

FISH COMMISSION OF OREGON
GROUNDFISH AND SHRIMP INVESTIGATIONS

Report of Cruise 74-9, Resource Survey

Vessel: R/V Commando, chartered research vessel

Dates: September 3 - October 4, 1974

Objectives: The purpose of the survey was to provide data for biomass estimates of flatfish and age data for forecasting year-class strength of important commercial flatfish. The survey had two objectives: (1) complete the last of four annual surveys planned for assessing fish stocks on the continental shelf off Oregon and (2) survey the continental slope between 110 and about 300 fathoms northward from Cape Blanco to Heceta Bank and from the northern edge of Heceta Bank to the Columbia River.

Methods: The shelf survey started 23 miles south of Newport and extended to 5 miles south of Cape Blanco. The slope survey extended northward from Cape Blanco to Heceta Bank and then from the northern edge of Heceta Bank to Cape Foulweather. Tows on the continental shelf were made on stations occupied in 1972. Tows outside 110 fathoms were added along existing track lines at 5-mile intervals. Shelf tows were 1.0 miles in length, made towing south. Slope tows were 1.5-miles long and made to the north except tows 70-74 and 79 which were made to the south. Gear used was two 400-mesh eastern otter trawls constructed entirely of 3.5-inch mesh. Footrope-headrope measurements were 77 and 60 feet, respectively. Sweeplines were a 5-fathom dandy line and a 10 fathom bridle.

The shelf survey trawl had a chain-rubber disc footrope, 4.5 inches in diameter, and thirteen 8-inch floats attached to the headrope. A 70-foot, 5/16-inch tickler chain was attached to each wingtip. This trawl was used on tows 1-62. The slope survey trawl had a roller-gear footrope consisting of two 16-inch rollers and two 16-inch bobbins in the center section and six 14-inch bobbins on each wing. There were twenty 8-inch and two 10-inch floats on the headrope. An 18-inch chain extension was attached to the bottom leg of each bridle. This trawl was used on tows 63-74. To obtain estimates of comparative catch rates between the two trawls, 12 calibration tows were made, 6 with each trawl (tows 57-68). The "V" type otter boards measured 5x7-feet and weighed 1,050 pounds each.

Results: A total of 94 tows were made, 56 on the shelf and 38 on the slope. Twelve of the slope tows were for trawl calibration (57-68). All shelf stations were occupied. Tows were made at all slope stations between Cape Blanco and Heceta Bank. Only a few deep tows were made north of Heceta Bank due to rough weather and charter time running out. Snags were encountered on 4 shelf tows and 1 slope tow. Catch rate by species and tow location are shown in Table 1. For convenience in the format of Table 1, infrequently caught species are listed in the miscellaneous category. Table 2 lists the common and scientific names of fishes caught. There were about 5,200 fish sampled for age, size and sex composition (Table 3).

Prior to departure from Puget Sound, the opening of the trawl rigged with roller-gear was measured by divers in 8-10 fathoms. The horizontal opening was 30 feet while the vertical opening was 15-20 feet.

Other work performed was the fulfilling of various requests for specimens.

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October 21, 1974

Table 1. Station Location and Catch of Principle Species by Haul,
Groundfish Survey, Cruise 74-9, September 3 to October 4,
1974.

Haul Numbers	1	2	3	4	5	6
Date	9/7	9/7	9/7	9/7	9/7	9/7
Loran, 1LO						
Start	2086	2075	2054	2051	1986	1992
End	2056	2062	2042	2038	1974	1978
Depth	30-29	45-46	55	57	61-63	54-56
Catch:						
Spiny dogfish				9	2	10
Skate	9	88	32	26	30	13
Ratfish	88	34	13	3		10
Pacific hake		160	53		992	2,279
Flatfish						
Pacific sanddab	103	371	30	75	9	23
Arrowtooth flounder		3	1		18	
Slender sole		2		T	8	1
Petrale sole	8	18	5	7	8	3
English sole	121	101	32	55		11
Dover sole	3	51	249	32	114	133
Rex sole	11	87	6	20	21	30
Other flatfish	5			2	3	
Rockfish						
Shortspine thornyhead						
Pacific ocean perch						
Greenstriped rockfish			5	26		
Yellowtail rockfish						
Canary rockfish						
Blackmouth rockfish						
Splitnose rockfish						
Other rockfish						
Sablefish		7	19	19	125	8
Lingcod	19		3	7		1
Miscellaneous ^{1/}	T	11		T	T	1
Totals	367	933	448	281	1,330	2,523

