

APPENDIX A

Haul and Catch Information

Appendix A contains listings of station data and catch data for all hauls from the 1997 West Coast upper continental slope bottom trawl survey of the International North Pacific Fisheries Commission (INPFC) U.S.-Vancouver, Columbia, Eureka, Monterey, and Conception statistical areas. Depths are reported in meters, distances fished in kilometers, and catch weights are in kilograms. Geodetic positions are displayed in the table as degrees and decimal minutes, e.g., 3552.11 corresponds to 35°52.11'N latitude. Only catches from hauls with a performance code greater than or equal to 0 were used for data analyses. Performance codes that appear in this appendix are as follows:

<u>Code</u>	<u>Explanation</u>
-5	Unsatisfactory, unspecified gear performance problem
-4	Unsatisfactory, caught unspecified object
-2	Unsatisfactory, unspecified gear damage
0	Good performance
2	Satisfactory, unspecified gear damage
6	Satisfactory, unspecified problems

Table A-1.--Station and catch data for the NOAA ship Miller Freeman during the 1997 West Coast upper continental slope bottom trawl survey.

Haul number	1	2	3	4	5	6	7	8	9	10
Start date and time	10/24 7:00	10/24 12:18	10/24 16:50	10/24 19:25	10/24 22:50	10/25 4:45	10/25 7:30	10/25 10:05	10/25 12:33	10/25 16:45
Start latitude	3552.1	3525.8	3501.7	3502.4	3500.3	3431.8	3429.5	3428.9	3428.8	3433.4
Start longitude	12228.1	12248.9	12106.0	12255.7	12244.4	12113.1	12112.0	12108.3	12108.6	12258.5
End latitude	3553.1	3526.7	3502.4	3503.7	3501.5	3432.9	3430.5	3429.9	3429.8	3434.3
End longitude	12227.5	12248.0	12105.8	12255.8	12243.7	12112.1	12111.3	12107.6	12107.9	12257.7
Bottom depth (m)	342	334	199	484	591	247	443	590	588	797
Duration (h)	0.50	0.51	0.26	0.52	0.51	0.51	0.51	0.53	0.52	0.53
Distance fished (km)	2.10	2.21	1.27	2.36	2.43	2.48	2.22	2.18	2.18	2.18
Net width (m)	14.197	16.96	16.433	17.057	16.494	16.064	16.52	16.80464286	16.80464286	16.80464286
Net measured?	Y	Y	Y	Y	Y	Y	Y	N	N	N
Performance	0	0	0	0	0	0	0	-4	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish			0.1	0.1	0.5		0.1	0.2	0.1	1.1
Brown catshark	4.5	4.3	0.5	4.3	1.9	0.1	3.3	1.4	1.1	4.5
Spiny dogfish	21.2	3.1		4.9			1.0			
Skates	1.8	32.3	0.1	66.8	6.4	12.6	13.2	9.4	7.2	2.3
Other elasmobranchs	46.6	16.2	10.1	10.1	3.5	6.7	7.7	13.6	16.1	4.2
Arrowtooth flounder										
Petrale sole		4.4		4.4						
Dover sole	1.3	4.3		148.2	293.1	2.2	51.9	11.5	7.2	385.9
Deepsea sole										
Rex sole	0.9	6.6		156.3		3.6	49.9		0.3	0.7
Other flatfish	0.2	9.4	0.4	0.2		23.2				
Sablefish	1.8	2.1		8.2	8.7	0.2	5.3	70.7	33.1	20.4
Pacific grenadier										
Giant grenadier				0.0						0.4
Other grenadiers	0.1									0.1
Pacific flatnose										6.8
Slickheads		0.1								9.2
Eelpouts	0.5	5.9	1.9	24.6	0.4	5.8	56.8	0.3	0.2	3.0
Snailfish	0.8	0.4		0.2	2.0	0.2	0.2	0.1	0.8	
Pacific hake	27.5	215.8	4.3	223.0	50.4	108.7	185.0	59.1	38.8	
Other roundfish	0.6	0.1	34.4	0.1	1.0	2.2	0.3	0.2	0.2	1.7
Shortspine thornyhead	3.5			20.9	26.5	2.6	19.0	95.1	110.2	27.7
Longspine thornyhead				25.9	72.0		21.9	73.5	72.5	181.1
Rougheye rockfish										
Pacific ocean perch										
Aurora rockfish	1.1			75.9			35.9	0.4	0.5	
Darkblotched rockfish										
Splitnose rockfish	141.1	25.7	0.2	19.7		2.2	19.1			
Greenstriped rockfish										
Other rockfish	116.6	204.8	0.1	1.9		466.3	1.3			
True tanner crab	0.8				0.5	0.1				1.1
Sea urchins	49.0	84.5	171.9	47.9	0.1	188.3	55.6	49.2	35.9	6.9
Sea stars	0.4	0.1		69.1	59.5	7.3	1.0	0.7	1.5	3.7
Other invertebrates	2.3	2.4	32.8	24.2	3.6	7.5	35.7	12.2	11.8	9.9
Total catch weight	422.6	618.0	246.5	936.9	530.1	839.8	564.2	397.5	338.8	671.8

Table A-1.--Continued.

Haul number	11	12	13	14	15	16	17	18	19	20
Start date and time	10/25 19:34	10/25 23:26	10/26 4:07	10/26 8:48	10/26 10:48	10/26 14:10	10/26 16:59	10/26 19:54	10/26 23:33	10/27 4:34
Start latitude	3432.2	3431.3	3431.0	3500.4	3458.9	3453.6	3453.1	3456.9	3459.1	3526.2
Start longitude	12253.5	12245.2	12249.4	12234.8	12233.2	12229.9	12228.0	12226.3	12223.9	12243.8
End latitude	3432.6	3432.6	3431.3	3501.5	3459.9	3454.7	3454.3	3458.2	3500.0	3527.4
End longitude	12252.0	12244.5	12247.9	12234.2	12232.6	12229.4	12227.7	12226.7	12224.6	12243.5
Bottom depth (m)	942	1127	1046	424	481	687	874	971	1254	439
Duration (h)	0.57	0.62	0.58	0.52	0.52	0.53	0.54	0.54	0.53	0.52
Distance fished (km)	2.36	2.56	2.42	2.23	2.06	2.30	2.19	2.35	2.10	2.15
Net width (m)	17.489	16.80464286	17.709	17.174	16.80464286	16.80464286	16.80464286	16.73	16.80464286	17.091
Net measured?	Y	N	Y	Y	N	N	N	Y	Y	Y
Performance	0	2	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	1.7	0.1	0.9	0.1			3.6	0.8	0.5	
Brown catshark	1.4	6.1	2.1		1.0	1.6	1.2	0.4	2.6	1.6
Spiny dogfish										1.7
Skates	17.5	29.5	2.6	6.9	4.2		6.4	10.1	8.7	35.2
Other elasmobranchs	0.5			0.3	1.9	0.8				4.1
Arrowtooth flounder										
Petrale sole										1.6
Dover sole	38.9	41.2	27.6	83.2	226.0	239.2	124.9	126.3	96.1	7.5
Deepsea sole	18.5		10.9	1.3			26.9	6.5		
Rex sole				16.2	46.3					16.8
Other flatfish				0.4						0.1
Sablefish	119.3	32.3	38.6	6.5	16.6	54.2	174.0	115.7	3.7	18.0
Pacific grenadier	7.9	271.5	37.5				8.1	11.2	97.7	
Giant grenadier	25.1	0.7	19.8			7.8	12.4	13.6	84.4	
Other grenadiers	0.1		0.1			0.0	0.1		0.1	
Pacific flatnose	0.2	4.1	3.4			0.1		0.3	21.5	
Slickheads	28.8	11.8	29.2			25.4	24.3	30.1	18.5	
Eelpouts	13.7	0.6	0.9	12.4	14.1		7.5	5.1	5.6	12.6
Snailfish	0.1	0.0	0.0			0.6	0.6	0.2	0.0	
Pacific hake				85.7	67.3	7.6	0.4			380.3
Other roundfish	0.5	2.3	2.1	0.0	0.0	0.3	1.7	3.1	5.4	0.1
Shortspine thornyhead	101.3	12.7	24.1	4.8	29.9	34.2	50.8	43.4	5.9	1.4
Longspine thornyhead	135.7	19.0	46.8	61.3	56.3	245.0	246.0	109.6	7.6	
Rougheye rockfish										
Pacific ocean perch										
Aurora rockfish				1.9	34.5	0.9				13.1
Darkblotched rockfish										
Splitnose rockfish				8.0	2.2					323.9
Greenstriped rockfish										
Other rockfish				25.9	6.4					3.0
True tanner crab	0.3	1.3	8.0			3.5	0.7	0.5	0.6	0.5
Sea urchins	0.0	0.0		64.2	61.6	61.8	0.7	0.9		16.0
Sea stars	12.5	7.1	5.4	0.9	1.8	16.9	14.9	10.5	1.9	25.4
Other invertebrates	15.7	17.0	12.9	9.2	19.7	35.0	50.6	12.9	10.7	19.2
Total catch weight	539.5	457.4	272.7	389.3	589.8	737.8	755.8	501.2	371.5	882.2

Table A-1.--Continued.

