°35'54"N  
78°46'58"W Sept. 27 to Oct. 7, 1970 0-  
60 ft. SCUBA R/V A. Helix W. Newman,  
S. Luke
- E 2298 ANTIPODE 8 144 D Seychelles 08°17.6'S  
58°55.1'E Feb. 4, 1971 490m chain rock  
dredge R/V Melville J. Coatsworth
- E 2314 TEPE70-31 San Blas Is., Panama 09°36'03"N  
78°46'46"W Oct. 6, 1970 2-4 ft. chemfish  
R/V A. Helix W. Newman, S. Luke
- E 2317 MV66-I-6 off Cabo Colnett, Baja Calif.,  
Norte, Mexico 31°05'N 118°W Mar. 31, 1966  
1463-1728m 40' ott. tr. R/V Agassiz  
C. Hubbs
- E 2318 SI067-45 Toro Point, Panama, Atlantic 0-  
15 ft. rotenone Mar. 23, 1967 R. Rosenblatt
- E 2320 Monsoon 110-D Tasman Sea, top of Guyot  
41°27'S 164°16'W rock dredge 1097m Mar. 3,  
1961
- E 2322 Monsoon 107-D Sta. VII-5 S.E. of New  
Zealand 47°35'S 178°58'E 146m rock dredge  
Feb. 28, 1961 Russell
- E 2324 Monsoon P-240-60 off Soembawa Is. 08°02.0'N  
118°08.5'E orange peel grab 57m Oct. 27,  
1960 Parker & Rowland
- E 2338 Capricorn 34 S.E. reef, Ocean Is., 00°52'S  
169°35'E Nov. 30, 1952 intertidal,  
collected by natives & given to Martin  
Johnson R/V Horizon
- E 2339 Capricorn 34 S.E. reef, Ocean Is., 00°52'S  
169°35'E Nov. 30, 1952 intertidal,  
collected by natives & given to Martin  
Johnson
- E 2350 Eniwetak Atoll, Marshall Is. ca. 11°30'N  
162°10'E Sept., 1971-May, 1972 0-60 ft.  
SCUBA coll. T. Dana, R. Nolan
- E 2351 Eniwetak Atoll, Marshall Is. ca. 11°30'N  
162°10'E Sept., 1971-May, 1972 0-60 ft.  
SCUBA coll. T. Dana, R. Nolan
- E 2385 Monsoon Sta. VI-28 E. of New Zealand  
49°42'S 178°52'E Feb. 20, 1961 274m rock  
dredge 101-D Russell, Menard (SI061-155)
- E 2392 MV72-II-4 off Pta. San Juan, Peru 15°48'S  
76°07'W May 10, 1972 ca. 3562m 25' ott. tr.  
R/V T. Washington S. Luke
- E 2398 TEPE70-30 San Blas Is., Panama 09°35'54"N  
78°46'58"W Sept. 27, 1970 0-60 ft. SCUBA on  
coral R/V A. Helix W. Newman, S. Luke
- E 2403 R/V Oconostota Sta. 1 off La Jolla Cove,  
Calif. 32°52.2'N 117°17.4'W Nov. 4, 1969  
73m Van Veen grab F. Rokop, S. Luke
- E 2414 Monsoon Sta. VI-5 S.E. of New Zealand  
47°35'S 178°58'E Feb. 28, 1961 146m rock  
dredge 107-D Russell
- E 2416 NAGA S-3 60-0104 Gulf of Thailand 09°37'N  
100°21'E Jan. 20, 1960 26-31m 6' Beam tr.  
Phangan
- E 2417 NAGA S11A 61-214 Timor Sea 13°17.6'S  
126°51.3'E Apr. 8, 1961 82m shell dredge
- E 2468 Bikini Atoll, 1946
- E 2469 Bikini Atoll, 1946
- E 2470 Bikini Atoll, 1946
- E 2471 NAGA S9A 60-1077 Gulf of Thailand  
12°21'18"N 101°31'55"E Dec. 12, 1960 26m  
16' ott. tr. mud Ko Samet (SI061-635)
- E 2482 NAGA 9A 60-1065 Gulf of Siam 11°13'50"N  
99°41'30"E Dec. 11, 1960 39m 16' ott. tr.  
T. Matsui
- E 2483 NAGA S9A 60-1052 Gulf of Thailand  
11°59'24"N 102°11'06"E Dec. 10, 1960 26m 7'  
beam tr. Ko Chang
- E 2529 N. of Darwin, Australia Aug. 29, 1976 beach  
wash B. Shor
- E 2777 NAGA S11A-V343 61-243 Timor Sea 10°42.0'S  
130°11.5'E Apr. 19, 1961 24m shell dredge
- E 2778 NAGA S11A-V343 61-243 Timor Sea 10°42.0'S  
130°11.5'E Apr. 19, 1961 24m shell dredge
- E 2785 Bahia Thetis, Staten Island, Argentina  
54°38.2'S 65°13.3'W May 14, 1973 in kelp  
bed
- E 2787 Canal Cockburn, Chile 54°22.2'S 71°21.7'W  
May 17, 1973
- E 2790 New Harbor, McMurdo Sound, Antarctica 90-  
130 ft. Nov. 15, 1975
- Class HOLOTHUROIDEA
- Subclass DENDROCHIROTACEA
- Order DENDROCHIROTIDA
- Family Psolidae
- Psolus diomedea* Ludwig
- E 105 P-222-60 off Tijuana River, San Diego,  
Calif. 32°33.4'N 117°13.2'W 31m deep diving  
dredge Mar. 8, 1960 R. Parker Det.  
E. Deichmann

Psolus squamatus (Koren)

- E 117 SOB-1 S.W. of Pta. Banda, Baja Calif., Norte, Mex. 31°38.3'N 116°51.4'W 183-458m rock dredge Feb. 12, 1960 (P-136-60) R. Parker Det. E. Deichmann

Psolus sp.

- E 91 MV71-I-1 Isla de Guadalupe, Mex. 28°51.5'N 118°16.0'W-118°16.5'W 95-81m 6' Sigsbee trawl May 18, 1971 R/V Agassiz coll. Hubbs, Wisner, Luke

Lissothuria hancocki (Deichmann)

- E 131 P-222-60 off Tijuana River, San Diego, Calif. 32°33.4'N 117°13.2'W 31m deep diving dredge Mar. 8, 1960 R. Parker Det. E. Deichmann

Lissothuria nutriens (Clark)

- E 190 Tip of Pt. Loma, San Diego, Calif. Nov. 14, 1955 James Lance  
E 195 Pacific Grove, Calif. Feb., 1921 M. Johnson

Gen. Indet.

- E 816 MV72-II-26 off Arica, Chile 18°42'S 70°37'W May 7, 1972 1097-1152m 25' otter trawl R/V T. Washington S. Luke  
E 1137 TEPE28-23 Bahia Chamela, Jalisco, Mex. 19°35'N 105°08.5'W SCUBA 15-20 ft. Apr. 12, 1978 R/V A. Helix W. Newman, S. Luke  
E 1501 Staten Is., Vancouver Is., Argentina May 4, 1973 10m  
E 2600 TEPE70-7 Isla Jicaron, Panama 07°15.7'N 81°45.3'W rock dredge 64m Sept. 16, 1971 R/V A. Helix W. Newman, S. Luke  
E 2607 Oconostota sta. 4 San Diego Trough 32°38'N 117°30'W Nov. 7, 1969 1097-1180m pipe stem dredge F. Rokop, S. Luke  
E 2647 6203-B Catalina Is., Calif. 238m otter trawl Mar. 22, 1962 F.H. Berry  
E 2702 6111-B-25 Bahia Magdalena, Baja Calif., Sur, Mex. 24°38.4'N 112°01.5'W 27-23m 16' otter trawl #34 Nov. 29, 1961 F.H. Berry (SI062-113)

## Family Cucumariidae

Abyssocucumis abyssorum (Theel)

- E 13 MV70-III-1 W. of Patton Escarpment 31°25'N 120°14'W Mar. 21, 1970 3950-3880m IKMT R/V Melville S. Luke  
E 19 MV70-III-3 W. of Patton Escarpment 31°27'N 120°11'W Mar. 21, 1970 3880m 25' otter trawl R/V Melville S. Luke  
E 22 MV70-III-6 W. of Patton Escarpment 31°20'N 120°09'W Mar. 23, 1970 3706-3806m 25' otter trawl R/V Melville S. Luke  
E 28 MV70-III-8 W. of Patton Escarpment 31°37'N 120°18.5'W Mar. 23, 1970 3916-3950m 25' otter trawl R/V Melville S. Luke  
E 119 T0-58-2, D-5 off Salina Cruz, Oaxaca, Mex. 14°28.5'N 93°09.5'W Nov. 19, 1958 3539-3610m diving dredge (P-128-58) R. Parker Det. E. Deichmann  
E 125 SOB-III-5 W. of Pta. Banda, Baja Calif., Norte, Mex. 31°18'N 117°37'W 2068-2086m 30' otter trawl Feb. 13, 1960 (P-137-60) R. Parker and Yonge Det. E. Deichmann  
E 137 Baja Slope BS-1 S.W. of Cabo Colnett, Baja Calif., Norte, Mex. 30°46'N 116°51'W 1986-1975m 30' otter trawl April 28, 1961 (P-274-61) R. Parker and Boyd Det. E. Deichmann

- E 156 VS-B-II-35 N.W. of Islas Tres Marias, Mex. 22°21'N 107°48.5'W 2999-2996m 40' otter trawl May 15, 1959 (P-96-59) R. Parker, Rowland, Keith Det. E. Deichmann  
E 1535 MET sta. 123 W. of Patton Escarpment 32°35'N 120°35'W Feb. 5, 1981 3634-3713m 40' otter trawl R/V N. Horizon K. Smith, S. Luke

Athyone glasselli Deichmann

- E 149 P-109-59 S.W. side of Los Angeles Bay, Mex. 28°55.0'N 113°31.0'W intertidal hand collection April 7, 1959 Det. E. Deichmann

Cucumaria calcigera

- E 209 Off San Diego, Calif. June 25, 1906 32°54.9'N 117°17.3'W 185m

Cucumaria chilensis Ludwig

- E 130 P-268-60 sta. #6 off Pta. Santo Domingo, Baja Calif., Sur, Mex. 26°12.5'N 113°18.2'W Dec. 2, 1960 92-82m closing dredge R. Parker Det. E. Deichmann  
E 132 P-281-61 Baja Slope Exped. BS-8 25°42.8'N 112°55.0'W May 2, 1961 147-163m 16' otter trawl coll. Boyd and Parker Det. E. Deichmann  
E 134 P-262-60 off Pta. San Juanico, Baja Calif., Sur, Mex. 25°52.3'N 112°49.2'W 103m closing dredge Dec. 1, 1960 R. Parker Det. E. Deichmann  
E 144 Baja Slope BS-7 off Pta. San Juanico, Baja Calif., Sur, Mex. 25°43.0'N 112°51.4'W 121-161m 16' otter trawl May 2, 1961 (P-280-61) R. Parker and Boyd Det. E. Deichmann  
E 146 Baja Slope BS-6 off Pta. San Juanico, Baja Calif., Sur, Mex. 25°55'N 112°34'W 73-80m 16' otter trawl May 2, 1961 (P-279-61) R. Parker and Boyd Det. E. Deichmann  
E 151 P-261-60 off Pta. San Juanico, Baja Calif., Sur, Mex. 26°01.7'N 112°57.5'W 106m closing dredge Nov. 30, 1960 R. Parker Det. E. Deichmann

Cucumaria curata Cowles

- E 194 Pacific Grove, Calif. Feb., 1921 M. Johnson

Eupentacta quinquesemita (Selenka)

- E 197 Pacific Grove, Calif. Feb., 1921 M. Johnson

Neothyone gibbosa Deichmann

- E 148 P-109-59 S.W. side of Bahia de Los Angeles, Baja Calif., Norte, Mex. 28°55.0'N 113°31.0'W intertidal April 7, 1959 R. Parker Det. E. Deichmann

Sphaerothuria bitentaculata Ludwig

- E 129 T058-2, D-5 off Salina Cruz, Oaxaca, Mex. 14°28.5'N 93°09.5'W Nov. 19, 1958 3539-3610m diving dredge R. Parker (P-128-58) Det. E. Deichmann

Sphaerothuria sp.

