

Supplementary Table S1. List of species of Polychaeta and frequency by region of the southern Gulf of Mexico.

Family	Species	Authority	West Frequen cy	(%)	East Frequen cy	(%)
Ampharetidae	<i>Amphicteis scaphobranchiata</i>	Moore, 1906	2	6.06	9	32.1 4
Ampharetidae	<i>Sosane sulcata</i>	Malmgren, 1866	3	9.09	0	0.00
Ampharetidae	<i>Ampharete lindstroemi</i>	Malmgren, 1867	2	6.06	0	0.00
Amphinomida e	<i>Chloeia viridis</i>	Schmarda, 1861	3	9.09	3	10.7 1
Amphinomida e	<i>Paramphinome jeffreysii</i>	(McIntosh, 1868)	4	12.1 2	1	3.57
Amphinomida e	<i>Paramphinome</i>	M. Sars in G. Sars, 1872	4	12.1 2	0	0.00
Capitellidae	<i>Rashgua lobatus</i>	(Hartman, 1947)	8	24.2 4	14	50.0 0
Capitellidae	<i>Notomastus daueri</i>	Ewing, 1982	14	42.4 2	2	7.14
Capitellidae	<i>Mediomastus californiensis</i>	Hartman, 1944	5	15.1 5	2	7.14
Capitellidae	<i>Notomastus hemipodus</i>	Hartman, 1945	3	9.09	3	10.7 1
Capitellidae	<i>Dasybranchus lumbricoides</i>	Grube, 1878	2	6.06	3	10.7 1
Capitellidae	<i>Notomastus hemipodus</i>	Hartman, 1945	2	6.06	2	7.14
Capitellidae	<i>Dasybranchus lunulatus</i>	Ehlers, 1887	2	6.06	0	0.00
Capitellidae	<i>Decamastus gracilis</i>	Hartman, 1963	0	0.00	2	7.14
Capitellidae	<i>Mastobranhus variabilis</i>	Ewing, 1984	0	0.00	2	7.14
Capitellidae	<i>Notomastus tenuis</i>	Moore, 1909	0	0.00	2	7.14
Chrysopetalid ae	<i>Bhawania goodei</i>	Webster, 1884	0	0.00	2	7.14
Cirratulidae	<i>Kirkegaardia dorsobranchialis</i>	(Kirkegaard, 1959)	8	24.2 4	11	39.2 9
Cirratulidae	<i>Chaetozone</i> sp. D	Malmgren, 1867	4	12.1 2	1	3.57
Cirratulidae	<i>Kirkegaardia dorsobranchialis</i>	(Kirkegaard, 1959)	4	12.1 2	1	3.57
Cirratulidae	<i>Caulleriella alata</i>	(Southern, 1914)	0	0.00	4	14.2 9
Cirratulidae	<i>Cirriformia</i> sp. A		2	6.06	1	3.57
Cossuridae	<i>Cossura delta</i>	Reish, 1958	22	66.6 7	10	35.7 1
Eulepethidae	<i>Grubeulepis mexicana</i>	(Berkeley & Berkeley, 1939)	0	0.00	4	14.2 9
Eulepethidae	<i>Grubeulepis augeneri</i>	Pettibone, 1969	0	0.00	2	7.14
Eunicidae	<i>Eunice vittata</i>	(Delle Chiaje, 1828)	2	6.06	12	42.8 6
Eunicidae	<i>Paucibranchia bellii</i>	(Audouin & Milne Edwards, 1833)	9	27.2 7	2	7.14
Eunicidae	<i>Lysidice ninetta</i>	Audouin & H Milne Edwards, 1833	0	0.00	7	25.0 0

Eunicidae	<i>Lysidice hebes</i>	(Verrill, 1900)	1	3.03	3	10.7 1
Eunicidae	<i>Eunice websteri</i>	Fauchald, 1969	0	0.00	3	10.7 1
Eunicidae	<i>Paucibranchia kinbergi</i>	(McIntosh, 1910)	2	6.06	0	0.00
Eunicidae	<i>Euniphysa</i> sp.		2	6.06	0	0.00
Fabriciidae	<i>Fabricinuda trilobata</i>	(Fitzhugh, 1983)	0	0.00	5	17.8 6