Haul number	21	22	23	24	25	26	27	28	29	30
Start date and time	10/27 6:51	10/27 9:45	10/27 13:18	10/27 16:23	10/27 21:42	10/28 2:53	10/28 6:56	10/28 11:53	10/28 14:57	10/28 17:42
Start latitude	3525.8	3525.3	3527.2	3525.9	3524.0	3550.4	3549.3	3548.4	3549.2	3552.1
Start longitude	12239.2	12229.9	12222.4	12217.3	12216.1	12206.0	12202.4	12210.3	12217.5	12222.9
End latitude	3526.9	3526.2	3527.8	3526.5	3525.0	3550.7	3549.5	3549.6	3550.4	3553.2
End longitude	12239.1	12229.6	12221.0	12215.9	12215.1	12206.1	12201.0	12210.2	12217.1	12222.7
Bottom depth (m)	562	898	1050	1135	1191	1198	1212	1071	863	658
Duration (h)	0.52	0.48	0.63	0.59	0.54	0.35	0.56	0.54	0.52	0.52
Distance fished (km)	2.14	1.83	2.33	2.35	2.26	0.81	2.14	2.11	2.24	2.07
Net width (m)	16.906	19.013	15.55	16.80464286	16.80464286	16.80464286	16.80464286	16.80464286	18.844	17.937
Net measured?	Y	Y	Y	N	N	N	N	N	Y	Y
Performance	0	0	0	0	0	-2	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.5	1.2	0.3	0.5	0.7	0.3	0.3	0.3	1.0	0.8
Brown catshark	11.8	4.0	0.3	0.9	0.7	0.7	0.7	0.7	5.2	5.8
Spiny dogfish										
Skates	17.2	6.5	1.3		9.1		0.7			8.2
Other elasmobranchs	50.8	3.2	22.4				4.5	0.0		28.5
Arrowtooth flounder										
Petrale sole										
Dover sole	78.0	18.6	1.0					4.4	92.8	36.8
Deepsea sole		7.9	13.4	1.0	5.8			2.6	6.5	
Rex sole									0.1	
Other flatfish										
Sablefish	23.2	73.1	59.9	26.2	5.1	2.7	7.8	34.2	38.9	41.9
Pacific grenadier		0.9	78.3	56.4	69.6	21.5	52.7	13.2		
Giant grenadier		0.9	43.5	23.5	20.5	3.4	13.9	21.1	3.6	1.0
Other grenadiers	0.3		0.1				0.0	0.1	0.1	
Pacific flatnose		0.4	0.5	4.9	11.1	3.3	14.4	1.5	0.2	
Slickheads		11.7	29.4	24.9	29.2	12.1	20.0	48.7	3.9	1.3
Eelpouts	0.9	3.7	7.2	0.8	0.1			0.0	4.1	0.5
Snailfish	0.3	0.2	0.0	0.0					0.1	0.9
Pacific hake	46.3	5.5	1.0	0.7				0.2	0.1	2.3
Other roundfish	0.3	2.1	3.7	3.3	3.3	1.3	2.2	4.0	2.3	0.1
Shortspine thornyhead	13.5	32.1	20.6	28.1	16.7	3.7	16.0	24.0	32.9	30.1
Longspine thornyhead	21.1	147.3	51.7	38.5	38.9	7.2	47.5	52.5	205.2	95.7
Rougheye rockfish										
Pacific ocean perch										
Aurora rockfish	2.9	0.8								
Darkblotched rockfish										
Splitnose rockfish										
Greenstriped rockfish										
Other rockfish										
True tanner crab		9.2	8.2	1.6	0.7	0.2	2.9	6.5	2.1	0.5
Sea urchins									61.1	46.5
Sea stars	13.3	1.8	89.8	56.8	25.6	14.6	15.6	183.4	83.4	52.5
Other invertebrates	8.6	15.4	13.8	12.1	14.3	6.1	41.4	35.1	4.2	4.3
Total catch weight	289.0	346.6	446.3	280.1	250.6	76.4	240.2	432.3	547.7	357.5

Table A-1.--Continued.

Haul number	31	32	33	34	35	36	37	38	39	40
Start date and time	10/28 19:59	10/28 21:53	10/29 3:15	10/29 5:10	10/29 6:58	10/29 9:36	10/29 12:17	10/29 15:27	10/29 21:02	10/30 01:31
Start latitude	3550.1	3551.4	3618.6	3618.6	3619.0	3621.1	3622.4	3623.4	3642.9	3645.0
Start longitude	12226.5	12225.9	12353.7	12353.6	12352.1	12349.0	12346.8	12346.1	12342.9	12344.1
End latitude	3551.0	3552.7	3619.3	3619.5	3620.1	3622.3	3623.6	3624.8	3643.8	3645.8
End longitude	12226.2	12225.5	12353.3	12353.2	12349.2	12349.2	12347.2	12346.4	12341.8	12343.1
Bottom depth (m)	521	530	413	425	588	817	1029	1156	1184	931
Duration (h)	0.44	0.51	0.32	0.42	0.52	0.52	0.54	0.66	0.54	0.52
Distance fished (km)	1.76	2.33	1.42	1.76	2.18	2.20	2.26	2.65	2.43	2.22
Net width (m)	15.606	13.139	15.677	15.743	16.191	17.28	15.424	15.122	16.8046286	16.87
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Performance	-5	0	-5	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.1	0.2				0.6	0.4	0.1	0.2	6.9
Brown catshark	15.8	4.5		7.6	15.5	9.3	0.0	2.5	1.2	
Spiny dogfish	1.5	0.3		4.1						
Skates	19.8	124.4		45.7	5.9		19.8	1.7	10.1	4.9
Other elasmobranchs	30.1	16.6		32.7	11.9	0.5		37.0		
Arrowtooth flounder										
Petrale sole				57.9						
Dover sole	10.6	13.4		156.6	118.8	38.7		0.7	154.5	496.9
Deepsea sole					1.3	4.2	25.2		21.0	27.9
Rex sole	1.1	2.0		126.4	0.4					
Other flatfish				0.0						
Sablefish	30.9	35.4		10.6	24.3	19.1	63.4	17.2	23.9	3.8
Pacific grenadier							48.1	139.3	117.5	72.0
Giant grenadier						2.3	9.7	52.5	76.0	1.1
Other grenadiers	1.2					0.1			0.3	
Pacific flatnose						1.9	2.5	14.6	24.7	7.8
Slickheads						13.7	17.1	23.6	21.2	3.8
Eelpouts	4.2	2.0		29.2	0.0		2.6	2.7	4.3	7.7
Snailfish	1.1	0.8		2.9	0.1	0.4	0.0		0.0	1.3
Pacific hake	14.8	25.8		120.2	22.2	0.6			0.0	0.1
Other roundfish	0.1	0.1		0.1	0.6	5.9	3.3	2.8	1.7	2.2
Shortspine thornyhead	27.8	28.0		3.4	4.3	3.0	21.3	39.9	11.6	43.2
Longspine thornyhead	7.1	14.0			12.2	118.1	60.7	43.5	23.2	193.0
Rougheye rockfish										
Pacific ocean perch										
Aurora rockfish	39.7	14.9		3.1	0.8					
Darkblotched rockfish										
Splitnose rockfish				609.6	4.5					
Greenstriped rockfish										
Other rockfish	23.4	2.0		7.4						
True tanner crab	0.4	1.1				20.8	19.4	19.3	13.3	27.5
Sea urchins	36.4	110.3		16.8	5.0	11.4				
Sea stars	44.5	183.6		2.7	0.1	8.7	15.1	13.0	16.5	3.3
Other invertebrates	86.1	29.6		22.9	3.6	25.7	19.4	19.6	19.7	38.6
Total catch weight	396.6	609.0		1,260.1	234.3	288.0	328.0	430.0	540.9	942.1

Table A-1.--Continued.

