

Table S1: Shore Stations 2019 - Egg Abundance. A list of all 32 species identified in the samples during 2019 and the total number of eggs identified as each species at each site. The site abbreviations are as follows: La Jolla = SIO, Newport Beach = NBP, Santa Monica = SM, San Luis Obispo = CP, and Santa Cruz = SC. The sampling effort at each site is as follows: SIO = 65, NBP= 44, SM = 45, SB = 49, CP = 29, SC = 34

<i>Scientific Name</i>	<i>Common Name</i>	<i>SIO</i>	<i>NBP</i>	<i>SM</i>	<i>SB</i>	<i>CP</i>	<i>SC</i>	<i>Total</i>
<i>Citharichthys stigmaeus</i>	Speckled sanddab	1099	145	56	870	199	61	2430
<i>Halichoeres semicinctus</i>	Rock wrasse	281	5	23	15	0	0	324
<i>Genyonemus lineatus</i>	White croaker	4	1	0	12	271	24	312
<i>Engraulis mordax</i>	Anchovy	233	4	0	23	0	0	260
<i>Roncador stearnsii</i>	Spotfin croaker	182	2	14	1	0	0	199
<i>Paralichthys californicus</i>	California halibut	70	13	2	27	4	8	124
<i>Oxyjulis californica</i>	Senorita	113	0	0	10	0	0	123
<i>Menticirrhus undulatus</i>	California corbina	64	6	5	4	0	0	79
<i>Seriphus politus</i>	Queenfish	48	2	6	10	0	0	66
<i>Sardinops sagax</i>	Pacific sardine	55	0	0	0	0	0	55
<i>Citharichthys sordidus</i>	Pacific sanddab	51	0	0	0	0	0	51
<i>Xenistius californiensis</i>	Californian salema	39	0	0	0	0	0	39
<i>Symphurus atricaudus</i>	California tonguefish	12	9	12	3	0	0	36
<i>Hypsopsetta guttulata</i>	Diamond turbot	8	5	0	20	0	0	33
<i>Citharichthys xanthostigma/sordidus</i>	Pacific/Longfin sanddab	27	3	0	0	0	0	30
<i>Citharichthys xanthostigma</i>	Longfin sanddab	22	0	3	0	0	0	25
<i>Paralabrax clathratus</i>	Kelp bass	10	0	2	3	0	0	15
<i>Umbrina roncador</i>	Yellowfin croaker	13	0	1	1	0	0	15
<i>Pleuronichthys coenosus</i>	C.O. sole	3	2	4	3	0	0	12
<i>Semicossyphus pulcher</i>	Sheephead	6	0	0	0	0	0	6
<i>Paralabrax maculatofasciatus</i>	Spotted sand bass	4	2	0	0	0	0	6
<i>Paralabrax nebulifer</i>	Barred sand bass	2	0	0	3	0	0	5
<i>Psettichthys melanostictus</i>	Pacific sand sole	0	0	0	0	3	2	5
<i>Cynoscion parvipinnis</i>	Shortfin weakfish	4	0	0	0	0	0	4

<i>Pleuronichthys verticalis</i>	Hornyhead turbot	2	1	0	1	0	0	4
<i>Xystreureys liolepis</i>	Fantail sole	3	0	0	0	0	0	3
<i>Scomber japonicus</i>	Chub mackerel	3	0	0	0	0	0	3
<i>Hermosilla azurea</i>	Zebra perch sea chub	2	0	1	0	0	0	3
<i>Cheilotrema saturnum</i>	Black croaker	1	0	0	1	0	0	2
<i>Anisotremus davidsonii</i>	Xantic sargo	0	1	0	0	0	0	1
<i>Hypsoblennius jenkinsi</i>	Mussel blenny	1	0	0	0	0	0	1
<i>Mugil cephalus</i>	Flathead grey mullet	1	0	0	0	0	0	1
Total		2363	201	129	1007	477	95	4272

Table S2: Shore Stations Species Frequency 2019 - A list of all 32 species identified in the samples during 2019 and the proportion of samples they were present in at each location. The site abbreviations are as follows: La Jolla = SIO, Newport Beach = NBP, Santa Monica = SM, Santa Barbara = SB, San Luis Obispo = CP, and Santa Cruz = SC. The sampling effort at each site is as follows: SIO = 65, NBP= 44, SM = 45, SB = 49, CP = 29, SC = 34