- E 100 MV65-I-13 Cedros Trench, Baja Calif., Norte, Mex. 28°08'N 116°42'W 4414-4425m 6' Sigsbee trawl June 13, 1965 R/V Horizon C. Hubbs  
E 673 MV72-II-32 Peru-Chile Trench, off Pta. San Juan, Peru 15°45'S 76°07'W 3475m 25' otter trawl May 10, 1972 R/V T. Washington coll. S. Luke  
E 832 MV72-II-27 off Arica, Chile May 7, 1972 18°35'S 70°32'W 25' otter trawl 768-968m R/V T. Washington S. Luke

- E 971 MV68-I-85 Farallon Basin, Golfo de, Calif.  
25°17'N 110°19'W otter trawl 1810-1908m  
Jan. 24, 1968 R/V T. Washington C. Hubbs
- E 2671 MV66-II-4 off Eureka, Calif. 40°30.5'N  
125°45.2'W May 22, 1966 2999-3017m 16'  
otter trawl R. Wisner (SI066-52)
- E 2665 MV65-I-41 Basin off Bahia Magdalena, Baja  
Calif., Sur, Mex. 24°27'N 113°20'W 3497-  
3610m 10' IKMT June 25, 1965 R/V Horizon  
C. Hubbs (SI065-224)

Thyonacta mexicana Deichmann

- E 150 VS-BII-25 N. of Mazatlan, Sinaloa, Mex.  
23°56.6'N 107°21.8'W May 10, 1959 57-44m  
40' otter trawl (P-87-59) R. Parker Det.  
E. Deichmann

Thyone parafusus Deichmann

- E 135 P-109-59 S.W. side of Bahia de Los Angeles,  
Baja Calif., Norte, Mex. 28°55.0'N  
113°31.0'W intertidal April 7, 1959  
R. Parker Det. E. Deichmann

Pachythyone rubra (Clark)

- E 196 Pacific Grove, Calif. Feb., 1921 M. Johnson

Gen. Indet.

- E 658 'ECCE' P.A.-1 rocky point E. of Pta.  
Abreojos, Baja Calif., Sur, W. side of La  
Baliza Bay, W. of Campo Media 26°44'N  
113°35'W intertidal hand collection  
July 23, 1975 coll. Hemingway, Luke
- E 663 'ECCE' P.A.-2-B rocky point E. of Pta.  
Abreojos, Baja Calif., Sur, W. side of  
Bahia La Baliza, mid-tide zone hand  
collection July 24, 1975 coll. Hemingway,  
Luke
- E 666 'ECCE' rocky point E. of Pta. Abreojos,  
Baja Calif., Sur, W. side of Bahia La  
Baliza, tide pools MLLW 26°44'N 113°35'W  
July 25, 1975 coll. Hemingway, Luke
- E 1543 MET sta. 129 W. of Patton Escarpment  
32°22'N 120°42'W 40' otter trawl Feb. 6,  
1981 3640-3740m R/V N. Horizon K. Smith,  
S. Luke
- E 1564 MET sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' otter trawl Feb. 7,  
1981 3689-3632m R/V N. Horizon K. Smith,  
S. Luke
- E 1565 MET sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' otter trawl Feb. 7,  
1981 3689-3632m R/V N. Horizon K. Smith,  
S. Luke

Subclass ASPIDOCHIROTACEA

Order ASPIDOCHIROTIDA

Family Holothuriidae

Brandtothuria impatiens (Forsk.)

- E 121 P-109-59 S.W. side of Bahia de Los Angeles,  
Baja Calif., Norte, Mex. 28°55.0'N  
113°31.0'W intertidal Apr. 7, 1959  
R. Parker Det. E. Deichmann

Holothuria leucospilota Brandt

- E 1434 Sta. 1 Clipperton Is., reef flat in front  
of barracks 10°17'N 109°13'W intertidal  
Mar. 13, 1980 J. Cousteau, S. Luke
- E 1435 Sta. 2 Clipperton Is., reef flat at N. end  
10°18'N 109°13'W intertidal Mar. 15, 1980  
J. Cousteau, S. Luke

Vaneyothuria zaca (Deichmann)

- E 124 P-198-60 Costa de Hermosillo, Golfo de  
Calif., Mex. 28°41.6'N 112°11.0'W 92m shell  
dredge Mar. 27, 1960 J. Curray Det.  
E. Deichmann
- E 152 P-56-59 Santa Ana Bay, Golfo de Calif.,  
Mex. 27°45.0'N 112°38.5'W 69m shell dredge  
#2 Apr. 4, 1959 (VSS-49) R. Parker Det.  
E. Deichmann
- E 153 VSS-104 Golfo de Calif., Mex. 29°19'N  
113°10'W Apr. 10, 1959 73m shell dredge  
(P-71-59) R. Parker Det. E. Deichmann

Family Stichopodidae

Parastichopus californicus (Stimpson)

- E 145 Holt Exped. sta. #10 San Quintin Bay, Baja  
Calif., Norte, Mex. 30°17'N 116°04'W 118m  
10' otter trawl Dec. 4, 1960 C. Boyd,  
D. Dockins (P-267-60) Det. E. Deichmann
- E 147 VS-BII-6 Golfo de Calif., Mexico 29°21.0'N  
112°42.0'W April 28, 1959 130m rock chain  
dredge (P-83-59) R. Parker Det.  
E. Deichmann
- E 155 P-133-59 off San Diego, Calif., 32°31.9'N  
117°17.5'W Jan. 27, 1959 92m deep diving  
dredge R. Parker Det. E. Deichmann

Family Synallactidae

cf. Bathyploetes sp.

- E 140 VS-17 (SI062-366) off Cabo Falso, Baja  
Calif., Sur, Mex. 22°37'N 110°03'W 2622-  
2715m deep diving dredge Mar. 26, 1959 (P-  
42-59) R. Parker Det. E. Deichmann

Pseudostichopus mollis Theel

- E 143 P-201-60 off Hermosillo, Sonora, Mex.  
28°30.0'N 112°22.0'W 230m shell dredge  
Mar. 27, 1960 R. Parker Det. E. Deichmann
- E 98 MV70-III-8 W. of Patton Escarpment 31°35'N  
120°18.5'W Mar. 23, 1970 3916-3950m 25'  
otter trawl R/V Melville S. Luke

Gen. Indet.

- E 954 CIRCE Leg IV sta. 60 Indian Ocean 05°27.0'S  
89°14.8'E rock dredge 4266m June 13, 1968  
J. Coatsworth

Order ELASIPODIDA

Family Delmatidae

Oneirophanta mutabilis Theel

- E 5 MV69-VI-9 W. of Patton Escarpment 31°10'N  
119°35.5'W Dec. 18, 1969 3600-3676m 25'  
otter trawl R/V Melville C. Hubbs, S. Luke
- E 17 MV70-III-3 Baja Calif. abyssal plain  
31°24.0'-31°28.8'N 120°14.5'-120°10.3'W  
3880m 25' otter trawl March 21, 1970 R/V  
Melville coll. R. Wisner, F. Rokop, S. Luke
- E 21 MV70-III-6 Baja Calif. abyssal plain  
31°36.0'-31°14.4'N 120°07.4'-120°09.6'W  
3706-3806m 25' otter trawl March 22, 1970  
R/V Melville coll. R. Wisner, F. Rokop,  
S. Luke
- E 27 MV70-III-8 Baja Calif. abyssal plain  
31°47.5'-31°32.0'N 120°19.0'-120°18.0'W  
3916-3950m 25' otter trawl March 23, 1970  
R/V Melville coll. R. Wisner, F. Rokop,  
S. Luke
- E 123 T058-2, D-5 off Salina Cruz, Oaxaca, Mex.  
14°28.5'N 95°09.5'W Nov. 19, 1958 3539-  
3610m diving dredge (P-128-58) R. Parker  
Det. E. Deichmann

- E 1545 MET sta. 129 W. of Patton Escarpment  
32°22'N 120°42'W 40' otter trawl Feb. 6,  
1981 3640-3740m R/V N. Horizon K. Smith,  
S. Luke
- E 1563 MET sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' otter trawl Feb. 7,  
1981 3689-3632m R/V N. Horizon K. Smith,  
S. Luke

Pannychia moseleyi Theel

- E 82 Rokop 71-II-20 San Diego Trough 32°24.7'N  
117°27.75'W 32°29.2'N 117°30.2'W 1226-1204m  
25' otter trawl Jan. 18-19, 1971 R/V  
Agassiz coll. F. Rokop

Gen. Indet.

- E 817 MV72-II-26 off Arica, Chile May 7, 1972  
18°42'S 70°37'W 25' otter trawl R/V  
T. Washington 1097-1152m S. Luke

Family Laetmogonidae

Laetmogone wyvillethomsoni Theel

- E 8 MV69-VI-9 W. of Patton Escarpment 31°11'N  
119°36'W Dec. 18, 1969 3600-3676m 25' otter  
trawl R/V Melville (SI070-22) C. Hubbs,  
S. Luke

Family Psychropotidae

Benthodytes sanguinolenta Theel

- E 107 P-274-61 Baja Slope Exped. BS-1 off Baja  
Calif. 30°52.0'N 116°53.0'W 30' otter trawl  
1986-1975m April 28, 1961 coll. R. Parker,  
Boyd to 30°42.3'N 116°50.7'W Det.  
E. Deichmann
- E 141 BS-12 Basin off Bahia Magdalena, Baja  
Calif., Sur, Mex. 23°59.5'N 113°11.9'W  
3481-3518m 10' beam tr. May 3, 1961 (P-  
285-61) R. Parker Det. E. Deichmann
- E 157 SOB-5 W. of Pta. Banda, Baja Calif., Norte,  
Mex. 31°18'N 117°36'W Feb. 13, 1960 2068-  
2086m 30' otter trawl (P-137-60) R. Parker  
and Yonge Det. E. Deichmann

Benthodytes sp.

- E 7 MV69-VI-9 W. of Patton Escarpment 31°11'N  
119°36'W Dec. 18, 1969 3600-3676m 25' otter  
trawl R/V Melville (SI070-22) C. Hubbs,  
S. Luke
- E 9 MV69-VI-9 W. of Patton Escarpment 31°11'N  
119°36'W Dec. 18, 1969 3600-3676m 25' otter  
trawl R/V Melville (SI070-22) C. Hubbs,  
S. Luke
- E 15 MV70-III-1 Baja Calif. abyssal plain  
31°47.0'-31°18.8'N 120°12'-120°14.8'W  
3950-3880m IKMT March 21, 1970 R/V Melville  
coll. R. Wisner, F. Rokop, S. Luke
- E 23 MV70-III-6 Baja Calif., abyssal plain  
31°36.0'-31°14.4'N 120°07.4'-120°09.6'W  
3706-3806m 25' otter trawl March 22, 1970  
R/V Melville coll. R. Wisner, F. Rokop,  
S. Luke
- E 24 MV70-III-8 Baja Calif. abyssal plain  
31°47.5'-31°32.0'N 120°19.0'-120°18.0'W  
3916-3950m 25' otter trawl March 23, 1970  
R/V Melville coll. R. Wisner, F. Rokop,  
S. Luke

Psychropotes dubiosa Ludwig

- E 106 Baja Slope BS-12 Basin off Bahia Magdalena,  
Baja Calif., Sur, Mex. 23°59.5'N 113°11.9'W  
3481-3518m 10' beam tr. May 3, 1961 (P-  
285-61) R. Parker Det. E. Deichmann

Psychropotes sp.