Haul number	41	42	43	44	45	46	47	48	49	50
Start date and time	10/30 3:36	10/30 5:59	10/30 11:03	10/30 17:51	10/30 20:08	10/30 23:05	10/31 4:07	10/31 8:24	10/31 11:17	10/31 21:08
Start latitude	3645.8	3645.7	3647.7	3713.8	3713.2	3713.5	3708.2	3713.4	3715.0	3805.8
Start longitude	12347.2	12345.2	12348.2	12312.2	12304.0	12456.9	12455.0	12449.5	12437.1	12437.1
End latitude	3646.5	3646.5	3648.4	3714.7	3714.2	3713.8	3709.1	3714.6	3715.8	3806.2
End longitude	12346.0	12344.3	12347.2	12311.2	12303.3	12455.5	12454.1	12448.7	12450.5	12436.6
Bottom depth (m)	658	782	464	204	433	687	788	1260	1048	212
Duration (h)	0.52	0.54	0.51	0.52	0.52	0.48	0.53	0.63	0.58	0.26
Distance fished (km)	2.19	2.14	1.99	2.21	2.13	2.05	2.17	2.49	2.11	1.14
Net width (m)	17.267	17.056	16.80464286	16.80464286	16.309	16.788	16.814	16.80464286	17.226	16.337
Net measured?	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.5		0.2			0.5	0.7		0.3	
Brown catshark	6.8	4.9	7.2			4.9	4.9		1.4	
Spiny dogfish				13.1						
Skates	3.7	2.8	5.4	21.0	43.7	5.3	0.2	11.7	6.7	27.8
Other elasmobranchs	5.1		1.4	4.5	8.2	1.4		8.1	11.2	2.2
Arrowtooth flounder										
Petrale sole	33.1	4.3	2.8	19.3	14.2					5.7
Dover sole			16.7	2.8	666.6	206.7	323.1	108.0	354.3	4.1
Deepsea sole						0.1	4.0	2.7	29.9	
Rex sole			0.2	55.8	176.4					53.3
Other flatfish				187.5	0.9					74.2
Sablefish	10.7	8.7	9.3	1.4	18.9	26.7	38.7	17.4	196.3	1.9
Pacific grenadier	0.1	1.6					3.5	145.6	215.3	
Giant grenadier	1.0	1.5				31.4	21.8	106.8	43.0	
Other grenadiers		3.0	0.0							
Pacific flatnose	0.4	1.6				0.1	1.0	52.8	13.0	
Slickheads	4.4	22.9				53.5	125.0	2.2	68.3	
Eelpouts	4.4	13.6	39.5	0.3	16.7	4.4	2.5	7.3	3.2	
Snailfish	23.8	4.2	0.0		0.4	2.0	0.1	0.3	1.7	
Pacific hake	10.7		126.6	30.1	157.3	3.8				1.6
Other roundfish	0.2	2.2	0.2	34.7		0.1	0.7	1.4	0.9	300.4
Shortspine thornyhead	5.5	3.1			4.5	27.1	13.9	38.1	72.5	
Longspine thornyhead	8.3	96.5	1.2			184.5	447.0	26.1	109.8	
Rougheye rockfish										0.7
Pacific ocean perch										
Aurora rockfish				1.3						
Darkblotched rockfish					116.5					
Splitnose rockfish					147.3					0.1
Greenstriped rockfish				9.0						2.1
Other rockfish			4.1	765.6						153.7
True tanner crab	21.2	58.5	0.0			122.9	16.7	2.1	5.6	
Sea urchins	0.3	1.0	46.6	0.1	8.5		1.3		0.0	
Sea stars	2.0		0.9	1.1	0.7	0.6	2.3	2.8	13.7	1.4
Other invertebrates	8.0	6.2	13.2	13.0	46.4	0.7	9.4	31.5	40.2	8.6
Total catch weight	150.3	236.7	277.9	1,147.5	1,440.1	676.6	1,016.9	564.9	1,187.4	637.9

Table A-1.--Continued.

Haul number	51	52	53	54	55	56	57	58	59	60
Start date and time	10/31 23:17	11/1 3:29	11/1 14:35	11/1 16:47	11/1 18:40	11/1 21:17	11/2 0:08	11/2 3:38	11/2 8:55	11/2 11:03
Start latitude	3808.1	3808.6	3832.7	3833.5	3836.2	3838.3	3841.6	3841.7	3901.6	3904.8
Start longitude	12431.0	12428.0	12417.0	12418.2	12418.2	12412.1	12407.6	12407.3	12400.2	12402.4
End latitude	3809.4	3809.4	3833.9	3834.6	3836.8	3839.3	3842.6	3842.5	3902.9	3905.9
End longitude	12431.0	12427.1	12416.6	12417.7	12417.8	12411.2	12406.7	12406.3	12400.3	12402.1
Bottom depth (m)	409	651	627	420	210	772	1084	1137	498	292
Duration (h)	0.52	0.52	0.52	0.52	0.27	0.52	0.52	0.53	0.52	0.51
Distance fished (km)	2.29	2.13	2.34	2.21	1.21	2.24	2.17	2.13	2.38	2.16
Net width (m)	16.109	17.506	17.077	16.316	16.759	16.541	16.188	16.80464286	16.909	16.053
Net measured?	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish		3.2		0.2		1.5	5.4	2.1		0.1
Brown catshark	4.8	16.4	11.9	1.4		5.3	0.2		9.6	3.3
Spiny dogfish	7.3			7.8					10.4	2.1
Skates	73.7	4.2	8.7	58.7	21.1	0.1	7.4	16.6	40.0	57.4
Other elasmobranchs	67.3	2.2		15.6	12.4				0.4	1.8
Arrowtooth flounder				0.2						
Petrale sole	6.5			1.7	6.0				2.7	2.2
Dover sole	88.4	190.0	47.6	488.3	2.7	226.1	33.9	153.5	80.5	20.6
Deepsea sole		2.1	1.7			0.4	45.6	81.7	3.6	
Rex sole	141.4			242.9	46.6				15.8	41.6
Other flatfish	18.7			41.9	45.2				0.1	24.9
Sablefish	40.8	45.0	40.6	31.3		36.7	61.9	48.9	82.8	30.9
Pacific grenadier						0.8	133.8	157.4		
Giant grenadier			1.3			4.1	25.8	18.8		
Other grenadiers						0.2			0.5	0.2
Pacific flatnose		0.2	1.5	0.4		0.6	14.9	23.2		
Slickheads		3.5	1.7			9.5	20.5	34.6		
Eelpouts	12.8	6.3	9.3	15.2	0.5	6.7	3.4	7.6	14.3	2.1
Snailfish	1.6	2.8	3.4	0.3		2.1				0.3
Pacific hake	233.2	16.3	4.5	156.2	2.1	2.3	1.7	1.6	71.0	707.9
Other roundfish		0.5	2.2	0.0	23.3	0.4	1.8	2.0	0.1	0.0
Shortspine thornyhead	25.3	24.1	10.0	19.8		10.1	22.4	95.8	20.0	0.9
Longspine thornyhead		119.1	36.4	3.8		174.9	111.8	116.4	21.7	
Rougheye rockfish										
Pacific ocean perch										
Aurora rockfish	10.9			10.8					3.7	
Darkblotched rockfish										
Splitnose rockfish	19.2			5.6						1.7
Greenstriped rockfish					14.9					15.6
Other rockfish	3.1			14.1	992.2					27.1
True tanner crab		3.7	4.8			19.8	16.0	11.8		
Sea urchins		0.0	4.2	1.3	1.3	0.0		0.0	18.6	48.3
Sea stars	0.1	2.7	5.5	2.0	2.6	6.3	10.1	14.3	8.1	20.5
Other invertebrates	66.5	9.8	20.0	28.0	23.3	15.7	154.4	255.4	19.6	6.3
Total catch weight	821.6	452.2	215.2	1,147.5	1,194.1	523.6	671.1	1,041.8	423.7	1,015.8

Table A-1.--Continued.

Haul number	71	72	73	74	75	76	77	78	79	80
Start date and time	11/3 20:08	11/3 23:12	11/4 2:21	11/4 7:09	11/4 10:56	11/4 17:15	11/4 19:20	11/4 22:20	11/5 3:17	11/5 5:32
Start latitude	3951.2	3953.7	3957.8	3958.5	3958.3	3957.3	3957.4	4002.2	4026.7	4023.7
Start longitude	12541.9	12538.4	12528.0	12537.1	12544.3	12547.3	12547.5	12535.7	12522.2	12524.2
End latitude	3952.1	3954.9	3957.3	3959.1	3959.2	3958.3	3958.5	4002.8	4025.5	4023.0
End longitude	12541.8	12537.6	12526.6	12535.7	12543.9	12546.2	12546.7	12534.3	12522.7	12525.4
Bottom depth (m)	1117	1188	1133	959	552	374	353	786	527	628
Duration (h)	0.39	0.58	0.60	0.55	0.42	0.52	0.51	0.54	0.52	0.52
Distance fished (km)	1.61	2.50	2.27	2.25	1.67	2.39	2.26	2.24	2.32	2.17
Net width (m)	16.309	16.80464286	16.80464286	16.853	17.735	17.055	17.348	18.096	16.11	17.185
Net measured?	Y	N	N	Y	Y	Y	Y	Y	Y	Y
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	3.7	0.7		0.7	0.4			1.4		0.7
Brown catshark				2.9	11.9			4.4		13.6
Spiny dogfish					8.0	138.5	24.5		26.1	
Skates	6.6	0.1	20.5	11.1	6.4	41.3	189.5		20.4	
Other elasmobranchs	2.3	1.3		0.8	0.9	12.0	30.7			3.6
Arrowtooth flounder										
Petrale sole						28.1	119.7			
Dover sole	6.3			40.0	110.5	32.1	119.5	61.0	41.1	42.4
Deepsea sole	12.1	3.8	2.2	20.5				8.2		
Rex sole					0.9	21.1	74.6		133.3	12.6
Other flatfish						3.1	10.3			
Sablefish	65.0	50.1	96.4	148.6	114.3	6.7	19.6	13.5	1.5	6.8
Pacific grenadier	49.3	104.1	63.0	132.9				3.1		15.2
Giant grenadier	6.1	36.6	4.6	4.4				0.6		2.0
Other grenadiers				0.2						
Pacific flatnose	14.2	58.8	13.1	1.8	0.8			0.7	2.3	6.8
Slickheads	50.7	5.4	31.1	68.2				10.9		2.4
Eelpouts	7.9	0.8	3.8	14.6	6.9	15.3	14.8	2.7	24.0	41.4
Snailfish		0.7		1.7	2.2	1.7	0.4		3.7	1.2
Pacific hake	0.6	0.3			45.7	148.0	535.5		385.7	93.1
Other roundfish	4.8	0.6	0.6	0.4	0.1	2.4	1.9	0.9		0.3
Shortspine thornyhead	70.4	35.1	26.3	105.7	26.7	2.2	3.2	2.7	0.2	19.5
Longspine thornyhead	111.8	84.8	76.4	216.6	25.7			253.6		2.7
Rougheye rockfish										
Pacific ocean perch										
Aurora rockfish					0.8	4.1			5.8	
Darkblotched rockfish						1.2		2.0		
Splitnose rockfish						1.6	1.1			
Greenstriped rockfish										
Other rockfish						2.6	1.0			
True tanner crab	3.5	4.2	10.9	21.2	0.0			33.0		1.5
Sea urchins					4.2	1.3	22.1		9.2	0.2
Sea stars	50.9	10.9	46.0	4.9	3.4	9.5	17.1	1.5	1.4	1.2
Other invertebrates	183.4	94.7	154.7	8.9	9.6	25.6	33.9	14.5	49.7	17.1
Total catch weight	649.7	493.0	549.6	806.0	379.4	498.4	1,219.5	414.5	718.1	276.0