Flabelligeridae	<i>Bradabyssa villosa</i>	(Rathke, 1843)	4	12.1 2	1	3.57
Flabelligeridae	<i>Piromis roberti</i>	(Hartman, 1951)	2	6.06	1	3.57
Glyceridae	<i>Glycera brevicirris</i>	Grube, 1870	2	6.06	7	25.0 0
Glyceridae	<i>Glycera americana</i>	Leidy, 1855	5	15.1 5	2	7.14
Glyceridae	<i>Glycera tessellata</i>	Grube, 1863	4	12.1 2	0	0.00
Glyceridae	<i>Glycera robusta</i>	Ehlers, 1868	1	3.03	2	7.14
Glyceridae	<i>Glycera papillosa</i>	Grube, 1857	0	0.00	2	7.14
Goniadidae	<i>Goniada maculata</i>	Örsted, 1843	1	3.03	5	17.8 6
Goniadidae	<i>Ophiogoniada lyra</i>	(Granados-Barba & Solis-Weiss, 1997)	4	12.1 2	1	3.57
Goniadidae	<i>Goniada teres</i>	Treadwell, 1931	0	0.00	3	10.7 1
Hesionidae	<i>Podarkeopsis levifuscina</i>	Perkins, 1984	3	9.09	1	3.57
Lumbrineridae	<i>Scoletoma verrilli</i>	(Perkins, 1979)	21	63.6 4	23	82.1 4
Lumbrineridae	<i>Scoletoma tenuis</i>	(Verrill, 1873)	30	90.9 1	4	14.2 9
Lumbrineridae	<i>Ninoe leptognatha</i>	Ehlers, 1900	22	66.6 7	10	35.7 1
Lumbrineridae	<i>Lumbrineris cingulata</i>	Ehlers, 1897	23	69.7 0	3	10.7 1
Lumbrineridae	<i>Scoletoma ernesti</i>	(Perkins, 1979)	16	48.4 8	8	28.5 7
Lumbrineridae	<i>Lumbrineris latreilli</i>	Audouin & Milne Edwards, 1833	11	33.3 3	9	32.1 4
Lumbrineridae	<i>Lumbricalus dayi</i>	Frame, 1992	8	24.2 4	3	10.7 1
Lumbrineridae	<i>Ninoe brasiliensis</i>	Kinberg, 1865	7	21.2 1	1	3.57
Lumbrineridae	<i>Lumbrineris bidens</i>	Ehlers, 1887	2	6.06	1	3.57
Lumbrineridae	<i>Lumbrinerides acuta</i>	(Verrill, 1875)	0	0.00	3	10.7 1
Lumbrineridae	<i>Lumbrinerides dayi</i>	Perkins, 1979	3	9.09	1	3.57
Lumbrineridae	<i>Lumbrineriopsis paradoxa</i>	(Saint-Joseph, 1888)	1	3.03	3	10.7 1
Lumbrineridae	<i>Lumbrinerides aberrans</i>	(Day, 1963)	0	0.00	2	7.14
Magelonidae	<i>Magelona polydentata</i>	Jones, 1963	11	33.3 3	6	21.4 3
Magelonidae	<i>Magelona</i> sp. L		9	27.2 7	8	28.5 7
Magelonidae	<i>Magelona pettiboneae</i>	Jones, 1963	0	0.00	6	21.4 3

Magelonidae	<i>Magelona cf. phyllisae</i>	Jones, 1963	4	12.1 2	1	3.57
Magelonidae	<i>Magelona</i> sp. D		1	3.03	2	7.14
Magelonidae	<i>Magelona</i> sp. J		1	3.03	1	3.57
Maldanidae	<i>Sabaco elongatus</i>	(Verrill, 1873)	7	21.2 1	3	10.7 1
Maldanidae	<i>Clymenella torquata</i>	(Leidy, 1855)	6	18.1 8	1	3.57
Melinnidae	<i>Melinna</i> sp.		0	0.00	2	7.14
Nephtyidae	<i>Nephtys incisa</i>	Malmgren, 1865	30	90.9 1	9	32.1 4
Nephtyidae	<i>Aglaophamus verrilli</i>	(McIntosh, 1885)	8	24.2 4	5	17.8 6
Nephtyidae	<i>Nephtys squamosa</i>	Ehlers, 1887	3	9.09	5	17.8 6