- E 10 MV69-VI-9 W. of Patton Escarpment 31°11'N  
119°36'W Dec. 18, 1969 3600-3676m 25' otter  
trawl R/V Melville (SI070-22) C. Hubbs,  
S. Luke
- E 14 MV70-III-1 Baja Calif. abyssal plain  
31°47.0'-31°18.8'N 120°12'-120°14.8'W  
3950-3880m IKMT March 21, 1970 R/V Melville  
coll. R. Wisner, F. Rokop, S. Luke
- E 20 MV70-III-3 Baja Calif. abyssal plain  
31°24.0'-31°28.8'N 120°14.5'-120°10.3'W  
3880m 25' otter trawl March 21, 1970 R/V  
Melville coll. R. Wisner, F. Rokop, S. Luke
- E 26 MV70-III-8 Baja Calif. abyssal plain  
31°47.5'-31°32.0'W 120°19.0'-120°18.0'W  
3916-3950m 25' otter trawl March 23, 1970  
R/V Melville coll. R. Wisner F. Rokop,  
S. Luke
- E 101 MV70-III-6 Baja Calif., Norte, abyssal  
plain 31°36.0'N 120°07.4'W 31°14.4'N  
120°09.6'W 3706-3806m 25' otter trawl  
March 23, 1970 R/V Melville coll. Wisner,  
Rokop, Luke

Gen. Indet.

- E 826 MV72-II-26 off Arica, Chile May 7, 1972  
18°42'S 70°37'W 25' otter trawl 1097-1152m  
R/V T. Washington S. Luke
- E 862 SS72-115DB N. Pacific Ocean R/V Sea Scope  
38°56.39'N 178°37.26'W June 28, 1972 5396m  
dredge box, Global Marine
- E 2740 MV65-I-38 Basin off Bahia Magdalena, Baja  
Calif., Sur, Mex. 24°34'N 113°25'W 3563-  
3621m 6' Sigsbee tr. R/V Horizon C. Hubbs  
(SI065-221)

Family Elpidiidae

Scotoplanes globosa Theel

- E 6 MV69-VI-9 W. of Patton Escarpment 31°10'N  
119°36.5'W Dec. 18, 1969 3600-3676m 25'  
otter trawl R/V Melville C. Hubbs, S. Luke
- E 12 MV70-III-1 Baja Calif. abyssal plain  
31°47.0'-31°18.8'N 120°12'-120°14.8'W  
3950-3880m IKMT March 21, 1970 R/V Melville  
coll. R. Wisner, F. Rokop, S. Luke
- E 16 SI069-487 San Diego Trough 32°27'N  
117°31.4'W Dec. 13, 1969 1207-1234m 25'  
otter trawl R/V Melville R. Hessler,  
S. Luke
- E 18 MV70-III-3 Baja Calif. abyssal plain  
31°24.0'-31°28.8'N 120°14.5'-120°10.3'W  
3880m 25' otter trawl March 21, 1970 R/V  
Melville coll. R. Wisner, F. Rokop, S. Luke
- E 25 MV70-III-8 Baja Calif. abyssal plain  
31°47.5'-31°32.0'N 120°19.0'-120°18.0'W  
3916-3950m 25' otter trawl March 23, 1970  
R/V Melville coll. R. Wisner, F. Rokop,  
S. Luke
- E 29 Oconostota sta. 4 San Diego Trough 32°38'N  
117°31'W Nov. 7, 1969 1097-1180m 4' pipe  
stem dredge F. Rokop, S. Luke
- E 49 Rokop 70-I-9 Tanner Basin, R/V Agassiz  
32°53.4'N 119°33.8'W 32°49.5'N 119°31.9'W  
1398m 25' otter trawl Oct. 28, 1970  
F. Rokop, R. McConnaughey, S. Luke
- E 66 Rokop 70-I-12 San Diego Trough 32°37.0'N  
117°32.6'W-32°33.2'N 117°33.1'W 1171-1217m  
25' otter trawl Oct. 29, 1970 R/V Agassiz  
F. Rokop, R. McConnaughey, S. Luke
- E 73 Rokop 71-II-24 Tanner Basin 32°41.0'N  
119°30.5'W 32°46.5'N 119°25.9'W 1317-1363m  
25' otter trawl Jan. 20, 1971 R/V Agassiz  
coll. F. Rokop, R. McConnaughey



- E 76 Rokop 71-II-27 Tanner Basin 32°52.2'N  
119°32.5'W 32°46.4'N 119°31.0'W 1391-1373m  
25' otter trawl Jan. 21, 1971 R/V Agassiz  
coll. F. Rokop
- E 81 San Diego Trough Rokop 71-II-20 32°24.7'N  
117°27.75'W 32°29.2'N 117°30.2'W 1226-1204m  
25' otter trawl Jan. 18-19, 1971 R/V  
Agassiz coll. F. Rokop
- E 84 Rokop 71-II-28 San Diego Trough 32°37.0'N  
117°33.2'W 32°34.3'N 117°33.8'W 1184-1217m  
25' otter trawl Jan. 21, 1971 R/V Agassiz  
coll. F. Rokop
- E 89 MV71-I-62 San Diego Trough 32°21.8'N  
117°24.0'W 32°30.7'N 117°32.8'W 1235m  
25 ft. otter trawl June 1-2, 1971 R/V  
Agassiz coll. C. Hubbs, R. Wisner, S. Luke
- E 92 SI071-90 San Diego Trough 32°25.3'N  
117°28.9'W 32°35.1'N 117°33.7'W 1234m 25'  
otter trawl June 22, 1971 R/V Agassiz coll.  
R. McConnaughey
- E 93 Rokop 71-41 Tanner Basin 32°51.0'N  
119°32.0'W 32°47.0'N 119°28.5'W 1391m 25'  
otter trawl July 13, 1971 R/V Agassiz coll.  
F. Rokop
- E 95 Rokop 71-38 San Diego Trough 32°36.3'N  
117°32.4'W 32°32.1'N 117°27.7'W 1208m 25'  
otter trawl April 21, 1971 R/V Agassiz  
coll. F. Rokop
- E 96 Rokop 71-35 Tanner Basin 32°51.8'N  
119°33.8'W 32°47.8'N 119°31.3'W 1391-1371m  
25' otter trawl April 20, 1971 R/V Agassiz  
coll. F. Rokop
- E 187 Trawl #6 Tanner Basin, Calif. 32°43.3'N  
119°28.9'W 32°50.2'N 119°31.7'W 1362m 16'  
otter trawl Sept. 5, 1974 R/V Oconostota  
coll. J.F. Siebenaller
- E 188 Trawl #7 Tanner Basin, Calif. 32°50.2'N  
119°31.7'W-32°41.9'N 119°31.0'W ca. 1200-  
1300m 16' otter trawl Sept. 5, 1974 R/V  
Oconostota coll. J.F. Siebenaller
- E 189 Trawl #10 off La Jolla, Calif. 32°55.5'N  
117°37.4'W 32°51.0'N 117°36.0'W 896m 16'  
otter trawl Sept. 6, 1974 Oconostota coll.  
J.F. Siebenaller
- E 350 Sta. 15 Catalina Basin, Calif. 32°58.4'N  
118°26.8'W 32°55.4'N 118°22.3'W 1121-1137m  
16' otter trawl Dec. 10, 1972 R/V Agassiz  
coll. P. Jumars
- E 610 A-15 Afterthot II East Cortez Basin  
32°32.0'N 118°53.1'W-32°32.7'N 118°53.6'W  
1298m 25' otter trawl May 6, 1975 R/V  
Agassiz coll. J.F. Siebenaller
- E 637 A-24 Afterthot II San Diego Trough  
32°52.1'N 117°42.1'W-32°52.3'N 117°41.9'W  
1057m 25' otter trawl May 8, 1975 R/V  
Agassiz coll. Siebenaller
- E 684 Allozyme A-28 Catalina Basin, Calif.  
32°56'N 118°24'W 25' otter trawl 1143m  
Aug. 6, 1975 R/V Agassiz coll. Siebenaller
- E 1474 NoFac#5 San Nicholas Basin 33°20'N 119°15'W  
July 6, 1980 1738m 25' otter trawl  
R. Wilson R/V Melville
- E 1529 MET sta. 117 Catalina Basin, Calif. 33°13'N  
118°32'W 40' otter trawl Feb. 3, 1981  
1262-1235m R/V N. Horizon K. Smith, S. Luke
- E 2575 R-8 Tanner Basin Oct. 28, 1970 32°44'N  
119°27'W epibenthic sled 1298-1302m R/V  
Agassiz F. Rokop, S. Luke
- E 2579 M-7, sta. 1 San Diego Trough 32°29'N  
117°31'W Sept. 14, 1971 1225-1244m 40'  
otter trawl R/V Agassiz T. Matsui
- E 2582 M-8, sta. 1 San Diego Trough 32°30'N  
117°32'W Nov. 1, 1971 1207-1244m 40' otter  
trawl R/V Agassiz T. Matsui
- E 2675 Sta. 16 Catalina Basin, Calif. 33°0N  
118°17'W Dec. 10, 1972 1097m IKMT R/V  
Agassiz R. Hessler
- E 2710 M-15, OT-2 Encinitas, Calif. 33°02'N  
117°19'W Mar. 29, 1974 51m 25' otter trawl  
R/V Agassiz T. Matsui
- Scotoplanes sp.
- E 918 MV72-II-21 W. of Iquique, Chile 20°25'S  
71°15'W April 2-3, 1972 6894m 6' Sigsbee  
trawl R/V T. Washington S. Luke
- E 2706 MV66-II-4 off Eureka, Calif. 40°30.5'N  
125°45.2'W May 22, 1966 2999-3017m 16'  
otter trawl R. Wisner
- Subclass AFODACEA
- Order APODIDA
- Family Synaptidae
- Synapta sp.
- E 222 First two caves, La Jolla Cove, La Jolla,  
Calif. Sept. 10, 1915 coll. P.S. Barnhardt
- Order MOLPADIIDA
- Family Molpadiidae
- Ankyroderma sp.
- E 75 Rokop 71-II-24 Tanner Basin 32°41.0'N  
119°30.5'W 32°46.5'N 119°25.9'W 1317-1363m  
25' otter trawl Jan. 20, 1971 R/V Agassiz  
coll. F. Rokop, R. McConnaughey
- Molpadia arenicola Stimpson
- E 893 Silver Strand, S. of Coronado, Calif.  
March 16, 1937
- E 894 La Jolla Canyon, La Jolla, Calif. 15 ft. La  
Jolla Beach & Tennis Club canyon rim  
Sept. 8, 1955 C. Limbaugh
- E 2761 H50-283 Bahía Todos Santos, Baja Calif.,  
Norte, Mex. Dec. 10, 1950 0-5 ft. 50' bag  
seine C. Hubbs
- Molpadia granulosa Ludwig
- E 126 VS-BII-35 N.W. of Islas Tres Marias, Mex.  
22°21'N 107°48'W May 15, 1959 2999-2996m  
40' ott. tr. (P-96-59) R. Parker, Rowland,  
Keith Det. E. Deichmann
- Molpadia musculus Risso
- E 108 VS-BII-35 N.W. of Islas Tres Marias, Mex.  
22°21'N 107°48'W May 15, 1959 2999-2996m  
40' ott. tr. (P-96-59) R. Parker, Rowland,  
Keith Det. E. Deichmann
- E 118 SI058-422 W. of Nicaragua 12°11'N  
09°48.5'W-12°20'N 09°52'W 3594-3475m deep  
diving dredge Nov. 21, 1958 coll.  
R. Wisner, R. Parker Det. E. Deichmann
- E 133 P-127-58 off Salina Cruz, Oaxaca, Mex.  
15°38.0'N 95°18.5'W 1006-1135m deep diving  
dredge Nov. 18, 1935 R. Parker Det.  
E. Deichmann
- E 136 T0-58-2, D-5 off Salina Cruz, Oaxaca, Mex.  
14°28.5'N 93°09.5'W Nov. 19, 1958 3539-  
3610m diving dredge R. Parker (P-128-59)  
Det. E. Deichmann
- E 2618 No. 2019 off Scripps Inst. Pier, La Jolla,  
Calif. Aug. 18, 1916 457m

Molpadia sp.