Table A-1.--Continued.

Haul number	81	82	83	84	85	86	87	88	89	90
Start date and time	11/5 9:49	11/5 13:20	11/5 16:25	11/5 20:46	11/6 2:17	11/6 4:59	11/6 7:54	11/6 10:27	11/6 12:27	11/6 16:57
Start latitude	4025.7	4024.7	4028.1	4050.5	4053.2	4051.9	4051.2	4048.9	4048.2	4114.8
Start longitude	12519.7	12519.0	12523.1	12515.2	12515.5	12519.1	12522.4	12529.5	12532.9	12535.9
End latitude	4024.6	4023.7	4026.9	4051.6	4054.2	4052.5	4052.0	4049.7	4049.2	4116.0
End longitude	12520.3	12519.9	12523.6	12516.0	12514.5	12517.7	12521.3	12529.3	12533.7	12535.7
Bottom depth (m)	1014	1227	215	1208	950	766	611	446	206	229
Duration (h)	0.53	0.59	0.51	0.54	0.54	0.55	0.52	0.39	0.50	0.52
Distance fished (km)	2.11	2.31	2.26	2.32	2.23	2.36	2.26	1.56	2.21	2.31
Net width (m)	16.864	16.80464286	16.80464286	16.80464286	16.80464286	17.669	17.511	15.5	17.238	16.792
Net measured?	Y	N	N	N	N	Y	Y	Y	Y	Y
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish				0.3	0.4		0.3		0.2	
Brown catshark	3.3				1.3	6.9	2.4	2.1		
Spiny dogfish			0.1					1,374.7		7.1
Skates	5.9	4.5	61.2	24.4	0.0		10.5	20.6	5.0	38.0
Other elasmobranchs	0.8		156.1	1,071.1			1.5		2.5	0.7
Arrowtooth flounder			0.1							1.1
Petrale sole			22.2					3.1	2.8	
Dover sole	50.8	46.3	54.0	1.2	39.9	40.0	102.3	40.9	3.9	48.7
Deepsea sole	16.3	5.2		19.4	4.7	5.7	0.2			
Rex sole			46.5				39.1	26.7	45.9	7.8
Other flatfish			10.8						38.7	15.5
Sablefish	244.9	99.3		52.8	14.4	9.2	12.4	13.3		35.8
Pacific grenadier	168.1	103.0		84.8	13.4	3.0	1.7			
Giant grenadier	26.7	36.9		56.2	35.1	45.4	11.3			
Other grenadiers	0.2									
Pacific flatnose	7.5	18.3		23.9	1.8	1.6	1.8			
Slickheads	17.2	1.5		6.7	52.2	6.0	4.4			
Eelpouts	23.9	1.5		10.0	6.7	1.4	18.2	2.4	5.4	7.6
Snailfish	2.3	0.0		0.6	0.5	0.2	0.5		0.2	
Pacific hake			28.2			1.7	30.2	652.3	1,215.3	169.1
Other roundfish	1.7	0.9	16.2	6.8	0.6	0.8	0.1		5.6	2.3
Shortspine thornyhead	31.3	13.1	6.9	38.8	1.4	8.8	37.6	0.7	0.2	9.2
Longspine thornyhead	160.5	13.3		71.9	170.2	162.6	106.4	0.4		
Rougheye rockfish										
Pacific ocean perch										
Aurora rockfish								3.8		
Darkblotched rockfish			0.2					0.5	1.6	1.4
Splitnose rockfish			1.1						0.2	21.4
Greenstriped rockfish			13.9						1.5	0.1
Other rockfish			243.6						45.2	19.8
True tanner crab	18.6	5.6	0.0	8.5	29.7	121.6	82.5			
Sea urchins			24.1			0.1	0.2	233.2		48.4
Sea stars	1.3	4.4	3.8	7.3	2.3	0.6	3.6	57.7	4.4	4.1
Other invertebrates	3.8	11.7	14.4	34.6	14.5	12.3	38.1	371.5	38.8	22.6
Total catch weight	785.1	365.6	703.4	1,519.2	389.4	427.9	505.5	2,803.9	1,417.2	460.8

Table A-1.--Continued.

Haul number	91	92	93	94	95	96	97	98	99	100
Start date and time	11/6 19:07	11/6 21:40	11/7 3:15	11/7 6:22	11/7 9:45	11/9 8:19	11/9 10:18	11/9 12:56	11/9 16:05	11/9 23:05
Start latitude	4118.1	4117.5	4116.3	4116.8	4117.0	4145.7	4142.9	4144.9	4144.7	4144.5
Start longitude	12531.3	12530.2	12525.2	12516.1	12508.7	12531.0	12527.1	12524.2	12514.4	12500.1
End latitude	4119.0	4118.6	4117.1	4117.7	4117.0	4146.9	4143.9	4145.6	4144.7	4143.4
End longitude	12530.6	12529.6	12524.1	12515.0	12507.1	12531.0	12526.5	12522.9	12512.9	12659.4
Bottom depth (m)	460	588	1076	1153	1157	272	498	591	846	1043
Duration (h)	0.51	0.51	0.55	0.58	0.56	0.52	0.51	0.52	0.53	0.56
Distance fished (km)	2.05	2.20	2.23	2.37	2.29	2.34	2.19	2.21	2.11	2.28
Net width (m)	17.094	17.853	16.173	16.80464286	16.80464286	16.964	17.626	17.95	16.261	17.37
Net measured?	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.9	0.5	0.6	0.2	0.5		0.3		1.6	0.9
Brown catshark	25.1	16.3	1.5			3.2	20.1	12.9	6.2	
Spiny dogfish	149.4	1.4					18.6			
Skates	52.2	7.5	11.1	10.7	19.4	0.7	6.7	1.1		9.7
Other elasmobranchs										
Arrowtooth flounder	15.7					0.2	1.2			
Petrale sole						1.5		0.2		
Dover sole	304.2	38.4	72.6	62.1	57.7	37.5	140.3	60.0	22.7	10.6
Deepsea sole		1.6	52.9	44.1	32.4			1.7	7.5	8.3
Rex sole	4.5	44.7				146.1	108.9	0.3		
Other flatfish						53.8				
Sablefish	89.9	47.3	27.9	86.4	111.8	47.4	173.3	64.1	1.3	75.0
Pacific grenadier			13.8	28.5	41.3				0.1	57.1
Giant grenadier			44.9	28.0	217.3					15.0
Other grenadiers	0.4								0.0	
Pacific flatnose			4.4	9.6	12.8				0.0	3.6
Slickheads			14.1	8.8	1.3				0.0	9.0
Eelpouts	7.9	20.1	10.2	1.8		6.0	34.5	0.0	0.9	9.0
Snailfish	0.9	1.2	0.2				2.6	17.6	1.9	1.4
Pacific hake	355.4	85.5	3.2			208.5	811.8	43.1	0.1	0.4
Other roundfish	0.1	0.2	1.3	0.8	1.1	0.1	0.1	0.1	0.6	0.8
Shortspine thornyhead	22.3	15.2	9.1	18.3	9.8	28.6	24.1	12.6	128.3	24.5
Longspine thornyhead		60.3	166.3	182.9	99.7		5.8	76.8		199.9
Rougheye rockfish										
Pacific ocean perch										
Aurora rockfish										
Darkblotched rockfish	31.2									
Splitnose rockfish						48.5				
Greenstriped rockfish						0.5				
Other rockfish						2.1				
True tanner crab		1.7	23.2	16.9	5.1		1.1	25.4	13.8	17.6
Sea urchins	74.0	31.9	0.0			263.5	16.4	0.1	12.1	
Sea stars	71.7	12.3	4.1	27.4	21.1	0.7	16.1	3.8	4.3	9.0
Other invertebrates	93.1	32.8	9.5	122.9	84.8	66.7	56.0	32.6	11.6	22.8
Total catch weight	1,298.9	418.9	470.9	649.4	716.0	916.0	1,443.3	352.7	213.1	465.6

Table A-1.--Continued.