<i>Scientific Name</i>	<i>Common Name</i>	<i>SIO</i>	<i>NBP</i>	<i>SM</i>	<i>SB</i>	<i>CP</i>	<i>SC</i>
<i>Citharichthys stigmaeus</i>	Speckled sanddab	0.908	0.795	0.244	0.918	0.931	0.559
<i>Halichoeres semicinctus</i>	Rock wrasse	0.338	0.045	0.111	0.122	0.000	0.000
<i>Genyonemus lineatus</i>	White croaker	0.031	0.023	0.000	0.143	0.310	0.118
<i>Engraulis mordax</i>	Anchovy	0.169	0.045	0.000	0.102	0.000	0.000
<i>Roncador stearnsii</i>	Spotfin croaker	0.200	0.045	0.089	0.020	0.000	0.000
<i>Paralichthys californicus</i>	California halibut	0.538	0.273	0.044	0.245	0.069	0.147
<i>Oxyjulis californica</i>	Senorita	0.292	0.000	0.000	0.143	0.000	0.000
<i>Menticirrhus undulatus</i>	California corbina	0.185	0.045	0.067	0.061	0.000	0.000
<i>Seriphus politus</i>	Queenfish	0.200	0.045	0.067	0.102	0.000	0.000
<i>Sardinops sagax</i>	Pacific sardine	0.062	0.000	0.000	0.000	0.000	0.000
<i>Citharichthys sordidus</i>	Pacific sanddab	0.277	0.000	0.000	0.000	0.000	0.000
<i>Xenistius californiensis</i>	Californian salema	0.138	0.000	0.000	0.000	0.000	0.000
<i>Symphurus atricaudus</i>	California tonguefish	0.077	0.114	0.067	0.061	0.000	0.000
<i>Hypsopsetta guttulata</i>	Diamond turbot	0.092	0.091	0.000	0.347	0.000	0.000

<i>Citharichthys xanthostigma/sordidus</i>	Pacific/Longfin sanddab	0.215	0.068	0.000	0.000	0.000	0.000
<i>Citharichthys xanthostigma</i>	Longfin sanddab	0.246	0.000	0.044	0.000	0.000	0.000
<i>Paralabrax clathratus</i>	Kelp bass	0.092	0.000	0.022	0.041	0.000	0.000
<i>Umbrina roncadior</i>	Yellowfin croaker	0.046	0.000	0.022	0.020	0.000	0.000
<i>Pleuronichthys coenosus</i>	C.O. sole	0.046	0.045	0.044	0.061	0.000	0.000
<i>Semicossyphus pulcher</i>	Sheephead	0.092	0.000	0.000	0.000	0.000	0.000
<i>Paralabrax maculatofasciatus</i>	Spotted sand bass	0.046	0.023	0.000	0.000	0.000	0.000
<i>Paralabrax nebulifer</i>	Barred sand bass	0.031	0.000	0.000	0.020	0.000	0.000
<i>Psettichthys melanostictus</i>	Pacific sand sole	0.000	0.000	0.000	0.000	0.069	0.059
<i>Cynoscion parvipinnis</i>	Shortfin weakfish	0.031	0.000	0.000	0.000	0.000	0.000
<i>Pleuronichthys verticalis</i>	Hornyhead turbot	0.031	0.023	0.000	0.020	0.000	0.000
<i>Xystreureys liolepis</i>	Fantail sole	0.046	0.000	0.000	0.000	0.000	0.000
<i>Scomber japonicus</i>	Chub mackerel	0.015	0.000	0.000	0.000	0.000	0.000
<i>Hermosilla azurea</i>	Zebra perch sea chub	0.031	0.000	0.022	0.000	0.000	0.000
<i>Cheilotrema saturnum</i>	Black croaker	0.015	0.000	0.000	0.020	0.000	0.000
<i>Anisotremus davidsonii</i>	Xantic sargo	0.000	0.023	0.000	0.000	0.000	0.000
<i>Hypsoblennius jenkinsi</i>	Mussel blenny	0.015	0.000	0.000	0.000	0.000	0.000
<i>Mugil cephalus</i>	Flathead grey mullet	0.015	0.000	0.000	0.000	0.000	0.000