Nephtyidae	<i>Aglaophamus circinata</i>	(Verrill in Smith & Harger, 1874)	1	3.03	2	7.14
Nephtyidae	<i>Aglaophamus cf. verrilli</i>	(McIntosh, 1885)	0	0.00	2	7.14
Nephtyidae	<i>Inermonephtys inermis</i>	(Ehlers, 1887)	0	0.00	2	7.14
Nereididae	<i>Neanthes micromma</i>	(Harper, 1979)	10	30.3 0	2	7.14
Nereididae	<i>Ceratocephale oculata</i>	Banse, 1977	2	6.06	7	25.0 0
Nereididae	<i>Nereis riisei</i>	Grube, 1857	2	6.06	7	25.0 0
Nereididae	<i>Ceratonereis mirabilis</i>	Kinberg, 1865	0	0.00	7	25.0 0
Nereididae	<i>Ceratonereis (Composetia) irritabilis</i>	(Webster, 1879)	1	3.03	3	10.7 1
Nereididae	<i>Nereis splendida</i>	Grube, 1840	0	0.00	2	7.14
Nereididae	<i>Nereis grayi</i>	Pettibone, 1956	2	6.06	0	0.00
Nereididae	<i>Nereis pelagica</i>	Linnaeus, 1758	0	0.00	2	7.14
Oeononidae	<i>Drilonereis longa</i>	Webster, 1879	7	21.2 1	6	21.4 3
Oeononidae	<i>Drilonereis spatula</i>	(Treadwell, 1911)	6	18.1 8	1	3.57
Oeononidae	<i>Arabella iricolor</i>	(Montagu, 1804)	4	12.1 2	1	3.57
Onuphidae	<i>Kinbergonuphis</i> sp.		26	78.7 9	19	67.8 6
Onuphidae	<i>Diopatra cuprea</i>	(Bosc, 1802)	22	66.6 7	13	46.4 3
Onuphidae	<i>Diopatra tridentata</i>	Hartman, 1944	14	42.4 2	5	17.8 6
Onuphidae	<i>Diopatra neotridens</i>	Hartman, 1944	15	45.4 5	3	10.7 1
Onuphidae	<i>Kinbergonuphis simoni</i>	(Santos, Day & Rice, 1981)	6	18.1 8	10	35.7 1
Onuphidae	<i>Paradiopatra hartmanae</i>	(Kirkegaard, 1980)	7	21.2 1	2	7.14
Onuphidae	<i>Diopatra papillata</i>	Fauchald, 1968	0	0.00	6	21.4 3
Onuphidae	<i>Mooreonuphis nebulosa</i>	(Moore, 1911)	0	0.00	6	21.4 3
Onuphidae	<i>Kinbergonuphis pulchra</i>	(Fauchald, 1980)	0	0.00	5	17.8 6
Onuphidae	<i>Mooreonuphis dangrigae</i>	(Fauchald, 1980)	0	0.00	5	17.8 6

Onuphidae	<i>Mooreonuphis stigmatis</i>	(Treadwell, 1922)	0	0.00	3	10.7 1
Opheliidae	<i>Armandia maculata</i>	(Webster, 1884)	17	51.5 2	20	71.4 3
Opheliidae	<i>Armandia agilis</i>	(Andrews, 1891)	0	0.00	8	28.5 7
Orbiniidae	<i>Leodamas rubrus</i>	(Webster, 1879)	5	15.1 5	13	46.4 3
Orbiniidae	<i>Orbinia riseri</i>	(Pettibone, 1957)	4	12.1 2	7	25.0 0
Orbiniidae	<i>Leodamas texana</i>	(Maciolek & Holland, 1978)	4	12.1 2	3	10.7 1
Orbiniidae	<i>Phylofelix</i>	Kinberg, 1866	0	0.00	3	10.7 1
Orbiniidae	<i>Leitoscoloplos fragilis</i>	(Verrill, 1873)	0	0.00	2	7.14
Orbiniidae	<i>Naineris bicornis</i>	Hartman, 1951	0	0.00	2	7.14
Paralacydoniidae	<i>Paralacydonia paradoxa</i>	Fauvel, 1913	8	24.2 4	1	3.57
Paraonidae	<i>Paradoneis lyra</i>	(Southern, 1914)	12	36.3 6	16	57.1 4
Paraonidae	<i>Aricidea (Acmira) simplex</i>	Day, 1963	13	39.3 9	5	17.8 6