^{1/} See Table 2 for species listed in this category.

* Snag

T = Trace = <1 pound

Table 1. Continued

Haul Numbers	7	8	9	10	11	12
Date	9/8	9/8	9/8	9/8	9/8	9/8
Loran, 1L0						
Start	1982	2009	1940	1940	1938	1932
End	1970	1996	1928	1927	1925	1919
Depth	45	29	26-27	45	60-62	66-69
Catch:						
Spiny dogfish	6			5	14	
Skate	31	3	38	23	40	98
Ratfish	11	66		11	4	20
Pacific hake	32			219	985	8
Flatfish						
Pacific sanddab	569	72	231	567	21	T
Arrowtooth flounder				4	7	2
Slender sole	1			4	4	11
Petrale sole	20	26	9	34	12	43
English sole	62	401	93	106	4	
Dover sole	75	6	14	37	247	545
Rex sole	96	119	125	51	19	44
Other flatfish		4	7		1	5
Rockfish						
Shortspine thornyhead						
Pacific ocean perch						
Greenstriped rockfish					9	3
Yellowtail rockfish						
Canary rockfish						
Blackmouth rockfish						T
Splitnose rockfish						
Other rockfish						
Sablefish				2	12	144
Lingcod		16	1	2		
Miscellaneous	14	2	3	3		
Totals	917	715	521	1,068	1,379	923

Table 1. Continued

Haul Numbers	13	14	15*	16*	17	18
Date	9/8	9/8	9/9	9/9	9/9	9/10
Loran, 1LO						
Start	1928	1868	1792	1817	1807	1874
End	1916	1855	1779	1808	1795	1861
Depth	68	82-86	107-132	88	112-114	22-21
Catch:						
Spiny dogfish	2					
Skate	75	30	26		46	92
Ratfish	6	13	70		5	
Pacific hake	236	34			8	2
Flatfish						
Pacific sanddab	1					63
Arrowtooth flounder	14	6	6		4	
Slender sole	2	19			6	
Petrale sole	15	3	7			9
English sole						199
Dover sole	314	95	64		93	2
Rex sole	31	19	6		26	15
Other flatfish	2	3	T			9
Rockfish				500		
Shortspine thornyhead		44	18		18	
Pacific ocean perch			216		32	
Greenstriped rockfish	3		12		11	
Yellowtail rockfish						
Canary rockfish						
Blackmouth rockfish		14				
Splitnose rockfish			12		2	
Other rockfish			365		34	9
Sablefish	18		13		24	
Lingcod	4		13		5	1
Miscellaneous	T		T		7	4
Totals	723	280	828	500	321	405

Table 1. Continued

Haul Numbers	19	20	21	22	23	24
Date	9/10	9/10	9/10	9/10	9/10	9/10
Loran, 1L0						
Start	1880	1887	1864	1796	1811	1813
End	1868	1864	1851	1783	1798	1800
Depth	46	64	76	70	63-62	45-46
Catch:						
Spiny dogfish	7	32		6	356	
Skate	82	42	92	1	4	8
Ratfish	2	20	5	24	9	
Pacific hake		994	215	80	1,521	236
Flatfish						
Pacific sanddab	31	17	1	1	17	81
Arrowtooth flounder	10	5	9	10	8	5
Slender sole		1	1		1	1
Petrale sole	16		6			11
English sole	22	1		1	2	36
Dover sole	21	118	105	56	96	37
Rex sole	32	4	8	4	4	77
Other flatfish			15		2	
Rockfish						
Shortspine thornyhead						
Pacific ocean perch						
Greenstriped rockfish		15	17	33	4	
Yellowtail rockfish					4	
Canary rockfish						
Blackmouth rockfish			1			
Splitnose rockfish						
Other rockfish						
Sablefish			50	12	50	2
Lingcod	7		11	9	23	10
Miscellaneous	1			3		1
Totals	231	1,249	536	240	2,101	505