Table S3. Scripps Pier Species Abundance 2013 – 2019. A list of all 46 species identified in the samples from Scripps Pier from 2013 – 2019 and the number of eggs identified as each of those species within each year. The sampling effort by year is as follows: 2013 = 161, 2014 = 84, 2015 = 51, 2016 = 52, 2017 = 48, 2018 = 75, 2019 = 65

Scientific Name	Common Name	2013	2014	2015	2016	2017	2018	2019	Total
<i>Citharichthys stigmaeus</i>	Speckled sanddab	3246	805	140	811	1228	1485	1099	8814
<i>Oxyjulis californica</i>	Senorita	2494	1591	345	150	175	191	113	5059
<i>Sardinops sagax</i>	Pacific sardine	1201	47	3	107	94	429	55	1936
<i>Xenistius californiensis</i>	Californian salema	238	304	10	30	290	406	39	1317
<i>Engraulis mordax</i>	Anchovy	414	226	3	21	108	248	233	1253

<i>Halichoeres semicinctus</i>	Rock wrasse	163	62	24	11	317	316	281	1174
<i>Menticirrhus undulatus</i>	California corbina	282	112	54	47	60	307	64	926
<i>Roncador stearnsii</i>	Spotfin croaker	189	68	5	22	95	340	182	901
<i>Citharichthys sordidus</i>	Pacific sanddab	330	49	11	5	38	34	51	518
<i>Citharichthys xanthostigma/sordidus</i>	Pacific/Longfin sanddab	377	50	0	0	10	17	27	481
<i>Paralichthys californicus</i>	California halibut	160	87	13	7	32	54	70	423
<i>Seriphus politus</i>	Queenfish	121	89	10	3	71	48	48	390
<i>Paralabrax clathratus</i>	Kelp bass	38	44	9	21	3	25	10	150
<i>Semicossyphus pulcher</i>	Sheephead	46	33	6	6	16	19	6	132
<i>Trachurus symmetricus</i>	Pacific jack mackerel	87	25	0	0	4	0	0	116
<i>Genyonemus lineatus</i>	White croaker	24	9	0	8	29	41	4	115
<i>Umbrina roncadore</i>	Yellowfin croaker	7	3	3	4	22	56	13	108
<i>Hypsopsetta guttulata</i>	Diamond turbot	51	17	5	7	4	9	8	101
<i>Scomber japonicus</i>	Chub mackerel	18	20	4	8	18	30	3	101
<i>Citharichthys xanthostigma</i>	Longfin sanddab	47	6	0	6	4	11	22	96
<i>Anisotremus davidsonii</i>	Xantic sargo	3	22	1	1	6	59	0	92
<i>Symphurus atricaudus</i>	California tonguefish	7	6	3	3	14	22	12	67
<i>Cheilotrema saturnum</i>	Black croaker	23	17	2	1	1	0	1	45
<i>Cynoscion parvipinnis</i>	Shortfin weakfish	17	6	1	1	2	4	4	35
<i>Paralabrax nebulifer</i>	Barred sand bass	9	4	1	0	5	5	2	26
<i>Peprilus simillimus</i>	Pacific pompano	19	4	0	0	0	1	0	24
<i>Xystreureys liolepis</i>	Fantail sole	1	6	0	4	5	4	3	23
<i>Pleuronichthys coenosus</i>	C.O. sole	3	0	0	1	1	13	3	21
<i>Chilara taylori</i>	Spotted cusk eel	12	5	0	1	2	1	0	21
<i>Paralabrax maculatofasciatus</i>	Spotted sand bass	2	0	0	0	5	9	4	20
<i>Hermosilla azurea</i>	Zebra perch sea chub	1	0	0	2	3	12	2	20
<i>Atractoscion nobilis</i>	White seabass	4	13	0	0	0	0	0	17