E 1443 SnaFu SI080-8 San Diego Trough 32°36.5'N  
117°32'W 40' otter trawl #1 1171m Feb. 29,  
1980 R/V New Horizon R. Rosenblatt

Gen. Indet.

E 232 Off Scripps Inst. La Jolla, Calif. from  
North canyon & Torrey Pines to Pt. La Jolla  
293-348m Aug. 16, 1916

E 818 MV72-II-26 off Arica, Chile May 7, 1972  
18°42'S 70°37'W 25' otter trawl 1097-1152m  
R/V T. Washington S. Luke

E 895 MV65-III-14 Basin N.W. of 60 mi. Bank  
32°15'N 118°32'W 10' IKMT 1615-1664m  
Dec. 24, 1965 R/V Agassiz C. Hubbs,  
W. Newman

E 969 Off Point Fermin, Palos Verde, Calif.  
Mar. 22, 1938 146m

E 970 MV68-I-85 W. slope of Farallon Basin, Golfo  
de Calif. 25°17'N 110°19'W otter trawl  
Jan. 23-24, 1968 R/V T. Washington C. Hubbs  
1810-1908m

E 1536 MET Sta. 123 W. of Patton Escarpment  
32°35'N 120°35'W 40' ott. tr. Feb. 5, 1981  
3634-3713m R/V N. Horizon K. Smith, S. Luke

E 1544 MET Sta. 129 W. of Patton Escarpment  
32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981  
3640-3740m R/V N. Horizon K. Smith, S. Luke

E 1562 MET Sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981  
3689-3632m R/V N. Horizon K. Smith, S. Luke

E 2608 69/06/1 S.E. of San Nicolas Is., Calif.  
June, 1969 Dredge #15 1189-732m Edwin  
Allison

E 2612 MV68-I-60 Gulf of Calif., Mexico 29°42'N  
113°58'W Jan. 18, 1968 567-603m 40' ott.  
tr. R/V T. Washington C. Hubbs

E 2660 Mag Bay A-20 N.W. of Bahia Magdalena, Baja  
Calif., Sur, Mex. 24°54'N 113°08'W 1229-  
1147m 6' Sigsbee tr. Jan. 31, 1964 R/V  
Horizon C. Hubbs (SI064-14)

E 2670 MV66-III-21 W.S.W. of Cortez Bank 32°04'N  
120°29.8'W Dec. 11, 1966 3777-3792m 40'  
ott. tr. C. Hubbs (SI066-547)

E 2672 MV67-II-22 W. of Pioneer Seamount, Calif.  
37°18'N 123°53'W June 14, 1967 3592-3799m  
41' ott. tr. R/V T. Washington C. Hubbs  
(SI067-115)

E 2691 Oconostota trawl #10 off La Jolla, Calif.  
32°52'N 117°36.5'W Sept. 6, 1974 896m 16'  
ott. tr. J.F. Siebenaller

E 2704 MV65-I-13 Cedros Trench, Baja Calif.,  
Norte, Mex. 28°07'N 116°40'W 4414-4425m 6'  
Sigsbee tr. June 13, 1965 R/V Horizon  
C. Hubbs (SI065-200)

## HOLOTHUROIDEA

Incertae Sedis

E 819 MV72-II-26 off Arica, Chile May 7, 1972  
18°42'S 70°37'W 25' otter trawl 1097-1152m  
R/V T. Washington, S. Luke

E 835 MV72-II-27 off Arica, Chile May 7, 1972  
18°35'S 70°32'W 25' otter trawl 768-968m  
R/V T. Washington, S. Luke

E 837 STYX-7 MPE680826 Sta. #2 Horizon Guyot  
19°29'N 168°45'W Aug. 26, 1968 1662-1820m  
25' otter trawl #1 R/V Agassiz W. Newman

E 863 SS-72, 115-DB N. Pacific R/V Sea Scope  
38°56.39'N 178°37.26'W June 28, 1972 5396m  
dredge box, Global Marine

E 865 SS-72, 88-DB S.E. of Hawaii 11°58.2'N  
150°18.5'W May 25, 1972 5000m dredge box  
R/V Sea Scope Global Marine

E 876 SS-72, 71-DB Central Pacific 09°02.1'N  
145°00.0'W dredge box 5033m May 20, 1972  
R/V Sea Scope

E 878 SS-72, 94-DB N. Pacific 28°23.8'N  
169°03.0'W dredge box 4393m June 14, 1972  
R/V Sea Scope

E 881 SS-72, 72-DB Central Pacific 08°58.8'N  
145°06.6'W dredge box 4940m May 20, 1972  
R/V Sea Scope

E 884 SS-72, 105-DB N. Mid-Pacific 32°24.5'N  
179°10.88'W dredge box 5377m June 19, 1972  
R/V Sea Scope

E 885 SS-72, 105-DB N. Mid-Pacific 32°24.5'N  
179°10.88'W dredge box 5377m June 19, 1972  
R/V Sea Scope

E 888 SS-72, 87-DB S.E. of Hawaii 11°58.2'N  
150°18.5'W dredge box 5000m May 24, 1972  
R/V Sea Scope

E 898 SS-72, 125-DB N.W. of Hawaii 31°43.78'N  
165°42.96'W dredge box 5597m July 4, 1972  
R/V Sea Scope

E 904 SS-72, 140-DB S. of Kauai, Hawaii  
21°49.54'N 159°23.85'W dredge box 732m  
July 10, 1972 R/V Sea Scope

E 905 SS-72, 104-DB N. Mid-Pacific 31°58.4'N  
177°19.55'W dredge box 5194m June 19, 1972  
R/V Sea Scope

E 907 SS-72, 123-DB N. Mid-Pacific 35°50.22'N  
171°41.44'W dredge box 5750m July 2, 1972  
R/V Sea Scope

E 972 MV68-I-85 Farallon Basin, Golfo de Calif.  
25°17'N 110°19'W otter trawl 1810-1908m  
Jan. 23, 1968 R/V T. Washington C. Hubbs

E 988 MV68-I-59 N.W. of Angel de La Guarda, Golfo  
de Calif. 29°41'W 113°56'W 566-644m 40'  
otter trawl Jan. 18, 1968 C. Hubbs R/V  
T. Washington

E 989 MV68-I-59 N.W. of Angel de La Guarda, Golfo  
de Calif. 29°41'N 113°56'W 566-644m 40'  
otter trawl Jan. 18, 1968 R/V T. Washington  
C. Hubbs

E 962 DW76-5-5 Alert Bay, British Columbia, rocky  
intertidal Aug. 27, 1976 D. Wilkie

E 965 MV68-I-76 Carmen Basin, Baja Calif., Sur  
25°56'N 110°35'W 1322m 25' otter trawl  
Jan. 22, 1968 R/V T. Washington C. Hubbs

E 966 MV68-I-76 Carmen Basin, Baja Calif., Sur  
25°56'N 110°35'W 1322m 25' otter trawl  
Jan. 22, 1968 R/V T. Washington C. Hubbs

E 1107 TEPE78-7 Key Point, Bahia Murcie Lagos,  
Costa Rica 10°53'N 85°54'W rocky intertidal  
Apr. 3, 1978 R/V A. Helix W. Newman,  
S. Luke

E 1108 TEPE78-11 off Champerico, Guatemala  
14°28.5'N 93°03.5'W 4' beam trawl 236m R/V  
A. Helix W. Newman, S. Luke Apr. 6, 1978

E 1117 TEPE78-15 Isla Sacrificios, Oaxaca, Mex.  
15°40.8'N 96°14.6'W Apr. 7, 1978 40 ft.  
SCUBA R/V A. Helix W. Newman, S. Luke

E 1121 TEPE78-16 Isla Sacrificios, Oaxaca, Mex.  
15°40.8'N 96°14.6'W intertidal Apr. 7, 1978  
R/V A. Helix W. Newman, S. Luke

E 1125 TEPE78-17 Isla Grande, Guerrero, Mex.  
17°40.3'N 101°40.4'W rocky intertidal  
Apr. 10, 1978 R/V A. Helix W. Newman,  
S. Luke

E 1128 TEPE78-18 Isla Grande, Guerrero, Mex.  
17°40.3'N 101°40.4'W Apr. 10, 1978 SCUBA  
15-20 ft. R/V A. Helix W. Newman, S. Luke

E 1135 TEPE78-23 Bahia Chamela, Jalisco, Mex.  
19°35'N 105°08.5'W SCUBA 15-20 ft. Apr. 12,  
1978 R/V A. Helix W. Newman, S. Luke

E 1136 TEPE78-23 Bahia Chamela, Jalisco, Mex.  
19°35'N 105°08.5'W SCUBA 15-20 ft. Apr. 12,  
1978 R/V A. Helix W. Newman, S. Luke