Paraonidae	<i>Aricidea (Strelzovia) sp.</i>		9	27.2 7	8	28.5 7
Paraonidae	<i>Levinsenia gracilis</i>	(Tauber, 1879)	6	18.1 8	11	39.2 9
Paraonidae	<i>Aricidea (Acmira) catherinae</i>	Laubier, 1967	2	6.06	13	46.4 3
Paraonidae	<i>Aricidea (Aricidea) fragilis</i>	Webster, 1879	2	6.06	8	28.5 7
Paraonidae	<i>Aricidea (Aricidea) wassi</i>	Pettibone, 1965	0	0.00	10	35.7 1
Paraonidae	<i>Aricidea (Acmira) finitima</i>	Strelzov, 1973	2	6.06	6	21.4 3
Paraonidae	<i>Aricidea (Acmira) taylori</i>	Pettibone, 1965	3	9.09	5	17.8 6
Paraonidae	<i>Cirrophorus furcatus</i>	(Hartman, 1957)	2	6.06	3	10.7 1
Paraonidae	<i>Aricidea (Acmira) cerrutii</i>	Laubier, 1966	0	0.00	4	14.2 9
Paraonidae	<i>Aricidea (Strelzovia) bryani</i>	Gaston & McLelland, 1996	0	0.00	4	14.2 9
Paraonidae	<i>Aricidea (Strelzovia) quadrilobata</i>	Webster & Benedict, 1887	0	0.00	4	14.2 9
Paraonidae	<i>Aricidea (Strelzovia) suecica</i>	Eliason, 1920	1	3.03	3	10.7 1
Paraonidae	<i>Aricidea (Acmira) philbinae</i>	Brown, 1976	0	0.00	3	10.7 1
Paraonidae	<i>Aricidea (Strelzovia) claudiae</i>	Laubier, 1967	0	0.00	3	10.7 1
Paraonidae	<i>Cirrophorus branchiatus</i>	Ehlers, 1908	1	3.03	2	7.14
Paraonidae	<i>Aricidea (Aricidea) longicirrata</i>	Hartmann-Schröder, 1965	0	0.00	2	7.14
Paraonidae	<i>Levinsenia reducta</i>	(Hartman, 1965)	1	3.03	1	3.57
Pectinariidae	<i>Pectinaria gouldii</i>	(Verrill, 1873)	0	0.00	3	10.7 1
Phyllodocidae	<i>Phyllodoce madeirensis</i>	Langerhans, 1880	5	15.1 5	3	10.7 1
Phyllodocidae	<i>Paranaitis gardineri</i>	Perkins, 1984	2	6.06	1	3.57

Phyllodoceidae	<i>Phyllodoce arenae</i>	Webster, 1879	1	3.03	1	3.57
Pilargidae	<i>Sigambra tentaculata</i>	(Treadwell, 1941)	12	36.3 6	16	57.1 4
Pilargidae	<i>Litocorsa antennata</i>	Wolf, 1986	0	0.00	4	14.2 9
Pilargidae	<i>Ancistrostylis commensalis</i>	Gardiner, 1976	2	6.06	0	0.00
Poecilochaetidae	<i>Poecilochaetus johnsoni</i>	Hartman, 1939	5	15.1 5	9	32.1 4
Polynoidae	<i>Lepidasthenia varia</i>	Treadwell, 1917	4	12.1 2	2	7.14
Polynoidae	<i>Malmgreniella taylori</i>	Pettibone, 1993	3	9.09	1	3.57
Polynoidae	<i>Malmgreniella maccroryae</i>	Pettibone, 1993	2	6.06	0	0.00
Sabellidae	<i>Acromegalomma bioculatum</i>	(Ehlers, 1887)	2	6.06	12	42.8 6
Sabellidae	<i>Paradialychone americana</i>	(Day, 1973)	0	0.00	8	28.5 7
Sigalionidae	<i>Sthenelais</i> sp. A		10	30.3 0	4	14.2 9
Sigalionidae	<i>Sthenolepis</i> sp. A		7	21.2 1	3	10.7 1
Sigalionidae	<i>Fimbriosthenelais hobbsi</i>	Pettibone, 1971	7	21.2 1	1	3.57
Sigalionidae	<i>Fimbriosthenelais minor</i>	(Pruvot & Racovitza, 1895)	0	0.00	5	17.8 6