<i>Pleuronichthys verticalis</i>	Hornyhead turbot	5	1	0	1	1	4	2	14
<i>Girella nigricans</i>	Opaleye	3	0	0	0	0	5	0	8
<i>Caulolatilus princeps</i>	Ocean whitefish	3	1	0	0	0	1	0	5
<i>Hypsoblennius jenkinsi</i>	Mussel blenny	2	0	0	0	0	2	1	5
<i>Sphyaena argentea</i>	Pacific baracuda	1	3	0	0	0	0	0	4
<i>Seriola lalandi</i>	Yellowtail amberjack	0	1	1	0	0	2	0	4
<i>Mugil cephalus</i>	Flathead grey mullet	0	0	1	0	1	0	1	3
<i>Lycodes pacificus</i>	Blackbelly eelpout	0	0	0	2	0	0	0	2
<i>Ophidion scrippsae</i>	Basketweave cusk eel	0	0	0	0	1	1	0	2
<i>Scorpaena guttata</i>	California scorpion fish	0	0	0	2	0	0	0	2
<i>Fodiator acutus</i>	Sharpchin flyingfish	0	0	0	0	0	2	0	2
<i>Etrumeus acuminatus</i>	Round herring	0	0	0	0	0	2	0	2
<i>Citharichthys gordae</i>	Mimic sanddab	1	0	0	0	0	0	0	1
<i>Stereolepis gigas</i>	Giant sea bass	1	0	0	0	0	0	0	1
<i>Strongylura exilis</i>	California needlefish	0	0	0	0	0	1	0	1
TOTAL		9650	3736	655	1293	2665	4216	2363	24578

Table S4. Scripps Pier Species Frequency 2013 – 2019. A list of all 46 species identified in the samples from Scripps Pier from 2013 – 2019 and the proportion of samples they were present in within each year. The sampling effort by year is as follows: The sampling effort by year is as follows: 2013 = 161, 2014 = 84, 2015 = 51, 2016 = 52, 2017 = 48, 2018 = 75, 2019 = 65

<i>Scientific Name</i>	<i>Common Name</i>	2013	2014	2015	2016	2017	2018	2019
<i>Citharichthys stigmaeus</i>	Speckled sanddab	0.919	0.762	0.490	0.788	0.979	0.880	0.908
<i>Oxyjulis californica</i>	Senorita	0.553	0.500	0.451	0.385	0.479	0.387	0.292
<i>Sardinops sagax</i>	Pacific sardine	0.112	0.143	0.059	0.019	0.125	0.293	0.062
<i>Xenistius californiensis</i>	Californian salem	0.149	0.202	0.098	0.058	0.146	0.413	0.138
<i>Engraulis mordax</i>	Anchovy	0.174	0.155	0.020	0.058	0.271	0.293	0.169