Haul number	101	102	103	104	105	106	107	108	109	110
Start date and time	11/10 1:59	11/10 7:45	11/11 10:38	11/11 13:45	11/11 16:30	11/11 19:00	11/11 22:32	11/12 4:34	11/12 7:14	11/12 10:18
Start latitude	4144.7	4208.7	4208.9	4212.6	4210.4	4209.8	4207.4	4239.9	4236.5	4236.7
Start longitude	12659.0	12503.0	12504.6	12507.8	12512.7	12521.0	12524.1	12516.7	12514.5	12512.5
End latitude	4143.7	4207.4	4207.7	4213.8	4211.4	4211.0	4208.6	4241.0	4237.1	4237.8
End longitude	12658.3	12502.9	12505.0	12507.7	12512.2	12521.1	12524.0	12516.2	12515.0	12513.3
Bottom depth (m)	1201	1140	1083	867	656	429	248	263	492	685
Duration (h)	0.53	0.59	0.57	0.55	0.52	0.54	0.51	0.52	0.32	0.51
Distance fished (km)	2.13	2.40	2.28	2.23	2.13	2.23	2.18	2.22	1.29	2.26
Net width (m)	16.80464286	16.80464286	16.354	14.669	15.189	15.613	16.847	17.142	16.574	17.446
Net measured?	N	N	Y	Y	Y	Y	Y	Y	Y	Y
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.2	0.5	0.8	0.4	0.2	0.3				
Brown catshark		0.7	3.5	0.2	11.3	11.5	0.8	1.2	8.9	13.9
Spiny dogfish						1,389.6	64.0	21.9	76.0	2.5
Skates	7.9	9.8	14.2	0.0	7.5	145.5	27.6	39.2	14.0	3.2
Other elasmobranchs			29.4				2.8	0.4		
Arrowtooth flounder						2.1	0.4		12.5	
Petrale sole						13.4	2.7	4.1		
Dover sole	2.3	51.7	3.9	41.3	44.4	200.0	71.0	135.0	315.0	141.4
Deepsea sole	2.3	10.2	8.6	14.0	4.7					1.5
Rex sole					1.6	6.2	81.4	88.8	90.3	
Other flatfish						35.7	24.9	42.9	6.1	
Sablefish	68.1	91.9	38.0	9.4	32.0	62.4	229.6	27.8	192.2	70.3
Pacific grenadier	57.0	59.6	67.0	1.9	2.4					6.8
Giant grenadier	57.2	16.4	21.2	7.1	3.6					14.2
Other grenadiers										
Pacific flatnose	16.3	24.5	9.9	0.2	0.5					2.6
Slickheads	0.5	8.0	10.9	2.6						6.5
Eelpouts	1.1	0.4	9.4	2.4	4.9	12.6	16.4	8.6	26.4	21.9
Snailfish		0.4	0.3	0.1	0.5	0.1	0.1	4.6	0.9	0.5
Pacific hake			0.8		6.8	3,003.1	4,054.7	309.5	2,743.3	20.3
Other roundfish	0.9	1.3	0.5	0.4	0.6		0.2	0.0		0.1
Shortspine thornyhead	23.0	33.4	33.4	0.6	8.9	15.5	27.7	4.8	4.8	3.4
Longspine thornyhead	74.4	146.8	158.0	111.9	118.5					16.1
Rougheye rockfish										
Pacific ocean perch										
Aurora rockfish						4.7			4.3	
Darkblotched rockfish						0.7		0.4		
Splitnose rockfish							96.6	19.7	0.2	
Greenstriped rockfish							5.2			
Other rockfish							233.3	7.9		
True tanner crab	5.0	62.2	52.3	43.1	17.8				37.9	53.8
Sea urchins				0.0	0.5	73.2		75.3	0.0	
Sea stars	17.0	21.1	16.1	8.0	8.1	48.4		21.7	6.3	3.8
Other invertebrates	53.0	39.5	40.2	3.8	44.6	285.1	120.2	32.2	50.8	17.1
Total catch weight	386.0	578.2	518.3	247.4	319.3	5,310.0	5,130.0	846.1	3,590.0	399.9

Table A-1.--Continued.

Haul number	111	112	113	114	115	116	117	118	119	120
Start date and time	11/12 13:54	11/12 16:36	11/12 19:27	11/12 22:16	11/13 3:44	11/13 6:22	11/13 9:31	11/13 12:22	11/13 16:07	11/13 18:26
Start latitude	4239.6	4239.9	4239.9	4240.0	4306.5	4305.6	4310.6	4306.2	4307.3	4306.1
Start longitude	12504.9	12503.2	12501.3	12501.2	12501.2	12505.2	12504.1	12506.3	12518.2	12507.6
End latitude	4238.5	4238.7	4238.7	4238.9	4305.5	4304.4	4309.3	4305.1	4306.6	4305.6
End longitude	12505.0	12503.4	12501.6	12501.5	12501.3	12504.4	12504.4	12505.9	12517.7	12507.3
Bottom depth (m)	835	1022	1124	1127	1138	559	746	464	188	347
Duration (h)	0.52	0.53	0.60	0.51	0.59	0.51	0.56	0.52	0.34	0.26
Distance fished (km)	2.15	2.20	2.29	2.13	2.04	2.19	2.45	2.14	1.42	1.03
Net width (m)	17.016	14.922	16.80464286	16.80464286	16.80464286	16.487	17.746	16.766	16.597	16.534
Net measured?	Y	Y	N	N	N	Y	Y	Y	Y	Y
Performance	0	0	-4	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.5	1.9	0.3	0.7	0.6	0.4	0.2			
Brown catshark	5.5	1.0	1.0	0.2		6.8	7.4	9.5		3.6
Spiny dogfish						39.9		999.5	49.6	298.0
Skates		14.5		0.1	10.1	8.4		30.7	33.7	13.5
Other elasmobranchs										
Arrowtooth flounder						3.4		4.8	1.5	
Petrale sole								2.3		2.7
Dover sole	73.6	95.8	1.1	0.2	1.0	166.3	16.9	1,063.5	3.2	86.7
Deepsea sole	5.8	17.8	12.2	6.4	16.3		2.6			
Rex sole						60.5		30.0	1.2	46.3
Other flatfish						0.0		1.5	4.6	2.3
Sablefish	89.8	29.3	171.2	114.1	11.4	135.7	94.7	122.9	0.9	55.7
Pacific grenadier	2.2	45.0	96.0	82.5	55.3	4.4	0.4			
Giant grenadier	64.7	34.7	54.3	77.0	160.9		83.7			
Other grenadiers	0.0									
Pacific flatnose	0.3	4.6	7.6	2.5	11.6	2.1	0.4			
Slickheads	9.9	40.8	45.4	45.3	12.0		5.1			
Eelpouts	2.7	13.6	5.4	5.2	7.0	25.5	1.3	6.9	4.7	2.9
Snailfish	0.0	0.3	0.2	0.4	0.3	0.8	0.1	0.8		
Pacific hake	1.3		0.3			1,129.7	1.1	1,714.0	1,206.5	2,444.0
Other roundfish	0.3	0.5	0.3	0.2	1.3	0.0	2.2	0.0		1.5
Shortspine thornyhead	25.1	13.3	40.7	24.6	10.9	28.6	2.2	8.9	2.2	6.1
Longspine thornyhead	234.8	141.8	207.5	163.4	111.3	20.7	130.9	0.2		
Rougheye rockfish								1.3		
Pacific ocean perch								0.6		
Aurora rockfish										0.5
Darkblotched rockfish									12.8	1.7
Splitnose rockfish								6.6	0.2	4.3
Greenstriped rockfish	0.3								0.2	
Other rockfish									9.8	
True tanner crab	168.1	34.4	15.4	15.1	89.4	39.8	336.5	2.3		
Sea urchins	0.0	0.0	0.2	0.1		0.0		0.5	0.0	
Sea stars	5.2	12.7	19.9	22.7	14.4	6.8	6.3	5.4		1.0
Other invertebrates	12.8	20.2	55.1	88.4	104.6	9.2	4.7	54.5	0.5	10.0
Total catch weight	703.2	522.1	734.0	649.2	618.7	1,689.1	696.8	4,066.7	1,368.5	2,981.2

Table A-1.--Continued.