Table 1. Continued

Haul Numbers	25	26	27	28	29	30
Date	9/10	9/11	9/11	9/11	9/11	9/11
Loran, 1L0						
Start	1750	1695	1630	1570	1502	1440
End	1737	1682	1618	1557	1488	1427
Depth	36	29-26	22	55-54	52-47	13-11
Catch:						
Spiny dogfish			4		12	
Skate	90	68	168	70	72	68
Ratfish				2		
Pacific hake	70	61		1,650	1,047	
Flatfish						
Pacific sanddab	89	28	8	37	27	
Arrowtooth flounder				6	7	
Slender sole	1			1	T	
Petrale sole	9	32	4		2	
English sole	48	146	171	6	11	
Dover sole	61	1	1	77	75	
Rex sole	258	80	3	32	16	
Other flatfish		55	164		1	58
Rockfish						
Shortspine thornyhead						
Pacific ocean perch						
Greenstriped rockfish						
Yellowtail rockfish					7	
Canary rockfish						
Blackmouth rockfish						
Splitnose rockfish						
Other rockfish	20	15	80			
Sablefish				3	5	
Lingcod	2	8	12	17		
Miscellaneous	T	8	24	1	2	
Totals	648	502	639	1,902	1,284	132

Table 1. Continued

Haul Numbers	31	32	33	34	35	36
Date	9/13	9/13	9/13	9/13	9/13	9/13
Loran, 1LO						
Start	1635	1699	1759	1746	1738	1686
End	1622	1686	1746	1733	1725	1674
Depth	63	62-63	64-63	72-73	107-104	70
Catch:						
Spiny dogfish	54	42	86			11
Skate	16	36	72	42	17	80
Ratfish	22	21	60	17	12	
Pacific hake	59	146	160	82	40	17
Flatfish						
Pacific sanddab	30	7	29	T		1
Arrowtooth flounder	25	7	13	13	13	14
Slender sole	4	1	3	1	T	2
Petrale sole			3	2		2
English sole	2	1	1	1		
Dover sole	54	89	60	110	304	95
Rex sole	12	3	22	16	21	25
Other flatfish	1		2			
Rockfish						
Shortspine thornyhead					13	
Pacific ocean perch					14	
Greenstriped rockfish	10	36	13	34	3	3
Yellowtail rockfish				3		
Canary rockfish				9		4
Blackmouth rockfish				2	5	
Splitnose rockfish					1	
Other rockfish						3
Sablefish	8	7	7	20		
Lingcod	7	10	58		92	
Miscellaneous		2				
Totals	304	408	589	352	535	257

Table 1. Continued

Haul Numbers	37	38	39	40	41	42
Date	9/14	9/14	9/14	9/14	9/14	9/15
Loran, 1LO						
Start	1620	1574	1500	1489	1433	1446
End	1607	1561	1487	1477	1421	1433
Depth	69-70	74	67-66	88-86	78-76	58-56
Catch:						
Spiny dogfish	9	44	40	5		14
Skate	12	60	22	36	41	47
Ratfish	26	38	24		23	67
Pacific hake	23	6	6	169		827
Flatfish						
Pacific sanddab	27	2	28			45
Arrowtooth flounder	20	15	25	54		1
Slender sole	2	3	4	2		1
Petrale sole		3	2	3	38	5
English sole	5	2	17		4	24
Dover sole	98	99	72	55	102	44
Rex sole	7	11	12	5	7	14
Other flatfish						
Rockfish						
Shortspine thornyhead					7	
Pacific ocean perch				1	176	
Greenstriped rockfish	52	30	22			
Yellowtail rockfish						136
Canary rockfish					5,800	
Blackmouth rockfish	T		T			
Splitnose rockfish						
Other rockfish			7	72	178	
Sablefish	20	6	9	14	8	32
Lingcod	12	11		26	220	
Miscellaneous				T	T	T
Totals	313	330	290	449	6,733	1,121