- E 1141 TEPF78-24 S.E. end of Isla Cerralvo, Baja Calif., Sur, Mex. 24°08'N 109°48'W intertidal Apr. 14, 1978 R/V A. Helix W. Newman, S. Luke
- E 1166 MV70-III-3 Baja Calif., Norte abyssal plain 31°27'N 120°11'W 25' otter trawl 3880m Mar. 21, 1970 R/V Melville S. Luke (SIO70-93)
- E 1207 NAGA S3 60-0104 Gulf of Thailand 09°37'00"N 100°21'00"E 6' Beam T. Jan. 20, 1960 26-31m Cat. #51-00486
- E 1223 NAGA S4 60-0237 S. China Sea 12°09.7'N 109°24.7'E 10' Beam T. Mar. 4, 1960 51m Cat. #51-01221
- E 1308 NAGA S2 59-0131 Gulf of Thailand 13°01'45"N 100°50'30"E 40' otter t. Dec. 15, 1959 11 ft. Cat. #51-00338
- E 1309 NAGA S2 59-0131 Gulf of Thailand 13°01'45"N 100°50'30"E 40' otter t. Dec. 15, 1959 11 ft. Cat. #51-00460
- E 1310 NAGA S2 59-0131 Gulf of Thailand 13°01'45"N 100°50'30"E 40' otter t. Dec. 15, 1959 11 ft. Cat. #51-00459
- E 1311 NAGA S2 59-0131 Gulf of Thailand 13°01'45"N 100°50'30"E 40' otter t. Dec. 15, 1959 11 ft. Cat. #51-00335
- E 1312 NAGA S2 59-0131 Gulf of Thailand 13°01'45"N 100°50'30"E 40' otter t. Dec. 15, 1959 11 ft. Cat. #51-00336
- E 1313 NAGA S2 59-0131 Gulf of Thailand 13°01'45"N 100°50'30"E 40' otter t. Dec. 15, 1959 11 ft. Cat. #51-01378
- E 1315 NAGA S3 60-0102 Gulf of Thailand 12°33'00"N 100°44'00"E 6' Beam T. Jan. 19, 1960 27m Cat. #51-00345
- E 1318 NAGA S3 60-0110 Gulf of Thailand 06°22'15"N 102°14'00"E 6' Beam T. Jan. 22, 1960 27m Cat. #51-01259
- E 1319 NAGA S3 60-0110 Gulf of Thailand 06°22'15"N 102°14'00"E 6' Beam T. Jan. 22, 1960 27m Cat. #51-00352
- E 1320 NAGA S3 60-0120 Gulf of Thailand 09°06'00"N 104°14'00"E 2' Bio dredge Jan. 23, 1960 24m Cat. #51-00869
- E 1321 NAGA S3 60-0127 Gulf of Thailand 08°37'00"N 102°21'30"E 40' otter t. Jan. 24, 1960 73m Cat. #51-00358
- E 1322 NAGA S3 60-0137 Gulf of Thailand 08°25'30"N 100°44'40"E 6' Beam T. Jan. 26, 1960 27m Cat. #51-00365
- E 1323 NAGA S3 60-0137 Gulf of Thailand 08°25'30"N 100°44'40"E 6' Beam T. Jan. 26, 1960 27m Cat. #51-00364
- E 1328 NAGA S3 60-0140 Gulf of Thailand 08°07'00"N 100°47'45"E 6' Beam T. Jan. 26, 1960 33m Cat. #51-00370
- E 1329 NAGA S3 60-0140 Gulf of Thailand 09°07'00"N 100°47'45"E 6' Beam T. Jan. 26, 1960 33m Cat. #51-00368
- E 1330 NAGA S3 60-0140 Gulf of Thailand 09°07'00"N 100°47'45"E 6' Beam T. Jan. 26, 1960 33m Cat. #51-00369
- E 1331 NAGA S4 60-0206 S. China Sea 12°09'30"N 109°17'30"E 10' Beam T. Feb. 23, 1960 15m Cat. #51-01453
- E 1333 NAGA S4 60-0208 S. China Sea 12°14.8'N 109°14.7'E 10' Beam T. Feb. 25, 1960 85 ft. Cat. #51-00492
- E 1334 NAGA S4 60-0211 S. China Sea 15°41'00"N 108°41'00"E 10' Beam T. Feb. 27, 1960 37m Cat. #51-00207
- E 1336 NAGA S4 60-0216 S. China Sea 15°40'00"N 109°43'30"E 10' Beam T. Feb. 28, 1960 479m Cat. #51-00234
- E 1337 NAGA S4 60-0237 S. China Sea 12°09.7'N 109°24.7'E 10' Beam T. Mar. 4, 1960 93m Cat. #51-01226
- E 1341 NAGA S4 60-0270 S. China Sea 10°23.8'N 108°53.2'E 2' dredge Mar. 10, 1960 49m Cat. #51-00494
- E 1343 NAGA S5 60-0316 Gulf of Thailand 09°46'15"N 100°10'30"E 6' Beam T. Apr. 22, 1960 22m Cat. #51-00452
- E 1344 NAGA S5 60-0316 Gulf of Thailand 09°46'15"N 100°10'30"E 6' Beam T. Apr. 22, 1960 22m Cat. #51-00451
- E 154 P-198-60 Costade Hermesillo, Mexico 28°41.6'N 112°11.0'W March 27, 1960 92m shell dredge on shelly sand coll. J. Curray
- E 198 La Jolla Canyon, La Jolla, Calif. 12-60 ft. rim Sept. 8, 1955 C. Limbaugh, R. Parks
- E 230 From off Pt. La Jolla, & Soledad to canyon N. of Scripps Inst. La Jolla, Calif. 55m July 19, 1916 trawl
- E 331 Stright off W. of Pt. La Jolla, San Diego, Calif. Jan. 28, 1965 16' otter trawl #1 101-183m coll. Fager ST-908
- E 335 Loma Sea Valley, due W. of Pt. Loma 326-351m otter trawl #1 Jan. 21, 1965 coll. Fager ST-908
- E 336 Due W. of Pt. La Jolla, San Diego, Calif. 220-274m 16' otter trawl Jan. 28, 1965 coll. Fager ST-908
- E 351 Sta. 15 Catalina Basin, Calif. 32°58.4'N 118°26.8'W 32°55.4'N 118°22.3'W 1121-1137m 16' otter trawl Dec. 10, 1972 R/V Agassiz coll. P. Jumars
- E 362 MV68-I-65 E. of Angel de la Guarda, Gulf. 29°19.9'N 113°10.4'W-29°20.4'N 113°12.0'W 265-284m 25' otter trawl Jan. 20, 1968 R/V T. Washington coll. C. Hubbs
- E 467 SI066-525 Queensland Australia, W. coast of Stanley Is. Flinders Group Dec. 26, 1966 14°09.3'S 144°12.2'E otter trawl R/V A. Helix 15-18m coll. C. Hubbs
- E 553 SI062-210 W. side of Isla Ventana Bahia de los Angeles 29°00.4'N 113°32.4'W 15 ft. chemfish April 18, 1962 coll. C. Hubbs
- E 611 A-15 Afterthot II East Cortez Basin 32°32.0'N 118°53.1'W-32°32.7'N 118°53.6'W 1298m 25' otter trawl May 6, 1975 R/V Agassiz coll. J.F. Siebenaller
- E 621 A-19 Afterthot II West Cortez Basin 32°27.7'N 119°33.8'W-32°27.9'N 119°34.1'W 1445m 25' otter trawl May 7, 1975 R/V Agassiz coll. J. Siebenaller
- E 627 A-17 Afterthot II West Cortez Basin 32°25.3'N 119°30.4'W-32°24.8'N 119°29.9'W 1362m 25' otter trawl May 7, 1975 R/V Agassiz coll. J. Siebenaller
- E 634 A-11 Afterthot II San Clemente Basin, Calif. 32°52.1'N 118°06.5'W-32°28.8'N 118°06.0'W 1829m 25' otter trawl May 5, 1975 R/V Agassiz coll. J. Siebenaller
- E 647 A-27 Afterthot II off Encinitas, Calif. 32°59.6'N 117°34.1'W-33°00.3'N 117°34.5'W 750m 25' otter trawl May 9, 1975 R/V Agassiz coll. J. Siebenaller
- E 660 'ECCE' P.A.-2 rocky point E. of Pta. Abreojos, Baja Calif., Sur, W. side of Bahia La Baliza, W. of Campo Media 26°44'N 113°35'W intertidal hand collection sandstone July 24, 1975 coll. Hemingway, Luke
- E 668 'ECCE' P.A.-10 rocky point E. of Pta. Abreojos, Baja Calif., W. side of Bahia La Baliza 26°44'N 113°35'W mid intertidal July 25, 1975 coll. Hemingway, Luke

- E 670 'ECCE' P.A.-11 rocky point E. of Pta. Abreojos, Baja Calif., W. side of Bahía La Baliza 26°44'N 113°35'W deep tidal pools MLLW July 25, 1975 coll. Hemingway, Luke
- E 674 72-II-32 Peru-Chile Trench, off Pta. San Juan, Peru 25' otter trawl 3475m 15°45'S 76°07'W May 10, 1972 R/V T. Washington coll. S. Luke
- E 685 Allozyme A-28 Catalina Basin, Calif. 32°56'N 118°24'W 25' otter trawl 1143m Aug. 6, 1975 R/V Agassiz coll. Siebenaller
- E 697 'ECCE' SJ San Juanito Bay, Baja Calif., Sur 26°12'N 112°28'W 4m otter trawl to 20 ft. sandy bay July 20, 1975 coll. Hemingway, Luke
- E 698 'ECCE' Pta. Pequeña, Baja Calif., Sur, Mexico 26°14'N 112°28.5'W rocky intertidal July 20, 1975 coll. Hemingway, Luke
- E 701 'ECCE' PB-38 Pta. Baja, Baja Calif. 29°57'N 115°48'W mid intertidal Aug. 9, 1975 coll. Hemingway, Luke
- E 713 Haul 3181 off San Diego, Calif. Feb. 10, 1912 32°28.5'N 117°15.3'W 55m coll. "Agassiz"
- E 715 San Diego Bay, San Diego, Calif. Navy base to end of jetty June 19, 1923
- E 719 SB-51 Tombola at S.W. tip of Isla San José ca. 24°45'N 110°35'W intertidal April 15, 1960 coll. A. Flechsiz on 'Orca'
- E 726 SI076-93 E. of Catalina Is., Calif. 33°28'N 118°27'W 25' otter trawl 397-355m March 8, 1976 R/V Agassiz coll. S. Luke
- E 730 40 mile bank - dredge 32°43'N 118°12'W March 22, 1938 110m coll. F.P. Shepard on 'E.W. Scripps'
- E 732 SB-39 beach 5 mi. N. of Guaymas, Sonora, Mexico ca. 27°55'N 111°W intertidal April 10, 1960 coll. A. Flechsiz on 'Orca'
- E 739 SI076-95 N. of Catalina Is., Calif. 33°33.5'N 118°39'W Mar. 9, 1976 585-534m 40' otter trawl R/V Agassiz coll. S. Luke
- E 740 SI076-95 N. of Catalina Is., Calif. 33°33.5'N 118°39'W Mar. 9, 1976 585-534m 40' otter trawl R/V Agassiz coll. S. Luke
- E 747 SI076-96 N. of Catalina Is., Calif. 33°33.5'N 118°38'W Mar. 9, 1976 556-585m 40' otter trawl R/V Agassiz coll. S. Luke
- E 748 SI076-96 N. of Catalina Is., Calif. 33°33.5'N 118°38'W Mar. 9, 1976 556-585m 40' otter trawl R/V Agassiz coll. S. Luke
- E 753 H51-27 Bahía Todos Santos, Baja Calif., Norte ca. 31°45'N 116°40'W 37m dredge Feb. 5, 1951 coll. C. Hubbs on 'Orca'
- E 754 H51-27 Bahía Todos Santos, Baja Calif., Norte ca. 31°45'N 116°40'W dredge 37m Feb. 5, 1951 coll. C. Hubbs on 'Orca'
- E 759 H51-18 S. side of Bahía Todos Santos, Baja Calif., Norte ca. 31°45'N 116°40'W 70-59m Feb. 2, 1951 coll. C. Hubbs on 'Orca'
- E 767 SI076-94 W. of Palos Verdes, Calif. 33°28'N 118°25'W March 9, 1976 457-417m 25' otter trawl R/V Agassiz S. Luke
- E 768 SI076-94 W. of Palos Verdes, Calif. 33°28'N 118°25'W March 9, 1976 457-417m 25' otter trawl R/V Agassiz S. Luke
- E 771 SI065-341 Isla Santa Cruz, Baja Calif., Sur 25°15.5'N 110°44.3'W chemfish & diving July 22, 1965 B. W. Walker
- E 784 Off Coal Oil Point, Goleta, Calif. ca. 34°40'N 119°50'W 165-201m beam trawl June 4, 1954
- E 789 MV67-II-22 W. of Pioneer Seamount, Calif. 37°18'N 123°53'W June 14-15, 1967 3592-3799m 41' otter trawl R/V T. Washington C. Hubbs (SI067-115)
- E 806 San Ignacio Lagoon, Baja Calif., Sur, Mexico ca. 26°45'N 113°12'W rocky intertidal Mar. 23, 1976 S. Luke
- E 814 MV72-II-21 W. of Iquique, Chile 20°26'S 71°15'W April 2-3, 1972 6894m 6' Sigsbee trawl R/V T. Washington S. Luke
- E 2581 M-7, Sta. 3 San Clemente Basin 32°28'N 118°07'W Sept. 16, 1971 1792-1866m 40' ott. tr. R/V Agassiz T. Matsui
- E 2580 M-7, Sta. 1 San Diego Trough 32°29'N 117°31'W Sept. 14, 1971 1225-1244m 40' ott. tr. R/V Agassiz T. Matsui
- E 2587 MV71-I-32 E. of Islas San Benitos, Baja Calif., Norte, Mex. 28°18'N 115°23.5'W 265-247m 6' Sigsbee tr. May 27, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2586 MV71-I-32 E. of Islas San Benitos, Baja Calif., Norte, Mex. 28°17.3'N 115°28'W 329-311m 6' Sigsbee tr. May 27, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2585 MV71-I-62 San Diego Trough 32°28'N 117°30'W June 1, 1971 1235m 25' ott. tr. R/V Agassiz C. Hubbs, S. Luke
- E 2584 R-51 San Diego Trough Oct. 23, 1971 32°23'N 117°28'W 25' ott. tr. 1238-1256m R/V Agassiz F. Rokop, S. Luke
- E 2583 R-37 San Diego Trough 32°25'N 117°26'W Apr. 21, 1971 1194-1097m 25' ott. tr. R/V Agassiz F. Rokop
- E 2599 South Tow 0.0 Sta. 6D off Mexico & U.S. border 31°11.9'N 118°28.8'W 1479m rock dredge Dec. 12, 1971 R/V T. Washington
- E 2598 Antipode 8 169D chain rock dredge Feb., 1971 R/V Melville R.L. Fisher, J. Coatsworth
- E 2597 R-41 Tanner Basin July 13, 1971 32°48'N 119°29.5'W 25' ott. tr. 1390m R/V Agassiz F. Rokop
- E 2596 R-41 Tanner Basin July 13, 1971 32°48'N 119°29.5'W 25' ott. tr. 1390m R/V Agassiz F. Rokop
- E 2595 R-35 Tanner Basin Apr. 19, 1971 32°48'N 119°32'W 25' ott. tr. 1390-1372m R/V Agassiz F. Rokop
- E 2594 R-28 San Diego Trough Jan. 21, 1971 32°35'N 117°33.5'W R/V Agassiz 1183-1216m 25' ott. tr. F. Rokop
- E 2593 M-8, Sta. 5 San Clemente Basin, Calif. 32°33'N 118°06'W Nov. 3, 1971 1829m 40' ott. tr. R/V Agassiz T. Matsui
- E 2592 M-7, Sta. 3 San Clemente Basin, Calif. 32°28'N 118°07'W Sept. 16, 1971 1792-1866m 40' ott. tr. R/V Agassiz T. Matsui
- E 2591 M-6, Sta. 3 San Clemente Basin, Calif. 32°35'N 118°15'W Aug. 12, 1971 1628-1838m 25' ott. tr. R/V Agassiz T. Matsui
- E 2590 MV71-I-43 outer 1,000 fm. Basin, Baja Calif., Norte, Mex. 31°25'N 117°45'W 2001-2025m 6' Sigsbee tr. May 30, 1971 R/V Agassiz C. Hubbs, S. Luke
- E 2589 MV71-I-33 W. of Isla Cedros, Baja Calif., Norte, Mex. 28°22'N 115°20'W 221-203m 25' ott. tr. R/V Agassiz May 27, 1971 C. Hubbs, S. Luke
- E 2601 TEPE70-17 Islas Secas, Panama 07°59.3'N 82°01.5'W intertidal Sept. 21-23, 1970 SCUBA R/V A. Helix W. Newman, S. Luke
- E 2602 MV70-III-3 W. of Patton Escarpment 31°28'N 120°11'W March 21, 1970 3880m 25' ott. tr. R/V Melville S. Luke
- E 2603 TEPE70-17 Islas Secas, Panama 07°59.3'N 82°01.5'W Sept. 21-23, 1970 intertidal SCUBA to 15 ft. R/V A. Helix W. Newman, S. Luke