Haul number	121	122	123	124	125	126	127	128	129	130
Start date and time	11/13 21:31	11/14 2:03	11/14 6:18	11/14 8:55	11/14 11:30	11/14 13:45	11/14 16:27	11/14 18:54	11/14 23:46	11/15 3:40
Start latitude	4307.0	4331.2	4333.9	4331.8	4334.7	4332.5	4332.0	4331.2	4356.8	4355.4
Start longitude	12500.6	12656.1	12500.2	12505.2	12509.7	12513.0	12516.5	12520.6	12658.6	12656.0
End latitude	4306.0	4329.9	4332.8	4330.7	4333.5	4331.3	4330.9	4330.1	4355.6	4354.2
End longitude	12501.8	12656.4	12500.7	12505.3	12510.1	12512.9	12516.2	12520.3	12658.3	12655.5
Bottom depth (m)	1065	1158	1033	736	636	590	513	350	852	1248
Duration (h)	0.59	0.54	0.49	0.53	0.53	0.52	0.51	0.51	0.54	0.55
Distance fished (km)	2.40	2.28	2.19	2.07	2.18	2.14	2.08	2.11	2.23	2.25
Net width (m)	17.738	16.80464286	17.438	18.26	18.268	17.244	16.889	16.691	17.396	16.80464286
Net measured?	Y	N	Y	Y	Y	Y	Y	Y	Y	N
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.6		0.4			0.1			0.2	
Brown catshark	2.4		0.3	5.0	0.7	22.5	20.6	1.2	1.7	
Spiny dogfish							17.2	108.5		
Skates	1.5	48.8	8.5		2.1	2.7	15.2	64.5		10.4
Other elasmobranchs										
Arrowtooth flounder							14.8	19.5		
Petrale sole								11.6		
Dover sole	13.3	22.4	6.6	13.6	35.2	50.6	94.4	181.7	38.9	
Deepsea sole	10.3	4.8	5.9	1.1	4.5	0.8			4.1	6.1
Rex sole					0.2	6.8	59.8	214.1		
Other flatfish						0.1	7.4	41.9		
Sablefish	6.0	40.1	32.5	57.3	97.7	56.0	96.0	82.2	110.4	35.1
Pacific grenadier	19.1	91.1	30.9	5.1	0.4	1.7			3.6	137.1
Giant grenadier	7.8	41.0	19.5	124.6	13.9				65.4	249.3
Other grenadiers	0.1									
Pacific flatnose		18.2	1.6	0.6	0.1	1.5			0.6	47.4
Slickeheads	18.7	4.3	14.9	2.4					18.0	4.3
Eelpouts	1.4	0.8	1.8	0.5		11.6	36.8	5.4	4.3	0.7
Snailfish	0.9		1.0	0.3		0.6	0.7	0.3		0.4
Pacific hake				1.4	6.4	29.7	839.5	1,050.4		
Other roundfish	0.7	0.5	2.1	1.6	0.7	0.3	0.2	0.0	0.4	1.4
Shortspine thornyhead	4.1	4.9	28.7	6.1	48.0	7.8	18.4	50.6	7.9	5.5
Longspine thornyhead	217.6	122.6	170.7	65.1	127.9	37.1	8.3		107.6	38.3
Rougheye rockfish										
Pacific ocean perch								2.6		
Aurora rockfish							0.8	1.4		
Darkblotched rockfish										
Splitnose rockfish								3.0		
Greenstriped rockfish								15.4		
Other rockfish								1.7		
True tanner crab	72.1	23.5	31.7	42.7	59.3	20.7	1.5	49.2		21.2
Sea urchins					0.0	0.5	4.1	29.6		
Sea stars	2.8	19.2	6.3	19.3	11.7	8.5	8.9	2.9	1.3	12.2
Other invertebrates	18.5	29.6	11.1	8.7	12.0	7.1	29.7	14.8	4.7	58.0
Total catch weight	404.4	471.7	374.5	355.3	420.8	266.8	1,270.4	1,903.2	418.2	627.5

Table A-1.--Continued.

Haul number	131	132	133	134	135	136	137	138	139	140
Start date and time	11/15 6:33	11/15 9:22	11/15 11:41	11/15 13:30	11/15 17:24	11/15 20:10	11/16 0:02	11/16 3:18	11/16 6:02	11/16 8:44
Start latitude	4357.9	4358.1	4404.4	4405.4	4422.2	4426.6	4426.3	4432.3	4427.1	4428.1
Start longitude	12658.1	12660.0	12503.0	12502.3	12657.7	12655.5	12653.1	12503.1	12508.6	12507.5
End latitude	4356.8	4357.2	4403.8	4404.3	4421.1	4425.4	4425.0	4431.2	4426.5	4427.0
End longitude	12657.4	12658.9	12502.9	12502.7	12658.0	12655.1	12652.9	12502.8	12509.8	12507.8
Bottom depth (m)	1083	697	344	383	793	920	1243	659	375	376
Duration (h)	0.50	0.52	0.27	0.53	0.51	0.52	0.56	0.51	0.49	0.52
Distance fished (km)	2.23	2.24	1.15	2.24	2.09	2.18	2.39	2.11	2.21	2.18
Net width (m)	16.973	17.171	17.498	16.545	17.016	17.181	16.80464286	17.53	16.619	16.498
Net measured?	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Performance	0	0	0	0	0	0	0	0	-5	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.6	0.1				0.7	0.7			
Brown catshark		2.8	0.2	2.2	1.6	2.4	0.8	3.1		20.4
Spiny dogfish			179.2	70.4						30.7
Skates		8.5	22.5	107.4		6.2	7.9			12.3
Other elasmobranchs			4.0	3.6						11.6
Arrowtooth flounder				2.4						3.1
Petrale sole			0.8	1.5						11.6
Dover sole	21.1	147.0	35.4	95.3	10.0	8.5	1.2	21.4		115.8
Deepsea sole	8.2	4.4			4.1	10.6	1.1			
Rex sole			27.0	81.1						4.5
Other flatfish			2.7	12.7						5.2
Sablefish	31.5	131.7	23.4	141.4	35.1	51.5	37.3	176.4		72.3
Pacific grenadier	58.7	1.2			0.9	4.8	85.9	12.6		
Giant grenadier	96.0	14.5			78.9	23.6	177.9	3.5		
Other grenadiers	0.3									
Pacific flatnose	4.6	3.8	0.1		0.6	1.7	40.7	3.3		
Slickheads	11.8	6.5	3.1	8.0	5.0	21.0	0.3	0.0		
Eelpouts	3.5	14.7				5.2	3.0	0.7		0.5
Snailfish			0.6	2.5		0.1	0.5	0.1		
Pacific hake	0.6	41.6	173.9	593.0	1.3			212.7		469.9
Other roundfish	2.2	0.4	0.1	0.0	1.1	1.2	1.0	0.2		0.0
Shortspine thornyhead	22.6	8.1	1.0	4.6	0.6	5.9	7.1	8.1		13.5
Longspine thornyhead	101.0	60.2			88.1	69.4	40.4	51.7		
Rougheye rockfish				3.3	2.2					
Pacific ocean perch			1.2	1.3						
Aurora rockfish										7.5
Darkblotched rockfish										1.3
Splitnose rockfish			7.7	2.0						5.2
Greenstriped rockfish				6.5						1.8
Other rockfish										0.9
True Tanner crab	24.2	27.2			37.8	32.1	29.0	7.6		
Sea urchins			0.4	6.4						0.7
Sea stars	9.1	10.8	2.8	26.4	4.7	1.6	11.7	3.1		8.4
Other invertebrates	8.2	14.4	58.2	87.0	9.2	10.5	27.5	2.8		39.3
Total catch weight	404.1	498.0	544.2	1,259.1	281.1	256.9	474.0	507.3		836.4

Table A-1.--Continued.