Table 1. Continued

Haul Numbers	43	44	45	46*	47	48
Date	9/15	9/15	9/15	9/15	9/15	9/15
Loran, 1L0						
Start	1379	1374	1370	1315	1195	1146
End	1367	1361	1357	1309	1183	1135
Depth	19	60	88-83	93-91	104-100	88-86
Catch:						
Spiny dogfish		60	2		6	2
Skate	20	34	70	1	58	39
Ratfish	482	70	3	14	22	15
Pacific hake		722	6			
Flatfish						
Pacific sanddab	3	10	1			1
Arrowtooth flounder		3	14		12	37
Slender sole		1	6	1	T	
Petrale sole	5	36				4
English sole	147	87	3			26
Dover sole	2	35	109	47	106	49
Rex sole		5	11	9	1	9
Other flatfish	42					
Rockfish						
Shortspine thornyhead						
Pacific ocean perch						8
Greenstriped rockfish			10	78	30	31
Yellowtail rockfish			16			5
Canary rockfish	38		142	26		
Blackmouth rockfish			T			
Splitnose rockfish						
Other rockfish			3	81	36	170
Sablefish		40	70		4	12
Lingcod	5		11	22	48	1
Miscellaneous			8		T	T
Totals	706	1,191	485	279	331	401

Table 1. Continued

Haul Numbers	49	50	51	52	53	54
Date	9/15	9/16	9/19	9/19	9/19	9/19
Loran, 1LO						
Start	1082	2/	1077	1084	1134	1144
End	1075		1065	1071	1122	1130
Depth	116-120	23-24	46-45	21-17	44-41	69-66
Catch:						
Spiny dogfish						4
Skate	28	78	24	32	54	46
Ratfish	2	420	122	202	28	18
Pacific hake	42					4
Flatfish						
Pacific sanddab		2	1		4	1
Arrowtooth flounder	4		T			33
Slender sole			T			3
Petrale sole		14	5	2	16	4
English sole		63	56	7	90	1
Dover sole	48		87		34	68
Rex sole	17	3	15		20	11
Other flatfish		21		19		
Rockfish						
Shortspine thornyhead	11					
Pacific ocean perch	17					
Greenstriped rockfish	T					2
Yellowtail rockfish			32			6
Canary rockfish			8			4
Blackmouth rockfish	3					2
Splitnose rockfish	4					
Other rockfish	6		9			
Sablefish	44		8		2	56
Lingcod			18	11	16	14
Miscellaneous		T		T	T	
Totals	226	601	385	273	264	277

2/ 42° 44.5' N, 124° 33.3' W

Table 1. Continued

Haul Numbers	55*	56	57	58	59	60
Date	9/19	9/19	9/21	9/21	9/21	9/21
Loran, 1L0						
Start	1195	1316	1409	1434	1457	1480
End	1183	1304	1428	1451	1473	1498
Depth	35-34	20	141-140	138-137	140	140-141
Catch:						
Spiny dogfish				7	3	
Skate		64	114	102	182	116
Ratfish	30	210	55	38	4	
Pacific hake					2	
Flatfish						
Pacific sanddab						
Arrowtooth flounder			27	41	13	45
Slender sole			6	6		21
Petrale sole		13	4	21	13	11
English sole		5				
Dover sole			319	439	310	266
Rex sole			102	95	94	114
Other flatfish		18				
Rockfish	21					
Shortspine thornyhead			38	37	43	88
Pacific ocean perch			128	40	23	15
Greenstriped rockfish			T	3		
Yellowtail rockfish						
Canary rockfish						
Blackmouth rockfish			17	15	12	18
Splitnose rockfish			261	140	62	36
Other rockfish			9	24	7	9
Sablefish			54	174	542	488
Lingcod			T	T	T	19
Miscellaneous						
Totals	51	310	1,134	1,182	1,310	1,246