- E 2604 MV69-VI-9 W. of Patton Escarpment 31°12'N 119°37'W Dec. 18, 1969 3600-3676m 25' ott. tr. R/V Melville C. Hubbs, S. Luke
- E 2605 Baja 69-11B off Bahia Asuncion, Baja Calif., Sur, Mex. 27°01'N 114°21.1'W 201m chain dredge Feb. 23, 1969 R/V Oconostota
- E 2606 SI069-487 San Diego Trough 32°27'N 117°31.2'W Dec. 13, 1969 1207-1234m 25' ott. tr. R/V Melville R. Hessler, S. Luke
- E 2611 SI069-236 off Boca de San Domingo, Baja Calif., Sur, Mex. 25°31'N 112°27'W 100m 16' ott. tr. Apr. 20, 1969 D. Dockins
- E 2610 Circe Leg XI Sta. 255 (Mag-4) off Santa Marta, Colombia 11°30.5'N 74°09.3'W 1225m rock dredge Jan. 11, 1969 J. Coatsworth
- E 2609 Baja 69-10 S. of Laguna San Ignacio, Baja Calif., Sur, Mex. 26°17.7'N 113°46.2'W 311m dredge R/V Oconostota Feb. 22, 1969
- E 2617 TEPPE70-4 Panama, Pacific side 07°19.3'N 81°45.4'W Sept. 15, 1970 22-24m epibenthic sled R/V A. Helix W. Newman, S. Luke
- E 2616 Baja 69-16 off Bahia Tortugas, Baja Calif., Sur, Mex. 27°32.5'N 114°52.7'W 102m rock dredge Feb. 24, 1969 R/V Oconostota
- E 2615 MV68-I-50 S. of Isla San Pedro, Golfo de Calif., Mex. 27°39'N 111°21'W 931-952m 40' ott. tr. Jan. 16, 1968 R/V T. Washington C. Hubbs
- E 2614 JEM68-3 Algodones Bay, N. of San Carlos Bay, Sonora, Mex. in Porites 10 ft. March 17, 1968 J. McCosker (SI068-166)
- E 2613 Bahia Papelote, S. of Pta. Banda, Baja Calif., Norte, Mex. 0-50 ft. SCUBA July 28, 1968 T. Cukr
- E 2638 E. Pacific, box core ca. 4572m from manganese nodule ship Kennecott Exploration Inc. Del Mar, Calif. E. Habecker
- E 2637 11 mi. S.S.W. of Pt. Loma, San Diego, Calif. Apr. 26, 1961 from seaweed D. Jensen
- E 2636 Sunset Bay, Cape Argo, Coos Bay region, Oregon June 28, 1961 intertidal Berner
- E 2635 Monsoon 73-D, Sta. VI-4 Chatham Rise 43°27'S 117°57'E Jan. 29, 1961 311m rock dredge Russell
- E 2634 6108-B-9 Tres Marias Is., Mexico 21°44'N 106°42.3'W Aug. 14, 1961 3 ft. pro-noxfish F.H. Berry (SI062-9)
- E 2633 ca. 300 yds. due W. of La Jolla Cove, Calif., rocky area off vertical face 80 ft. SCUBA Feb. 25, 1961 Pete Taylor
- E 2632 Monsoon Exp. P-229-60 Ellice Is., Nanumea Atoll 05°40'S 176°10'E shore collection, fish poison Russell Sept. 28, 1960
- E 2631 Monsoon Exp. P-234-60 Torres Strait 10°11.0'S 139°31.0'E Oct. 12, 1960 51m rock dredge Rowland
- E 2630 A.E.C. IV L.C.-23 off Farallon Is., Calif. 1829m 16' ott. tr. Oct. 1960
- E 2629 A.E.C. IV L.C.-23 off Farallon Is., Calif. 1829m 16' ott. tr. Oct. 1960
- E 1345 NAGA S5 60-0325 Gulf of Thailand 06°24'12"N 102°13'00"E 6' Beam T. Apr. 24, 1960 27m Cat. #51-00513
- E 1346 NAGA S5 60-0325 Gulf of Thailand 06°24'12"N 102°13'00"E 6' Beam T. Apr. 24, 1960 27m Cat. #51-00809
- E 1347 NAGA S5 60-0363 Gulf of Thailand 08°39'45"N 100°14'45"E 6' Beam T. Apr. 27, 1960 17m Cat. #51-00435
- E 1350 NAGA S7 60-0627 Gulf of Thailand 09°17'30"N 100°06'15"E 6' Beam T. Aug. 6, 1960 17m Cat. #51-00251
- E 1352 NAGA S7 60-0636 Gulf of Thailand 10°19'50"N 102°25'50"E 6' Beam T. Aug. 7, 1960 60m Cat. #51-00400
- E 1357 NAGA S8 60-0711 S. China Sea 09°03'00"N 106°26'00"E 2.5' dredge Sept. 8, 1960 22m Cat. #51-00401
- E 1365 NAGA S9 60-0863 Gulf of Thailand 09°23'30"N 101°15'12"E 6' Beam T. Nov. 11, 1960 55m Cat. #51-00838
- E 1366 NAGA S9A 60-1042 Gulf of Thailand 11°01'00"N 101°17'06"E 6' Beam T. Dec. 9, 1960 57m Cat. #51-00438
- E 1387 NAGA S10 61-0246 Timor Sea 10°55.8'S 129°15.5'E shell dredge Apr. 19, 1961 27m
- E 1390 NAGA SSII V-355 61-0249 Timor Sea 10°54'54"S 128°49'54"E chain bag dredge Apr. 19, 1961 34-82m CN1053
- E 1407 NAGA SSII V-356 61-0250 Timor Sea 10°51.0'S 128°42.0'E shell dredge Apr. 19, 1961 34m CN1054
- E 1409 NAGA S9A 60-1062 Gulf of Thailand 11°21'48"N 100°14'50"E 16' otter t. Dec. 11, 1960 37m CN611a
- E 1419 NAGA 54 60-0211 South China Sea 15°41'00"N 108°41'00"E 10' Beam T. Feb. 27, 1960 37m Cat. #28-00208
- E 1444 SnaFu SI080-8 San Diego Trough 32°36.5'N 117°32'W 40' ott. tr. #1 1171m Feb. 29, 1980 R/V New Horizon R. Rosenblatt
- E 1451 SnaFu SI080-9 off San Diego, Calif. 32°43'N 117°24.4'W 25' otter trawl #2 402-421m Feb. 29, 1980 R/V New Horizon R. Rosenblatt
- E 1455 Bahia Concepcion, Baja Calif., Sur, Mexico 0-15 ft. snorkel, sand & rock July 19, 1980 S. Luke
- E 1470 Bahia Tortugas & Bahia Asuncion, Baja Calif., Sur, Mex. Aug. 4-6, 1980 25-50 ft. SCUBA Mia Tegner
- E 1479 'ECCE' IM-32 Laguna Manuela, Baja Calif., Norte, Mex. ca. 28°14'N 114°08.5'W 0-6 ft. 60' beach seine Aug. 5, 1975 G. Hemingway, S. Luke
- E 1484 Ferrar Glacier, Antarctica, 90-120 ft. SCUBA Jan. 7, 1976 O'Connor
- E 1510 MET Sta. 104 Catalina Basin, Calif. 33°24'N 118°35.5'W 25' ott. tr. 550-640m Jan. 29, 1981 R/V N. Horizon K. Smith, S. Luke
- E 1514 MET Sta. 105 Catalina Basin, Calif. 33°08'N 118°35.5'W 25' ott. tr. 1280-1271m Jan. 30, 1981 R/V N. Horizon K. Smith, S. Luke
- E 1521 MET Sta. 109 Catalina Basin, Calif. 33°11'N 118°30'W 40' ott. tr. Jan. 31, 1981 1198-1234m R/V N. Horizon K. Smith, S. Luke
- E 1528 MET Sta. 117 Catalina Basin, Calif. 33°13'N 118°32'W 40' ott. tr. Feb. 3, 1981 1262-1235m R/V N. Horizon K. Smith, S. Luke
- E 1537 MET Sta. 123 W. of Patton Escarpment 32°35'N 120°35'W 40' ott. tr. Feb. 5, 1981 3634-3713m R/V N. Horizon K. Smith, S. Luke
- E 1538 MET Sta. 123 W. of Patton Escarpment 32°35'N 120°35'W 40' ott. tr. Feb. 5, 1981 3634-3713m R/V N. Horizon K. Smith, S. Luke
- E 1546 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1547 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1548 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1549 MET Sta. 129 W. of Patton Escarpment 32°22'N 120°42'W 40' ott. tr. Feb. 6, 1981 3640-3740m R/V N. Horizon K. Smith, S. Luke
- E 1566 MET Sta. 133 W. of Patton Escarpment 32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981 3689-3632m R/V N. Horizon K. Smith, S. Luke