Haul number	141	142	143	144	145	146	147	148	149	150
Start date and time	11/16 10:48	11/16 12:31	11/16 17:01	11/16 20:01	11/17 0:22	11/17 2:33	11/17 6:20	11/17 8:51	11/17 11:23	11/17 14:24
Start latitude	4427.0	4425.9	4456.7	4456.7	4450.3	4453.7	4457.5	4455.0	4457.1	4457.9
Start longitude	12512.4	12514.2	12533.7	12529.6	12517.1	12513.1	12507.9	12501.5	12659.8	12657.0
End latitude	4425.9	4425.1	4455.7	4455.7	4449.3	4452.5	4457.2	4454.4	4456.0	4456.9
End longitude	12511.9	12513.9	12532.7	12528.8	12516.2	12512.7	12506.3	12500.0	12659.4	12656.2
Bottom depth (m)	329	193	249	375	432	255	626	788	949	1188
Duration (h)	0.52	0.34	0.52	0.51	0.51	0.51	0.51	0.52	0.52	0.55
Distance fished (km)	2.22	1.45	2.21	2.12	2.18	2.19	2.13	2.18	2.21	2.22
Net width (m)	16.465	15.905	16.534	16.678	16.878	16.438	17.596	17.773	17.044	16.80464286
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish						0.2		0.1	0.1	0.5
Brown catshark	4.9		0.8		15.0		4.2	3.0	1.5	
Spiny dogfish	498.4	2,043.0	1,180.3	1,123.2	4.5	10.5				
Skates	29.1	9.7	39.1	34.9	53.2	146.4				
Other elasmobranchs	8.2	6.7	3.9	2.0		5.0	5.3		0.5	12.8
Arrowtooth flounder		0.5	1.7	8.3	11.9	0.9				
Petrale sole		5.5	0.6		1.6	30.1				
Dover sole	2.7	1.9	0.7	6.5	83.1	12.9	0.7	10.7	1.3	0.8
Deepsea sole							1.2	2.8	2.1	
Rex sole	14.4	8.4	2.8		12.6	29.8				
Other flatfish	14.5	19.8	47.9	44.6	6.5	30.8				
Sablefish	7.8		0.7	12.6	45.7	34.9	77.3	59.3	7.8	61.5
Pacific grenadier							2.1	3.5	14.3	69.4
Giant grenadier							5.3	37.0	12.5	54.1
Other grenadiers										
Pacific flatnose							3.0	0.6	1.9	28.6
Slickheads							0.5	29.8	7.0	6.9
Eelpouts	5.4	2.4	4.8	4.9	5.5	0.3	5.4	1.4	0.1	2.2
Snailfish	0.8				0.3	0.1	0.3	0.1	0.6	0.6
Pacific hake	411.2	894.5	184.5	1,062.8	589.1	277.3	9.5	1.0	0.3	0.5
Other roundfish	0.1	7.0	0.2		0.0	0.6		0.9	5.7	1.2
Shortspine thornyhead	0.3		18.4	46.3	46.9	14.3	17.8	3.4	7.6	1.1
Longspine thornyhead					0.6		39.9	100.8	102.9	39.2
Rougheye rockfish				10.5						
Pacific ocean perch	1.7				0.6	9.5				
Aurora rockfish	0.1				5.4	0.8				
Darkblotched rockfish	0.3			1.7						
Splitnose rockfish	7.4	2.4	5.3	1.8		0.7				
Greenstriped rockfish		5.7	13.2			0.2				
Other rockfish		19.3	15.1			296.8				
True tanner crab					0.6		16.7	41.6	23.0	12.8
Sea urchins	21.7		178.5	0.1	0.0		0.0			
Sea stars	0.6		0.3	13.2	7.7	2.4	7.1	7.1	3.9	10.4
Other invertebrates	28.0	5.7	7.6	6.4	28.0	6.8	5.4	7.8	9.8	50.0
Total catch weight	1,057.6	3,032.7	1,706.3	2,379.7	919.4	911.3	201.7	310.9	202.3	352.6

Table A-1.--Continued.

Haul number	151	152	153	154	155	156	157	158	159	160
Start date and time	11/17 18:47	11/17 21:47	11/18 0:38	11/18 3:02	11/18 5:30	11/18 8:03	11/18 10:07	11/18 15:09	11/18 18:11	11/18 21:08
Start latitude	4519.2	4517.7	4520.9	4521.4	4519.4	4520.7	4522.5	4548.4	4550.2	4552.3
Start longitude	12503.5	12505.5	12508.7	12513.4	12524.0	12529.7	12535.4	12505.7	12510.0	12505.7
End latitude	4517.7	4516.6	4519.7	4520.3	4519.8	4519.9	4521.9	4547.5	4549.2	4551.5
End longitude	12503.4	12506.1	12508.9	12513.2	12522.5	12530.9	12535.7	12506.8	12511.0	12506.8
Bottom depth (m)	1115	941	830	571	415	388	296	1164	931	828
Duration (h)	0.74	0.53	0.53	0.51	0.51	0.52	0.27	0.57	0.56	0.51
Distance fished (km)	2.88	2.21	2.27	2.16	2.17	2.21	1.14	2.18	2.31	2.12
Net width (m)	16.80464286	17.575	17.951	17.265	16.42	17.082	16.825	16.80464286	14.37	16.728
Net measured?	N	Y	Y	Y	Y	Y	Y	N	Y	Y
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.6			0.1		0.3			0.5	0.3
Brown catshark	0.2	1.3	0.6	11.3	6.7	0.8			2.9	1.1
Spiny dogfish					25.2	46.5	27.7			
Skates	6.3	3.8		2.7	29.9	11.8	28.5	3.6		2.9
Other elasmobranchs							4.0			
Arrowtooth flounder					17.1	10.2	1.0			
Petrale sole							0.9			
Dover sole		0.7	15.2	61.1	46.8	19.9	1.4		8.3	17.0
Deepsea sole	2.5	7.2	1.8	0.0				2.7		6.4
Rex sole				6.3	0.8	15.5	3.9			
Other flatfish					0.7	1.9	37.1			
Sablefish	20.1	16.2	37.9	22.2	54.1	28.0	3.1	92.9	44.6	27.3
Pacific grenadier	41.7	2.2	0.4	0.2				39.4	4.3	0.8
Giant grenadier	117.5	13.0	13.5	7.4				84.1	17.8	3.6
Other grenadiers								1.5		
Pacific flatnose	7.0	0.8	0.4	4.3				8.3	1.1	0.2
Slickheads	4.6	3.6	4.6					8.7	8.0	14.2
Eelpouts	5.2	4.9	1.5	5.6	5.1	5.1	1.6	4.5	6.0	3.1
Snailfish		0.0	0.1	0.3					0.1	0.2
Pacific hake	0.3	0.2	0.6	58.6	1,531.8	899.1	411.8	9.6	4.6	0.6
Other roundfish	1.1	1.3	2.0	1.1	0.1	0.0	1.5	1.8	3.2	1.3
Shortspine thornyhead	4.8	4.9	3.0	10.2	55.1	53.4	31.3	18.5	8.4	2.1
Longspine thornyhead	202.3	153.0	86.0	9.9	0.8			65.6	140.6	146.4
Rougheye rockfish						1.8				
Pacific ocean perch					9.5	1.8	1.8			
Aurora rockfish					0.8	1.5				
Darkblotched rockfish					1.5					
Splitnose rockfish						0.5				
Greenstriped rockfish										
Other rockfish						1.1	0.5			
True Tanner crab		36.6	32.1	2.2	0.1	0.0		41.8	51.4	51.9
Sea urchins				36.6	8.9		14.0			
Sea stars	6.6	7.0	2.4	7.9	6.7	2.0	3.7	1.3	1.0	2.3
Other invertebrates	52.1	6.2	4.0	11.8	28.8	9.6	2.2	35.7	6.0	7.5
Total catch weight	503.0	262.9	206.2	259.9	1,821.7	1,119.8	591.9	420.0	313.6	289.1

Table A-1.--Continued.

Haul number	161	162	163	164	165	166	167	168	169	170
Start date and time	11/19 01:31	11/19 2:53	11/19 4:52	11/20 8:24	11/20 11:57	11/20 20:35	11/21 0:18	11/21 3:00	11/21 6:20	11/21 11:12
Start latitude	4546.8	4548.9	4547.0	4616.9	4616.7	4614.0	4615.3	4617.2	4619.0	4643.3
Start longitude	12511.2	12515.6	12519.8	12537.1	12535.5	12511.2	12508.0	12502.1	12659.9	12647.8
End latitude	4545.8	4547.8	4546.5	4616.1	4616.5	4613.9	4615.0	4616.2	4619.2	4644.5
End longitude	12511.5	12516.3	12520.0	12535.9	12533.8	12509.5	12506.4	12501.2	12658.2	12648.0
Bottom depth (m)	623	377	249	310	386	694	776	1008	1136	938
Duration (h)	0.48	0.51	0.26	0.53	0.56	0.50	0.52	0.52	0.53	0.53
Distance fished (km)	1.99	2.17	1.06	2.26	2.29	2.17	2.12	2.19	2.18	2.33
Net width (m)	15.685	16.557	15.648	16.849	16.587	17.255	17.462	18.016	16.80464286	17.084
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	1.0				0.4		0.2	0.9	0.3	0.4
Brown catshark	2.4	5.2			0.6	4.5	3.3	1.6	0.4	1.2
Spiny dogfish		130.2	659.6	23.8	10.1					
Skates	3.6	14.5	1.2	42.5	90.4	0.0		3.2	3.3	0.7
Other elasmobranchs		4.0	3.9	15.3			0.1		18.6	
Arrowtooth flounder		2.9	0.4	4.6	15.1	0.6				
Petrale sole		2.6	1.4	2.3						
Dover sole	4.3	29.8	2.5	8.7	93.4	7.5	8.8	2.5	0.7	3.6
Deepsea sole		8.6	2.6	596.6	1,138.6	4.6				
Rex sole		1.9	1.8	68.8	173.7					
Other flatfish		33.7	3.3	9.7	45.6	187.4	28.4	9.1	47.6	1.6
Sablefish	89.9					2.0	1.5	12.0	52.3	6.9
Pacific grenadier	0.7					5.2		22.6	80.5	10.6
Giant grenadier	5.6					0.1				
Other grenadiers	3.9					5.0	0.9	1.2	3.2	1.3
Pacific flatnose	0.2					0.3	9.1	8.5	0.6	3.4
Slickheads	0.8	6.7	0.5	2.6	2.6	0.6	5.6	4.3	1.0	1.9
Eelpouts	0.2	1.5			0.3	0.1	0.2			
Snailfish	175.2	1,363.5	4,051.1	1,239.4	651.3	3.8	0.4	0.2		0.7
Pacific hake	0.4		2.0	8.8	0.8	0.4	2.3	2.2	2.0	1.1
Other roundfish	7.5	34.0	1.7	4.0	17.0	5.9	0.5	3.4	1.0	6.1
Shortspine thornyhead	25.8					53.8	89.4	103.7	77.1	144.8
Longspine thornyhead	2.6									
Rougheye rockfish		1.1		6.8	1.2					
Pacific ocean perch					0.6					
Aurora rockfish		3.0								
Darkblotched rockfish		0.2		1.1						
Splitnose rockfish		0.2	57.5	0.6	1.0					
Greenstriped rockfish		1.6	0.8	16.9	1.6					
Other rockfish										
True tanner crab	27.5				1.1	44.2	30.0	18.9	16.3	17.3
Sea urchins			4.2	0.2	15.8					
Sea stars	3.3	2.2	0.3	20.8	296.8	4.5	3.6	3.4	2.7	1.4
Other invertebrates	6.0	40.6	16.4	22.6	21.5	6.2	4.6	13.1	17.7	16.3
Total catch weight	360.9	1,687.7	4,811.3	2,096.2	2,579.4	336.8	197.4	210.8	325.1	219.2

Table A-1.--Continued.