Table 1. Continued

Haul Numbers	61	62	63	64	65	66
Date	9/21	9/21	9/22	9/22	9/22	9/22
Loran, 1L0						
Start	1505	1542	1408	1439	1469	1497
End	1523	1550	1426	1457	1487	1513
Depth	137-136	139-141	131-135	141-140	141-140	138
Catch:						
Spiny dogfish						
Skate	246	71		9	1	
Ratfish			7	7		
Pacific hake	4		2	2	4	25
Flatfish						
Pacific sanddab						
Arrowtooth flounder	58	35	12	30	13	32
Slender sole	8	5	2	1	2	1
Petrale sole	6	16	2	9		
English sole						
Dover sole	322	148	130	110	68	46
Rex sole	88	36	37	78	56	24
Other flatfish						
Rockfish						
Shortspine thornyhead	84	56	25	19	14	21
Pacific ocean perch	28	12	24	30	13	8
Greenstriped rockfish						
Yellowtail rockfish						
Canary rockfish						
Blackmouth rockfish	31	9	5	6	3	1
Splitnose rockfish	22	7	164	90	21	13
Other rockfish	4	2	8	7	3	6
Sablefish	756	433	127	1,328	864	323
Lingcod			9			
Miscellaneous	T				T	
Totals	1,657	830	554	1,726	1,062	500

Table 1. Continued

Haul Numbers	67	68	69	70	71	72
Date	9/22	9/22	9/22	9/23	9/23	9/23
Loran, 1L0						
Start	1525	1541	1553	1359	1310	1320
End	1543	1559	1535	1341	1292	1302
Depth	135-139	133-126	252-264	268-262	210-200	236-248
Catch:						
Spiny dogfish	2					
Skate	56	9	9			
Ratfish						
Pacific hake		4	21	30	471	217
Flatfish						
Pacific sanddab						
Arrowtooth flounder	20	25			8	
Slender sole	T	T				
Petrale sole		2			4	
English sole						
Dover sole	58	50	67	76	224	57
Rex sole	20	8	39	15	64	15
Other flatfish						
Rockfish						
Shortspine thornyhead	22	13	49	14	82	2
Pacific ocean perch	6	12				
Greenstriped rockfish						
Yellowtail rockfish						
Canary rockfish						
Blackmouth rockfish	30				2	
Splitnose rockfish	23	38			6	
Other rockfish	3	2	5	4	14	5
Sablefish	264	52	266	308	160	76
Lingcod						
Miscellaneous						2
Totals	504	215	456	447	1,035	374

Table 1. Continued

Haul Numbers	73	74	75	76	77	78
Date	9/23	9/24	9/24	9/24	9/24	9/24
Loran, 1E0						
Start	1257	1272	1385	1436	1436	1474
End	1241	1254	1403	1454	1454	1495
Depth	260-246	194-182	364	334-311	296-290	250-246
Catch:						
Spiny dogfish						
Skate		4				
Ratfish						
Pacific hake	42	78			4	59
Flatfish						
Pacific sanddab						
Arrowtooth flounder	2	18				5
Slender sole						
Petrale sole		8				
English sole						
Dover sole	474	260	142	79	133	132
Rex sole	7	31	1	2	35	17
Other flatfish						
Rockfish						
Shortspine thornyhead	6	14	17	19	64	36
Pacific ocean perch		3				
Greenstriped rockfish						
Yellowtail rockfish						
Canary rockfish						
Blackmouth rockfish		3				
Splitnose rockfish						
Other rockfish	5	2				6
Sablefish	246	206	86	220	174	214
Lingcod						
Miscellaneous		3	20			1
Totals	782	630	266	320	410	470