- E 1567 MET Sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981  
3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 1568 MET Sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981  
3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 1569 MET Sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981  
3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 1570 MET Sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981  
3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 1571 MET Sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981  
3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 1572 MET Sta. 133 W. of Patton Escarpment  
32°25'N 120°40'W 40' ott. tr. Feb. 7, 1981  
3689-3632m R/V N. Horizon K. Smith, S. Luke
- E 1576 R71-37 San Diego Trough April 21, 1971  
32°25'N 117°25'W 25' otter trawl 1195-1098m  
R/V Agassiz F. Rokop
- E 2208 SOB-III-12 N.E. of Isla Guadalupe, Baja  
Calif., Mex. 29°40.2'N 117°06.6'W 2708-  
2763m 30' ott. tr. Feb. 15, 1960 R. Parker  
(P-139-60)
- E 2258 B6203-4 Monterey Bay, Calif. Mar. 8, 1962  
trawl #TR-48 F.H. Berry (SI063-809)
- E 834 MV72-II-27 off Arica, Chile May 7, 1972  
18°35'S 70°32'W 25' otter trawl R/V  
T. Washington S. Luke
- E 833 MV72-II-27 off Arica, Chile May 7, 1972  
18°35'S 70°32'W 25' otter trawl 768-968m  
R/V T. Washington S. Luke
- E 2574 Operation Blind Spot - off Pta. Lobos,  
Sonora, Mexico 27°14'N 111°28'W June 14,  
1970 1829-1875m 25' ott. tr. R/V Agassiz  
E. Kampa
- E 2573 Operation Blind Spot - off Pta. Chivato,  
Baja Calif., Sur, Mex. 27°18'N 111°25'W  
1829-1875m 25' ott. tr. June 15, 1970 R/V  
Agassiz E. Kampa
- E 2572 Off Flat Rock Pt., Palos Verdes Peninsula,  
Los Angeles, Calif. 40 ft. SCUBA June 6,  
1969 R. Kiwala, R. Grigg
- E 2571 RR65-38 W. side of Isla Monserrate, Gulf of  
Calif., Mex. 25°39'N 111°04.7'W July 11,  
1965 40' ott. tr. R. Rosenblatt (SI065-292)
- E 2570 SI063-169 Haul #2 Melpomene Cove, Isla  
Guadalupe, Baja Calif., Mexico 28°57'N  
118°16.7'W April 22, 1963 90-122 ft. tri-  
net R/V Horizon C. Hubbs
- E 2569 Pta. Tosca, Isla de Santa Margarita, Baja  
Calif., Sur, Mex. Feb. 4, 1964 T. Hopkins
- E 2568 Bahia San Pablo, Baja Calif., Sur, Mexico  
ca. 27°10'N 114°23'W 30-40 ft. Feb. 10,  
1964 T. Hopkins
- E 2567 SI062-212 Bahia de Los Angeles, Baja  
Calif., Norte, Mex. 29°00.3'N 113°33.7'W  
0-20 ft. chemfish Apr. 19, 1962 C. Hubbs,  
R. Rosenblatt
- E 2566 La Jolla, Calif. rocky area due W. of La  
Jolla Cove ca. 300 yds. 80 ft. SCUBA  
Feb. 25, 1961 Pete Taylor
- E 2565 RR-61 Los Frailes Cove, Baja Calif., Sur,  
Mex. ca. 23°20'N 109°20'W 3-20 ft. SCUBA  
June 17, 1961 D. Leighton
- E 2564 TP-38 near Emperor Seamount 46°17'N 169°E  
Sept. 6-7, 1953 4892-4682m TP diving dredge  
#3 after TP-50 R/V S.F. Baird R. Wisner
- E 2563 SI057-233 Melpomene Cove, Isla Guadalupe,  
Baja Calif., Mex. 28°51'N 118°16.8'W 27-73m  
pipe stem dredge Dec. 18, 1957 'Stranger'  
C. Hubbs
- E 2562 H51-148 San Diego Trough 32°45'N 117°40'W  
Apr. 20, 1951 1006m 10' midwater trawl Al  
Allansson
- E 2561 Redondo Canyon, Calif. June 10, 1938  
33°50.6'N 118°25.1'W dredge haul 'E.W.  
Scripps' W.P. Shepard No. 95
- E 2578 MV71-I-2 Isla Guadalupe, Baja Calif., Mex.  
28°52'N 118°15'W May 18, 1971 102-99m 6'  
Sigsbee tr. R/V Agassiz C. Hubbs, S. Luke
- E 2577 MV71-I-62 San Diego Trough 32°28'N 117°29'W  
June 1, 1971 1235m 25' ott. tr. R/V Agassiz  
C. Hubbs, S. Luke
- E 2576 R-8 Tanner Basin Oct. 28, 1970 32°44'N  
119°27'W epibenthic sled 1298-1302m R/V  
Agassiz F. Rokop, S. Luke
- E 2736 Monsoon 72-D off New Zealand 43°26'S  
176°43'E Jan. 29, 1961 245m rock dredge
- E 2735 6111B-2 Isla San Benitos, Baja Calif.,  
Norte, Mex. 28°17.5'N 115°34.6'W 16' ott.  
tr. #29 Nov. 25, 1961 (SI062-90)
- E 2734 MV68-I-60 Golfo de Calif., Mexico 29°42'N  
113°58'W Jan. 18, 1968 567-603m 40' ott.  
tr. R/V T. Washington C. Hubbs
- E 2733 MV65-I-39 Basin off Bahia Magdalena, Baja  
Calif., Sur, Mex. 24°27'N 113°18'W 3427-  
3621m 45' ott. tr. June 25, 1965 R/V  
Horizon C. Hubbs
- E 2732 MV65-I-41 Basin off Bahia Magdalena, Baja  
Calif., Sur, Mex. 24°29'N 113°21'W 3497-  
3610m 10' IKMT June 25, 1965 R/V Horizon  
C. Hubbs (SI065-224)
- E 2731 MV65-I-55 S.W. of Cabo San Lucas, Baja  
Calif., Sur, Mexico 22°33'N 110°08'W 2714-  
2886m 45' ott. tr. June 29, 1965 R/V  
Horizon C. Hubbs (SI065-238)
- E 2730 M15 OT-20 Summerland, Calif. 34°17.8'N  
120°49'W Apr. 2, 1974 75m 40' ott. tr. R/V  
Agassiz T. Matsui
- E 2729 M15 OT-10 Santa Monica, Calif. 33°52.5'N  
118°34'W Mar. 29, 1974 73m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2728 M15 OT-12 Pta. Piedras Blancas, Calif.  
35°33'N 121°40'W Apr. 1, 1974 906m 25' ott.  
tr. R/V Agassiz T. Matsui
- E 2727 MV67-II-22 Pioneer Seamount, Calif. 37°18'N  
123°53.5'W June 14, 1967 3592-3799m 41'  
ott. tr. R/V T. Washington C. Hubbs  
(SI067-115)
- E 2726 Monsoon Exp. Wharton Reef, Australia  
14°08'S 144°00'E shore collection  
skindiving to 6 ft. Oct. 9, 1960 (P-232-60)
- E 2725 M-15, OT-11 Pta. Piedras Blancas, Calif.  
35°28'N 121°50'W Mar. 31, 1974 1189-1170m  
25' ott. tr. R/V Agassiz T. Matsui
- E 2724 MV66-III-21 W.S.W. of Cortez Bank 32°04'N  
120°29.7'W Dec. 11, 1966 3777-3792m 40'  
ott. tr. C. Hubbs (SI066-547)
- E 2723 M-15, OT-6 San Onofre, Calif. 33°16'N  
117°31'W Mar. 29, 1974 54m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2722 MV73-I-63 Guatemala Apr. 16, 1973 13°22.6'N  
91°19.5'W 40' ott. tr. 159-146m R/V Agassiz  
C. Hubbs, S. Luke
- E 2721 R-24 Tanner Basin Jan. 20, 1971 32°45'N  
119°27'W 25' ott. tr. 1317-1362m R/V  
Agassiz F. Rokop
- E 2751 M-6, Sta. 2 San Diego Trough 32°52'N  
117°31'W Aug. 13, 1971 732-860m 25' ott.  
tr. R/V Agassiz T. Matsui
- E 2750 MV65-I-4 N.W. of Cedros Is., Baja Calif.,  
Norte, Mex. 28°49'N 115°43'W 1536-1511m 6'  
Sigsbee tr. June 10, 1965 R/V Horizon  
C. Hubbs