Haul number	171	172	173	174	175	176	177	178	179	180
Start date and time	11/21 14:03	11/21 17:14	11/21 20:48	11/21 23:17	11/22 11:41	11/22 3:42	11/22 5:19	11/22 11:55	11/22 13:32	11/22 16:38
Start latitude	4648.1	4648.1	4643.7	4644.9	4643.3	4642.8	4642.1	4714.4	4714.1	4710.6
Start longitude	12643.5	12643.5	12656.1	12501.2	12508.8	12512.6	12513.2	12659.4	12659.6	12502.3
End latitude	4648.7	4648.2	4642.8	4644.1	4642.6	4642.4	4641.6	4713.8	4712.9	4710.1
End longitude	12642.4	12642.7	12655.1	12502.4	12510.2	12513.0	12513.7	12659.5	12659.9	12502.8
Bottom depth (m)	1191	1195	806	660	398	199	189	475	456	267
Duration (h)	0.44	0.29	0.51	0.51	0.52	0.22	0.25	0.25	0.57	0.27
Distance fished (km)	1.81	1.18	2.21	2.13	2.22	0.89	1.07	1.15	2.35	1.13
Net width (m)	16.80464296	16.80464296	16.489	17.075	17.037	14.75	15.959	18.046	16.868	15.631
Net measured?	N	N	Y	Y	Y	Y	Y	Y	Y	Y
Performance	0	0	0	0	0	-2	0	6	-2	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.4	1.2	0.7	0.4	0.3			0.1		
Brown catshark										
Spiny dogfish	0.2		6.6	8.1	3.7			7.0	27.4	0.8
Skates	24.7	11.3		6.4	40.5		1,242.4	6.0	1.4	462.5
Other elasmobranchs					23.6		34.0	2.6	8.4	20.9
Arrowtooth flounder				1.1	59.5		16.7	0.4		39.0
Petrale sole					1.8		11.2	12.0	17.3	11.8
Dover sole			1.1	23.1	313.6		4.5	33.5	40.9	9.4
Deepsea sole			3.5	6.0				0.8	0.3	
Rex sole	2.1	2.7			69.6		20.4	7.2	16.7	12.9
Other flatfish					43.2		9.7	0.1	12.1	3.2
Sablefish	9.9	2.4	17.9	67.3	105.4		8.0	15.4	38.2	32.4
Pacific grenadier	84.6	25.7	10.9	4.4						
Giant grenadier	131.9	61.7	7.7	4.8						
Other grenadiers			0.2							
Pacific flatnose	11.0	9.3	3.0	4.2				0.3	1.1	
Slickheads			2.9	0.1						
Eelpouts	2.8		6.0	7.6	17.9		0.0	1.6	1.5	
Snailfish	0.2	0.2	0.5	0.7	2.2			0.2	0.9	
Pacific hake	0.3		0.5	0.3	763.0		1,859.7	23.1	220.2	376.1
Other roundfish	0.2	6.4	1.2	2.3	0.1		2.5	1.0	0.0	1.6
Shortspine thornyhead	2.7	5.8	1.9	35.3	52.3			12.7	32.4	11.1
Longspine thornyhead	88.7	53.6	92.5	83.3						
Rougheye rockfish					2.5				1.3	
Pacific ocean perch					2.0		0.1	0.5	8.0	8.4
Aurora rockfish								0.9	2.7	
Darkblotched rockfish					1.1		10.2			2.7
Splitnose rockfish					1.4		0.0			8.8
Greenstriped rockfish							21.2			
Other rockfish					0.7		14.9	7.5		3.1
True tanner crab	2.2	2.8	24.8	18.4	1.3					
Sea urchins			0.1		0.2		16.6	6.6	0.1	2.3
Sea stars	4.6	2.8	1.8	2.8	4.5		3.4	1.3	1.9	1.8
Other invertebrates	28.9	20.0	23.2	12.6	45.1		7.4	35.2	44.8	10.6
Total catch weight	395.3	205.9	206.9	289.1	1,555.6		3,282.8	176.1	477.6	1,019.5

Table A-1.--Continued.

Haul number	181	182	183	184	185	186	187	188	189	190
Start date and time	11/22 20:08	11/23 19:41	11/24 1:28	11/24 3:54	11/24 6:27	11/24 8:35	11/24 11:51	11/24 15:13	11/24 20:59	11/24 23:55
Start latitude	4715.9	4713.9	4735.4	4738.1	4736.7	4738.1	4735.8	4736.4	4804.4	4807.2
Start longitude	12653.6	12646.6	12646.6	12643.6	12652.0	12653.8	12633.6	12627.7	12601.5	12620.2
End latitude	4715.4	4712.7	4734.3	4737.0	4735.5	4737.8	4734.6	4735.5	4805.2	4807.8
End longitude	12655.1	12646.2	12646.0	12643.4	12652.0	12654.4	12633.0	12626.4	12600.2	12619.5
Bottom depth (m)	743	1207	649	811	484	246	948	1181	1067	207
Duration (h)	0.50	0.57	0.52	0.52	0.51	0.26	0.57	0.56	0.51	0.34
Distance fished (km)	2.08	2.21	2.16	2.19	2.19	1.07	2.26	2.24	2.22	1.47
Net width (m)	17.112	16.80464286	17.064	17.787	17.112	15.554	17.591	16.80464286	17.411	15.959
Net measured?	Y	N	Y	Y	Y	Y	Y	N	Y	Y
Performance	0	0	0	0	0	0	0	0	0	0
Gear	172	172	172	172	172	172	172	172	172	172
Hagfish	0.2			0.5	0.2		1.1		0.3	0.2
Brown catshark	4.7		0.8	1.1	3.8					
Spiny dogfish				1.0	6.4	204.5	0.5			277.5
Skates	2.4	14.1		2.9	1.2	22.2	1.3	15.4	2.4	45.9
Other elasmobranchs	0.9					21.1				17.0
Arrowtooth flounder					4.0	3.5				39.8
Petrale sole	1.6			1.1	8.0	24.8			1.1	0.6
Dover sole	3.8	1.9	3.2	5.6			3.2	1.8	9.8	5.1
Deepsea sole					0.1	1.2				
Rex sole					5.8	15.6				43.2
Other flatfish					19.2	15.6	5.7	8.3		28.7
Sablefish	62.1	3.7	39.4	61.1			7.4	16.9	33.7	4.1
Pacific grenadier	1.1	75.1	1.6	1.1			15.0	20.7	36.5	6.4
Giant grenadier	3.1	69.3	3.7	4.8						
Other grenadiers	0.0	0.0		0.1						
Pacific flatnose	0.9	17.1	3.3	0.8	2.3		0.8	1.8	0.9	
Slickheads	8.2			1.9			0.4		7.4	
Eelpouts	3.1	0.8	2.4	3.5	3.3		0.3	1.1	3.4	
Snailfish	0.2			0.6	0.6		0.2			
Pacific hake	2.0	1.3	5.9	2.1	88.8	537.0	1.7			520.7
Other roundfish	0.6	0.4	3.5	0.2	0.0	0.8	0.8	0.7	0.5	13.0
Shortspine thornyhead	6.9	16.1	6.3	1.1	15.5		6.5	7.2	12.8	3.9
Longspine thornyhead	56.5	60.6	68.2	70.7	0.6		74.1	69.8	101.9	
Rougheye rockfish						11.3				47.8
Pacific ocean perch										
Aurora rockfish										
Darkblotched rockfish										
Splitnose rockfish						4.4				1.5
Greenstriped rockfish						1.1				0.2
Other rockfish						2.0				0.6
True tanner crab							30.7	8.9	3.1	
Sea urchins					13.3	0.0				0.6
Sea stars	3.0	3.9	2.6	2.4	3.0	1.3	1.2	4.2	7.0	0.8
Other invertebrates	10.9	16.6	28.1	11.7	22.5	12.8	5.2	19.6	13.8	0.9
Total catch weight	200.9	284.0	202.8	231.4	199.1	881.5	155.9	176.5	234.8	1,075.3