Sigalionidae	<i>Dayipsammolyce ctenidophora</i>	(Day, 1973)	0	0.00	3	10.7 1
Sigalionidae	<i>Pisone</i> sp. A		1	3.03	1	3.57
Sigalionidae	<i>Sthenelais boa</i>	(Johnston, 1833)	0	0.00	2	7.14
Spionidae	<i>Paraprionospio</i> sp.		31	93.9 4	22	78.5 7
Spionidae	<i>Prionospio</i> sp.		12	36.3 6	16	57.1 4
Spionidae	<i>Prionospio steenstrupi</i>	Malmgren, 1867	8	24.2 4	18	64.2 9
Spionidae	<i>Minuspio perkinsi</i>	Maciolek, 1985	14	42.4 2	9	32.1 4
Spionidae	<i>Minuspio delta</i>	Hartman, 1965	11	33.3 3	4	14.2 9
Spionidae	<i>Laonice cirrata</i>	(M. Sars, 1851)	4	12.1 2	10	35.7 1
Spionidae	<i>Minuspio multibranchiata</i>	Berkeley, 1927	3	9.09	10	35.7 1
Spionidae	<i>Spiophanes duplex</i>	(Chamberlin, 1919)	9	27.2 7	2	7.14
Spionidae	<i>Spiophanes kroyeri</i>	Grube, 1860	5	15.1 5	6	21.4 3
Spionidae	<i>Scolecopsis (Parascolecopsis) texana</i>	Foster, 1971	2	6.06	7	25.0 0
Spionidae	<i>Microspio pigmentata</i>	(Reish, 1959)	1	3.03	7	25.0 0
Spionidae	<i>Spiophanes bombyx</i>	(Claparède, 1870)	1	3.03	6	21.4 3
Spionidae	<i>Prionospio pygmaeus</i>	Hartman, 1961	3	9.09	3	10.7 1
Spionidae	<i>Minuspio cirrifera</i>	Wirén, 1883	3	9.09	3	10.7 1
Spionidae	<i>Spiophanes wigleyi</i>	Pettibone, 1962	6	18.1 8	1	3.57

Spionidae	<i>Malacoceros indicus</i>	(Fauvel, 1928)	4	12.1 2	1	3.57
Spionidae	<i>Prionospio dayi</i>	(Foster, 1969)	0	0.00	4	14.2 9
Spionidae	<i>Dispio uncinata</i>	Hartman, 1951	2	6.06	1	3.57
Spionidae	<i>Spio pettiboneae</i>	Foster, 1971	0	0.00	3	10.7 1
Spionidae	<i>Aonidella dayi</i>	López-Jamar, 1989	3	9.09	0	0.00
Spionidae	<i>Prionospio dubia</i>	Day, 1961	1	3.03	1	3.57
Spionidae	<i>Prionospio ehlersi</i>	Fauvel, 1928	2	6.06	0	0.00
Sternaspidae	<i>Sternaspis scutata</i>	(Ranzani, 1817)	7	21.2 1	1	3.57
Syllidae	<i>Syllis (Typosyllis) sp. G</i>		8	24.2 4	1	3.57
Syllidae	<i>Syllis cornuta</i>	Rathke, 1843	2	6.06	5	17.8 6
Syllidae	<i>Opisthodonta spinigera</i>	Russell, 1987	0	0.00	4	14.2 9
Syllidae	<i>Sphaerosyllis taylori</i>	Perkins, 1981	0	0.00	3	10.7 1
Syllidae	<i>Syllis alosae</i>	San Martín, 1992	2	6.06	1	3.57
Syllidae	<i>Exogone atlantica</i>	Perkins, 1981	0	0.00	2	7.14
Syllidae	<i>Paraehlersia ferrugina</i>	(Langerhans, 1881)	0	0	2	7.14
Terebellidae	<i>Pista cristata</i>	(Müller, 1776)	3	9.09	8	28.5 7
Terebellidae	<i>Pistella papillosa</i>	(Tourtellotte & Kritzler, 1988)	0	0.00	3	10.7 1
Terebellidae	<i>Polycirrus denticulatus</i>	Saint-Joseph, 1894	0	0.00	2	7.14

Supplementary Figure S1. Spatial distribution of the number of species in the southern Gulf of Mexico.