<i>Halichoeres semicinctus</i>	Rock wrasse	0.261	0.238	0.118	0.115	0.312	0.480	0.338
<i>Menticirrhus undulatus</i>	California corbina	0.217	0.214	0.078	0.135	0.208	0.360	0.185
<i>Roncador stearnsii</i>	Spotfin croaker	0.205	0.107	0.078	0.115	0.250	0.307	0.200
<i>Citharichthys sordidus</i>	Pacific sanddab	0.497	0.238	0.059	0.077	0.271	0.227	0.277
<i>Citharichthys xanthostigma/sordidus</i>	Pacific/Longfin sanddab	0.547	0.226	0.000	0.000	0.104	0.120	0.215
<i>Paralichthys californicus</i>	California halibut	0.342	0.429	0.078	0.096	0.396	0.400	0.538
<i>Seriphus politus</i>	Queenfish	0.130	0.143	0.020	0.058	0.271	0.253	0.200
<i>Paralabrax clathratus</i>	Kelp bass	0.124	0.202	0.059	0.058	0.062	0.120	0.092
<i>Semicossyphus pulcher</i>	Sheephead	0.168	0.143	0.098	0.115	0.188	0.147	0.092
<i>Trachurus symmetricus</i>	Pacific jack mackerel	0.106	0.036	0.000	0.000	0.062	0.000	0.000
<i>Genyonemus lineatus</i>	White croaker	0.056	0.060	0.000	0.077	0.167	0.120	0.031
<i>Umbrina roncadore</i>	Yellowfin croaker	0.025	0.012	0.059	0.038	0.083	0.213	0.046
<i>Hypsopsetta guttulata</i>	Diamond turbot	0.217	0.131	0.078	0.096	0.042	0.093	0.092
<i>Scomber japonicus</i>	Chub mackerel	0.056	0.048	0.039	0.058	0.125	0.107	0.015
<i>Citharichthys xanthostigma</i>	Longfin sanddab	0.174	0.060	0.000	0.038	0.062	0.067	0.246
<i>Anisotremus davidsonii</i>	Xantic sargo	0.019	0.071	0.020	0.019	0.042	0.200	0.000
<i>Symphurus atricaudus</i>	California tonguefish	0.031	0.048	0.059	0.038	0.125	0.133	0.077
<i>Cheilotrema saturnum</i>	Black croaker	0.087	0.095	0.039	0.019	0.021	0.000	0.015
<i>Cynoscion parvipinnis</i>	Shortfin weakfish	0.062	0.024	0.020	0.019	0.021	0.027	0.031
<i>Paralabrax nebulifer</i>	Barred sand bass	0.043	0.048	0.020	0.000	0.083	0.053	0.031
<i>Pepnilus simillimus</i>	Pacific pompano	0.068	0.048	0.000	0.000	0.000	0.013	0.000
<i>Xystreureys liolepis</i>	Fantail sole	0.006	0.024	0.000	0.019	0.062	0.040	0.046
<i>Pleuronichthys coenosus</i>	C.O. sole	0.019	0.000	0.000	0.019	0.021	0.160	0.046
<i>Chilara taylori</i>	Spotted cusk eel	0.062	0.048	0.000	0.019	0.042	0.013	0.000
<i>Paralabrax maculatofasciatus</i>	Spotted sand bass	0.012	0.000	0.000	0.000	0.083	0.080	0.046
<i>Hermosilla azurea</i>	Zebra perch sea chub	0.006	0.000	0.000	0.019	0.042	0.120	0.031
<i>Atractoscion nobilis</i>	White seabass	0.006	0.083	0.000	0.000	0.000	0.000	0.000
<i>Pleuronichthys verticalis</i>	Hornyhead turbot	0.025	0.012	0.000	0.019	0.021	0.053	0.031
<i>Girella nigricans</i>	Opaleye	0.012	0.000	0.000	0.000	0.000	0.067	0.000

<i>Caulolatilus princeps</i>	Ocean whitefish	0.012	0.012	0.000	0.000	0.000	0.013	0.000
<i>Hypsoblennius jenkinsi</i>	Mussel blenny	0.012	0.000	0.000	0.000	0.000	0.027	0.015
<i>Sphyræna argentea</i>	Pacific baracuda	0.006	0.024	0.000	0.000	0.000	0.000	0.000
<i>Seriola lalandi</i>	Yellowtail amberjack	0.000	0.012	0.020	0.000	0.000	0.027	0.000
<i>Mugil cephalus</i>	Flathead grey mullet	0.000	0.000	0.020	0.000	0.021	0.000	0.015
<i>Lycodes pacificus</i>	Blackbelly eelpout	0.000	0.000	0.000	0.019	0.000	0.000	0.000
<i>Ophidion scrippsae</i>	Basketweave cusk eel	0.000	0.000	0.000	0.000	0.021	0.013	0.000
<i>Scorpaena guttata</i>	California scorpion fish	0.000	0.000	0.000	0.019	0.000	0.000	0.000
<i>Fodiator acutus</i>	Sharpchin flyingfish	0.000	0.000	0.000	0.000	0.000	0.027	0.000
<i>Etrumeus acuminatus</i>	Round herring	0.000	0.000	0.000	0.000	0.000	0.013	0.000
<i>Citharichthys gordae</i>	Mimic sanddab	0.006	0.000	0.000	0.000	0.000	0.000	0.000
<i>Stereolepis gigas</i>	Giant sea bass	0.006	0.000	0.000	0.000	0.000	0.000	0.000
<i>Strongylura exilis</i>	California needlefish	0.000	0.000	0.000	0.000	0.000	0.013	0.000