- E 2749 CalCofI 74126/II trawl #5 Piedras Blancas, Calif. 35°38'N 121°44.6'W Dec. 10, 1974 915m 25' ott. tr. #5 R/V Agassiz T. Matsui
- E 2748 MV69-VI-9 W. of Patton Escarpment 31°11'N 119°36'W Dec. 18, 1969 3600-3676m 25' ott. tr. R/V Melville (SIO70-22) C. Hubbs, S. Luke
- E 2747 MV67-II-22 W. of Pioneer Seamount, Calif. 37°18'N 123°53.4'W June 14, 1967 3592-3799m 41' ott. tr. R/V T. Washington C. Hubbs
- E 2746 M15 OT-22 Del Mar, Calif. 32°59'N 117°38'W Apr. 4, 1974 920m 25' ott. tr. R/V Agassiz T. Matsui
- E 2745 MV65-I-13 Cedros Trench, Baja Calif., Norte, Mex. 28°07'N 116°45'W 4414-4425m 6' Sigsbee tr. R/V Horizon June 13, 1965 C. Hubbs
- E 2744 MV66-I-6 Cabo Colnett, Baja Calif., Norte, Mex. 31°04'N 118°W 1463-1728m 40' ott. tr. R/V Agassiz Mar. 31, 1966 C. Hubbs
- E 2743 MV71-I-1 Isla Guadalupe, Baja Calif., Mexico 28°51.5'N 118°16.3'W May 18, 1971 95-81m 6' Sigsbee tr. R/V Agassiz C. Hubbs, S. Luke
- E 2742 M15 OT-4 off San Onofre, Calif. 33°13.5'N 117°30'W 25' ott. tr. 91m Mar. 29, 1974 R/V Agassiz T. Matsui
- E 2741 SIO59-354 off Bird Rock, San Diego, Calif. 40-45 ft. 600' wall net & diving Sept. 25, 1959 C. Hubbs
- E 2754 MV72-II-27 Arica, Chile May 7, 1972 18°34'S 70°31'W 25' ott. tr. 768-968m R/V T. Washington S. Luke
- E 2753 MV72-II-32 Pta. San Juan, Peru 15°48'S 76°07'W May 10, 1972 3562m 25' ott. tr. R/V T. Washington S. Luke
- E 2628 A.E.C. IV L.C.-23 off Farallon Is., Calif. 1829m 16' ott. tr. Oct., 1960
- E 2627 New Hope Rock, Pt. Loma, San Diego, Calif. Nov. 1959 SCUBA 27m
- E 2626 Los Arcos, Puerto Vallarta, Jalisco, Mexico May 20, 1959 3-12 ft. reef R. Parker
- E 2625 21 Stipe Holdfast, Bahia Tortugas, Baja Calif., Sur, Mex. Nov. 20, 1959
- E 2624 Melpomene Cove, Isla Guadalupe, Baja Calif., Mex. 28°51'N 118°16.8'W in trap set at anchor Jan. 28-29, 1950 'Orca' C. Hubbs
- E 2623 Oceano, San Luis Obispo Co., Calif. 40 ft. SCUBA April 10, 1955 C. Limbaugh
- E 2622 H48-215 to 222 S. Coronado Is., Baja Calif., Norte, Mex. 32°22'N 117°10'W 15-55m dredge Aug. 11, 1948 'E.W. Scripps' C. Hubbs
- E 2621 H48-229 Bahia Descanso, Baja Calif., Norte, Mex. ca. 32°20'N 117°05'W 20-26m dredge Aug. 13, 1948 'E.W. Scripps' C. Hubbs
- E 2620 Off San Diego, Calif. July 7, 1908 32°46.5'N 118°20.5'W trawling 503m
- E 2619 TP-33 Aleutian Is., Alaska 52°20'N 177°08'W Aug. 24, 1953 3300m diving dredge #2 Wooster & McGowan (SIO53-328)
- E 2657 E. of Bridge rock, La Jolla, Calif. 85 ft. under rocks Sept., 1964 T. Hopkins
- E 2656 Knepper shoal, Pta. Abreojos, Baja Calif., Sur, Mexico ca. 26°44'N 113°35'W 40-50 ft. Feb. 9, 1964 T. Hopkins
- E 2655 Cabo Corso, Bahia Santa Maria, Baja Calif., Sur, Mex. Jan. 31, 1964 60 ft. T. Hopkins
- E 2654 Off Pta. Redondo, Bahia Magdalena, Baja Calif., Sur, Mexico Feb. 4, 1964 45 ft. T. Hopkins
- E 2653 Pta. Tosca lagoon, Bahia Magdalena, Baja Calif., Sur, Mexico Feb. 4, 1964 T. Hopkins
- E 2652 Near Pta. Tosca, Bahia Magdalena, Baja Calif., Sur, Mexico Feb. 4, 1964 T. Hopkins
- E 2651 Alaska-Bahia Vizcaino, Baja Calif., Norte, Mexico 28°03'N 115°05'W 82m Isaacs dredge #1
- E 2650 B-6411-24 11.75 mi. W.S.W. of Pta. Pequena, Baja Calif., Sur 26°08.8'N 112°41'W 68-73m 16' ott. tr. #134 Nov. 16, 1964 R/V B. Douglas
- E 2649 Mag Bay A-8 off Boca San Domingo, Baja Calif., Sur, Mex. 25°31.3'N 112°25.7'W 97m 6' IKMT Jan. 28, 1964 C. Hubbs (SIO64-6) R/V Horizon
- E 2648 San Felipe, Baja Calif., Norte, Mex. N. of town underneath rocks 5 ft. spring 1963
- E 2659 Mission Bay, San Diego, Calif. 30 ft. April 25, 1964
- E 2664 MV65-I-31 off Bahia San Hipolito, Baja Calif., Sur, Mex. 26°31'N 114°15'W 2054-2136m 45' ott. tr. June 22, 1965 R/V Horizon C. Hubbs (SIO65-214)
- E 2663 MV65-I-26 off Bahia San Cristobal, Baja Calif., Sur, Mex. 27°08'N 115°09'W 4086-4096m 10' IKMT June 21, 1965 R/V Horizon C. Hubbs (SIO65-209)
- E 2662 MV65-I-2 off Isla San Martin, Baja Calif., Norte, Mex. 30°04'N 116°51'W 2392-2532m 6' Sigsbee tr. June 9, 1965 R/V Horizon C. Hubbs
- E 2661 MV65-IV-88 (W66-61) La Ventana, Chile, ca. 30 mi. N. of Valparaiso, Chile 10 ft. chemfish & SCUBA Dec. 28, 1965 B.W. Walker (SIO65-678)
- E 2669 N. of Scripps Canyon, La Jolla, Calif. Diving Saucer Nov. 16, 1964 R.F. Ford
- E 2668 2 mi. offshore, Princess Charlotte Bay, N. Queensland, Australia 25 ft. Sept. 29, 1966 ott. tr. R. McConnaughey
- E 2667 RR65-17 Canal de San Jose, Baja Calif., Sur, Mex. 24°59.75'N 110°46.0'W 0-4 ft. snorkel July 8, 1965 B.W. Walker (SIO65-271)
- E 2666 MV65-IV-76 Cruise 12 Sta. 14 off Chile 32°51'S 72°08'W Dec. 19, 1965 2580m 5' Agassiz tr. R/V Anton Brunn R.L. Wisner (SIO65-666)
- E 2674 Sta. 16 Catalina Basin, Calif. 33°N 118°17'W Dec. 10, 1972 1097m IKMT R/V Agassiz R. Heesler
- E 2673 Eniwetak Atoll, Marshall Is. ca. 11°30'N 162°10'E Sept., 1971 to May, 1972 0-60 ft. SCUBA R. Nolan, T. Dana
- E 2679 M-15 OT-14 San Onofre, Calif. 33°13.5'N 117°30'W Mar. 29, 1974 91m 25' ott. tr. R/V Agassiz T. Matsui
- E 2678 MV73-I-96 Golfo de Nicoya, Costa Rica 09°27.5'N 84°31'W Apr. 22, 1973 31m 25' ott. tr. R/V Agassiz C. Hubbs, S. Luke
- E 2677 W. of Pt. La Jolla, Calif. 282m Jan. 29, 1973 R/V Oconostota A. Flechsig
- E 2676 ca. 6 mi. W. of Pt. Loma, San Diego, Calif. 229m Jan. 29, 1973 R/V Oconostota A. Flechsig
- E 2690 Oconostota trawl #9 San Clemente Basin 32°25.8'N 117°51'W Sept. 5, 1974 1596-1600m 16' ott. tr. R/V Oconostota J.F. Siebenaller
- E 2689 Oconostota trawl #8 San Clemente Basin 32°27.8'N 117°52'W Sept. 5, 1974 1527-1545m 16' ott. tr. R/V Oconostota J.F. Siebenaller
- E 2688 Oconostota trawl #4 Catalina Basin, Calif. 32°58'N 118°26'W Sept. 4, 1974 1099-1104m 16' ott. tr. R/V Oconostota J.F. Siebenaller

- E 2687 M-15 OT-17 Pt. Sal, Calif. 34°53.5'N  
120°49'W Apr. 2, 1974 132m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2686 M-15 OT-15 off Morro Bay, Calif. 35°12'N  
121°02.5'W Apr. 2, 1974 99m 25' ott. tr.  
R/V Agassiz T. Matsui
- E 2685 M-15, OT-14 San Simeon, Calif. 35°34'N  
121°19'W Apr. 1, 1974 256m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2684 M-15, OT-14 San Simeon, Calif. 35°34'N  
121°19'W Apr. 1, 1974 256m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2683 M-15 OT-11 Pta. Piedras Blancas, Calif.  
35°28'N 121°49'W Mar. 31, 1974 1189-1170m  
25' ott. tr. R/V Agassiz T. Matsui
- E 2682 M-15 OT-11 Pta. Piedras Blancas, Calif.  
35°28'N 121°49'W Mar. 31, 1974 1189-1170m  
25' ott. tr. R/V Agassiz T. Matsui
- E 2681 M-15 OT-7 San Clemente, Calif. 33°23.7'N  
117°40'W Mar. 29, 1974 64m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2680 M-15 OT-7 San Clemente, Calif. 33°23.7'N  
117°40'W Mar. 29, 1974 64m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2697 A-20 Afterthot II San Nicolas Basin  
32°02.5'N 119°02.7'W May 7, 1975 1746m 25'  
ott. tr. R/V Agassiz J.F. Siebenaller
- E 2696 MV73-I-81 S. of Pta. Guiones, Costa Rica  
09°35'N 85°41'W Apr. 20, 1973 1157-1454m  
10' IKMT R/V Agassiz C. Hubbs, S. Luke
- E 2695 MV73-I-81 S. of Pta. Guiones, Costa Rica  
09°35'N 85°41'W Apr. 20, 1973 1157-1454m  
IKMT 10' R/V Agassiz C. Hubbs, S. Luke
- E 2694 CalCofi 74126/II off San Francisco, Calif.  
37°08'N 122°23'W Dec. 9, 1974 37m 16' ott.  
tr. #2 R/V Agassiz T. Matsui
- E 2693 Oconostota trawl #10 off La Jolla, Calif.  
32°52'N 117°36.5'W Sept. 6, 1974 896m 16'  
ott. tr. J.F. Siebenaller
- E 2692 Oconostota trawl #10 off La Jolla, Calif.  
32°52'N 117°36.5'W Sept. 6, 1974 896m 16'  
ott. tr. J.F. Siebenaller
- E 2701 Monsoon Sta. VI-28 E. of New Zealand  
49°42'S 178°52'E rock dredge 101-D 274m  
Feb. 20, 1961 Russell & Menard
- E 2703 SI063-17 San Diego Trough 32°24'N 117°30'W  
Feb. 8, 1963 732-1280m 10' IKMT R. Wisner
- E 2709 M-8, Sta. 1 San Diego Trough 32°29'N  
117°32'W Nov. 1, 1971 1207-1244m 40' ott.  
tr. R/V Agassiz T. Matsui
- E 2708 Baja 69-28 Pta. Blanca, Baja Calif., Norte,  
Mex. 29°11'N 115°14.3'W 91m Feb. 28, 1969  
dredge R/V Oconostota
- E 2707 MV66-II-4 off Eureka, Calif. 40°30.5'N  
125°45.2'W May 22, 1966 2999-3017m 16' ott.  
tr. R. Wisner
- E 2713 Mission Bay pier pilings, San Diego, Calif.  
intertidal, hand collected Feb. 6, 1974  
S. Luke
- E 2712 M-15, OT-9 Long Beach, Calif. 33°53.3'N  
118°08'W March 29, 1974 49m 40' ott. tr.  
R/V Agassiz T. Matsui
- E 2711 M-15, OT-13 Pta. Piedras Blancas, Calif.  
35°36'N 121°28'W Apr. 1, 1974 567-603m 25'  
ott. tr. R/V Agassiz T. Matsui
- E 2718 Oconostota trawl #5 San Clemente Basin  
33°05'N 118°18'W Sept. 4, 1974 1112-1115m  
16' ott. tr. J.F. Siebenaller
- E 2739 MV65-I-26 off Bahia San Cristobal, Baja  
Calif., Sur, Mexico 27°08'N 115°10'W 4085-  
4096m 10' IKMT R/V Horizon C. Hubbs
- E 2738 MV73-I-62 S.W. of San Jose, Guatemala  
13°26'N 91°21'W Apr. 16, 1973 130-121m 40'  
ott. tr. R/V Agassiz C. Hubbs, S. Luke
- E 2737 SI066-3 San Diego, Calif. 32°32.8'N  
117°18.2'W Mar. 12, 1966 82-101m 40' ott.  
tr. #2 R. Rosenblatt
- E 2756 Mag Bay A-43 off Boca de La Animas, Baja  
Calif., Sur, Mex. 25°44'N 113°00.3'W 154-  
155m 30' ott. tr. Feb. 7, 1964 R/V Horizon  
C. Hubbs (SI064-32)
- E 2759 BS-8 off Boca de Las Animas, Baja Calif.,  
Sur, Mex. 25°44'N 112°57'W 146-165m 16'  
ott. tr. May 2, 1961 R. Parker (P-281-61)  
(SI061-172)
- E 2760 SI062-228 Bahia de Los Angeles, Baja  
Calif., Norte, Mex. 28°55.6'N 113°33.8'W  
0-6 ft. chemfish Apr. 24, 1962 C. Hubbs
- E 2762 6108 B-58 Isla Maria Magdalena, Islas Tres  
Marias, Mex. 21°23.8'N 106°24.4'W 0-20 ft.  
Aug. 23, 1961 rotenone & diving F.H. Berry  
(SI062-58)
- E 2763 Holt Exped. Sta. 6 off Pta. Santo Domingo,  
Baja Calif., Sur, Mex. Dec. 2, 1960 26°13'N  
113°21'W 91m 10' ott. tr. C. Boyd (SI060-  
465)
- E 2770 Melpomene Cove, Isla Guadalupe, Baja  
Calif., Mex. dredged 44m C. Hubbs
- E 2769 Academy Bay, Isla Santa Cruz, Islas  
Galapagos, Ecuador Aug. 10, 1952
- E 2768 M-1, Sta. 2 San Diego Trough 32°57'N  
117°32'W Feb. 3, 1971 768m 25' ott. tr. R/V  
Agassiz T. Matsui
- E 2782 NAGA S-10 61-128 Gulf of Thailand  
10°12'42"N 103°55'15"E Feb. 10, 1961 11m  
16' ott. tr. Ile de Phu Quoc (SI061-694)
- E 2783 Cape Evans, McMurdo Sound, Antarctica,  
Nov. 13, 1967 Dayton & Robilliard