Table 1. Continued

Haul Numbers	79	80	81	82	83	84
Date	9/25	9/25	9/25	9/25	9/25	9/25
Loran, 1LO						
Start	1484	1552	1612	1606	1608	1671
End	1483	1570	1630	1624	1626	1689
Depth	312-314	356-361	380-372	252-250	149-148	127-122
Catch:						
Spiny dogfish						
Skate			7	2		
Ratfish						16
Pacific hake				82	6	101
Flatfish						
Pacific sanddab						
Arrowtooth flounder				13	26	11
Slender sole					T	T
Petrale sole					8	
English sole						
Dover sole	239	92	59	107	45	55
Rex sole	3	2	5	14	5	13
Other flatfish						
Rockfish						
Shortspine thornyhead	32	17	8	38	19	5
Pacific ocean perch					60	34
Greenstriped rockfish						2
Yellowtail rockfish						
Canary rockfish						
Blackmouth rockfish				3	15	122
Splitnose rockfish				2	3	6
Other rockfish	3			8	20	
Sablefish	172	196	76	196	78	42
Lingcod						
Miscellaneous	4	9	12			
Totals	453	316	167	465	285	407

Table 1. Continued

Haul Numbers	85	86	87	88	89	90
Date	9/25	9/30	9/30	9/30	10/1	10/1
Loran, 1L0						
Start	1687	1680	1745	1746	2280	2284
End	1705	1698	1763	1764	2298	2298
Depth	230-228	327-316	190-176	191-174	122-126	186-184
Catch:						
Spiny dogfish						
Skate	12	8				
Ratfish			17	14	7	10
Pacific hake	190	2	289	11	57	91
Flatfish						
Pacific sanddab						
Arrowtooth flounder			43	11	46	21
Slender sole				T		
Petrale sole			5		1	
English sole			43			
Dover sole	48	40	110	32	53	123
Rex sole	18	17	18	33	4	43
Other flatfish						
Rockfish						
Shortspine thornyhead	46	27	9	17	30	24
Pacific ocean perch			2		24	2
Greenstriped rockfish					2	
Yellowtail rockfish						
Canary rockfish						
Blackmouth rockfish			12	19	102	10
Splitnose rockfish			10	9	88	38
Other rockfish	15		1		26	28
Sablefish	116	182	130	128	300	244
Lingcod						
Miscellaneous		26				
Totals	445	302	689	274	740	634

Table 1. Continued

Haul Numbers	91*	92	93	94	Total
Date		10/1	10/2	10/2	
Loran, 1L0					
Start	2341	2413	2467		
End	2359	2431	2482		
Depth	164-144	156-176	152-156		
Catch:					
Spiny dogfish					856
Skate					3,442
Ratfish					2,539
Pacific hake	262	272	65		15,584
Flatfish					
Pacific sanddab					2,664
Arrowtooth flounder	30	88	285		1,386
Slender sole	T				151
Petrale sole					573
English sole					2,220
Dover sole	81	122	21		9,626
Rex sole	12	8	6		2,679
Other flatfish					439
Rockfish					521
Shortspine thornyhead	45	25	18		1,227
Pacific ocean perch	52	34	37		881
Greenstriped rockfish					676
Yellowtail rockfish					209
Canary rockfish					6,081
Blackmouth rockfish	574	5	10		1,051
Splitnose rockfish	12	15	5		1,090
Other rockfish	23	13	27		1,377
Sablefish	341	280	434		11,156
Lingcod	54				816
Miscellaneous					191
Totals	1,486	862	908		67,435

Table 2. List of Common and Scientific Names of Fishes Caught
on Cruise 74-9

Common Name	Scientific Name
Brown cat shark 1/	<i>Apristurus brunneus</i>
Spiny dogfish	<i>Squalus acanthias</i>
Pacific electric ray 1/	<i>Torpedo californica</i>
Big skate	<i>Raja binoculata</i>
Black skate	<i>R. kincaidi</i>
Longnose skate	<i>R. rhina</i>
Roughtail skate	<i>R. trachura</i>
ratfish	<i>Hydrolagus colliei</i>
American shad 1/	<i>Alosa sapidissima</i>
Eulachon 1/	<i>Thaleichthys pacificus</i>
Pacific viperfish 1/	<i>Chauliodus macouni</i>
Pacific flatnose 1/	<i>Antimora microlepis</i>
Pacific Hake	<i>Merluccius productus</i>
Pacific tomcod 1/	<i>Microgadus proximus</i>
Eelpouts 1/	<i>Zoarcidae</i>
Roughscale rattail 1/	<i>Coryphaenoides acrolepis</i>
Pectoral rattail 1/	<i>C. Pectoralis</i>
Jack mackerel 1/	<i>Trachurus Symmetricus</i>
Wolf-eel 1/	<i>Anarrhichthys ocellatus</i>
Giant wrymouth 1/	<i>Delolepis gigantea</i>
Rougheye rockfish	<i>Sebastes aleutianus</i>
Pacific ocean perch	<i>S. alutus</i>
Aurora rockfish	<i>S. aurora</i>
Silverygrey rockfish	<i>S. brevispinis</i>
Darkblotched rockfish	<i>S. crameri</i>
Splitnose rockfish	<i>S. diploproa</i>
Greenstriped rockfish	<i>S. elongatus</i>
Widow rockfish	<i>S. entomelas</i>
Yellowtail rockfish	<i>S. flavidus</i>
Rosethorn rockfish	<i>S. helvomaculatus</i>
Quillback rockfish	<i>S. maliger</i>
Black rockfish	<i>S. melanops</i>
Bocaccio	<i>S. paucispinis</i>
Canary	<i>S. pinniger</i>
Redstripe rockfish	<i>S. proriger</i>
Yellowmouth rockfish	<i>S. reodi</i>
Redbanded rockfish	<i>S. babcocki</i>
Stripetail rockfish	<i>S. Saxicola</i>
Sharpchin rockfish	<i>S. zacentrus</i>
Shortspine thornyhead	<i>Sebastolobus alascanus</i>
Sablefish	<i>Anoplopoma fimbria</i>
Brown irish lord 1/	<i>Hemilepidotus Spinosus</i>
Threadfinsculpin 1/	<i>Icelinus filamentosus</i>
Pacific staghorn sculpin 1/	<i>Leptocottus armatus</i>
Poachers 1/	<i>Agonidae</i>
Blacktail snailfish 1/	<i>Careproctus melanurus</i>
Pacific sanddab	<i>Citharichthys sordidus</i>
Arrowtooth flounder	<i>Atheresthes stomias</i>

Table 2. Continued

Common Name	Scientific Name
Petrale sole	<i>Eopsetta jordani</i>
Rex sole	<i>Glyptocephalus zachirus</i>
Flathead sole	<i>Hippoglossoides elassodon</i>
Butter sole	<i>Isopsetta isolepis</i>
Rock sole	<i>Lepidopsetta bilineata</i>
Slender sole	<i>Lyopsetta exilis</i>
Dover sole	<i>Microstomus pacificus</i>
English sole	<i>Parophrys retulus</i>
Starry flounder	<i>Platichthys stellatus</i>
Curlfin sole	<i>Pleyronichthys decurrens</i>
Sand sole	<i>Psettichthys melanostictus</i>

1/ Species listed in the miscellaneous category of Table 1.

Table 3. Preliminary Number of Fish Sampled, Cruise 74-9

Species	Number
Dover sole	1,710
Rex sole	1,234
Pacific sanddab	926
English sole	764
Arrowtooth flounder	335
Petrale sole	231
Total	5,200