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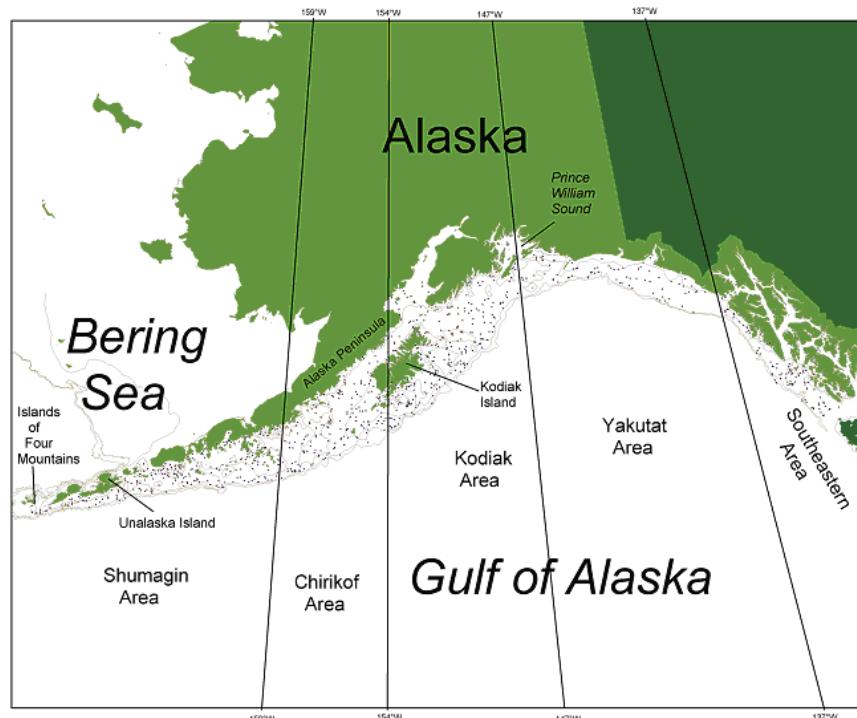
National Marine
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U.S DEPARTMENT OF COMMERCE

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Report to Industry: Fishing Log for the 2003 Gulf of Alaska Bottom Trawl Survey

October 2008



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REPORT TO INDUSTRY: FISHING LOG FOR THE 2003 GULF OF ALASKA
BOTTOM TRAWL SURVEY

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CONTENTS

INTRODUCTION	1
METHODS	1
Vessels and Gear Characteristics	2
Survey Design and Operations.....	4
RESULTS	5
ORGANIZATION OF REPORT AND DATA STANDARDIZATION.....	6
CITATIONS.....	9
Table 1. Catch Per Unit Effort of most abundant Species.....	11
Table 2. Performance codes.....	12
Section 1. Fishing Log for the FV <i>Gladiator</i>	15
Summary listings of species catches by haul	23
Section 2. Fishing Log for the FV <i>Northwest Explorer</i>	67
Summary listings of species catches by haul	75
Section 3. Fishing Log for the FV <i>Sea Storm</i>	119
Summary listings of species catches by haul	127

Section 4. Ranked Catch Per Unit Effort by Species or Species Group.....	173
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INTRODUCTION

The eighth in a series of bottom trawl surveys of the Gulf of Alaska (GOA) groundfish and invertebrate resources was completed during the summer of 2003 by the Resource Assessment and Conservation Engineering (RACE) Division, Alaska Fisheries Science Center (AFSC), National Marine Fisheries Service (NMFS). The 2003 biennial groundfish survey closely followed the design used for prior GOA surveys since 1984 (Brown (1986), Stark et al. (1988), Stark and Pashchenko (1989), Payne and Stark (1991), Payne and Martin (1994), Stark (1997), Stark and Raring (2000), and Raring (2008)) designed to describe and monitor the distribution, abundance and biological condition of important groundfish stocks.

The Gulf of Alaska forms the northeastern border of the Pacific Ocean and is comprised of complex bathymetric features ranging from jagged, mountainous pinnacles to muddy gullies. The features provide a wide variety of habitats resulting in a complex ecosystem and has been an important fishing grounds for a variety of groundfish species including Pacific ocean perch (*Sebastes alutus*), walleye pollock (*Theragra chalcogramma*), Pacific cod (*Gadus macrocephalus*), Pacific halibut (*Hippoglossus stenolepis*), sablefish (*Anoplopoma fimbria*), rockfishes (*Sebastes* spp.), arrowtooth flounder (*Atheresthes stomias*), lingcod (*Ophiodon elongatus*), Pacific herring (*Clupea pallasi*) and several invertebrate groups including crabs, scallops, and squid. The area surveyed included the entire Gulf of Alaska continental shelf out to a depth of 700 m. The entire area surveyed was approximately 308,416 km².

METHODS

The survey was conducted in four legs totaling 75 days aboard each of the three chartered commercial trawlers, the FV *Gladiator*, the FV *Northwest Explorer* and FV *Sea Storm*. The entire survey ran from 20 May to 9 August 2003 with the FV *Sea Storm* starting and ending a full week later than the other two vessels. Sampling began in the area of the Islands of Four Mountains (170° W long.) and continued eastward across the Gulf of Alaska to Dixon Entrance (133° 25' W long.) (Fig. 1).

VESSELS AND GEAR CHARACTERISTICS

All three chartered vessels are house-forward stern trawlers with hydraulic net reels and paired constant tension hydraulic trawl winches with 2.54 cm diameter steel cable (2.98 cm diameter for the FV *Northwest Explorer*) 1,800 m in length. All vessels have articulating hydraulic cranes for handling catches and gear. Each vessel has a single main diesel engine with a single-nozzled propeller (twin propellers on the FV *Northwest Explorer*). The FV *Gladiator* is 38 m long (LOA) with a main engine developing 1,715 continuous HP. The FV *Northwest Explorer* is 49.4 m long (LOA) with a 1,800 HP main engine. The FV *Sea Storm* is 37.5 m long (LOA) with a 1,800 HP main engine. Each vessel is equipped with a global positioning system (GPS) integrated with radar, computerized plotting and autopilot. Other essential electronics supplied by the vessels include color video fish finders, recording depth profilers, and trawl warp measuring systems. NMFS-supplied GPS-grade receivers recorded trawling position, time, and trackline position.

Standard methods as documented in Appendix 1 of “NOAA Protocols for Groundfish Bottom Trawl Surveys of the Nation’s Fishery Resources” (Stauffer 2004) were used for this survey. The rugged bathymetry prevalent in many areas requires the use of a roller gear footrope for all bottom trawling operations. The standard Poly-Nor’Eastern trawl with roller gear was used exclusively by all three vessels to sample the 807 assigned survey stations. Each trawl was measured and certified as conforming to standard measurements prior to use. The headrope is made of galvanized wire rope and is 27.2 m long with twenty-one 30-cm diameter plastic floats. The footrope is constructed of the same material and is 24.2 m long with sixteen 35.6-cm diameter rubber wing bobbins. The net was spread with 1.8×2.7 m steel V-doors weighing approximately 800 kg each. Detailed net specifications are documented by Stauffer (2004). A SCANMAR net mensuration system measured net width (wingtip-to-wingtip) and headrope height in near real time. After the haul was completed, data from a footrope-mounted

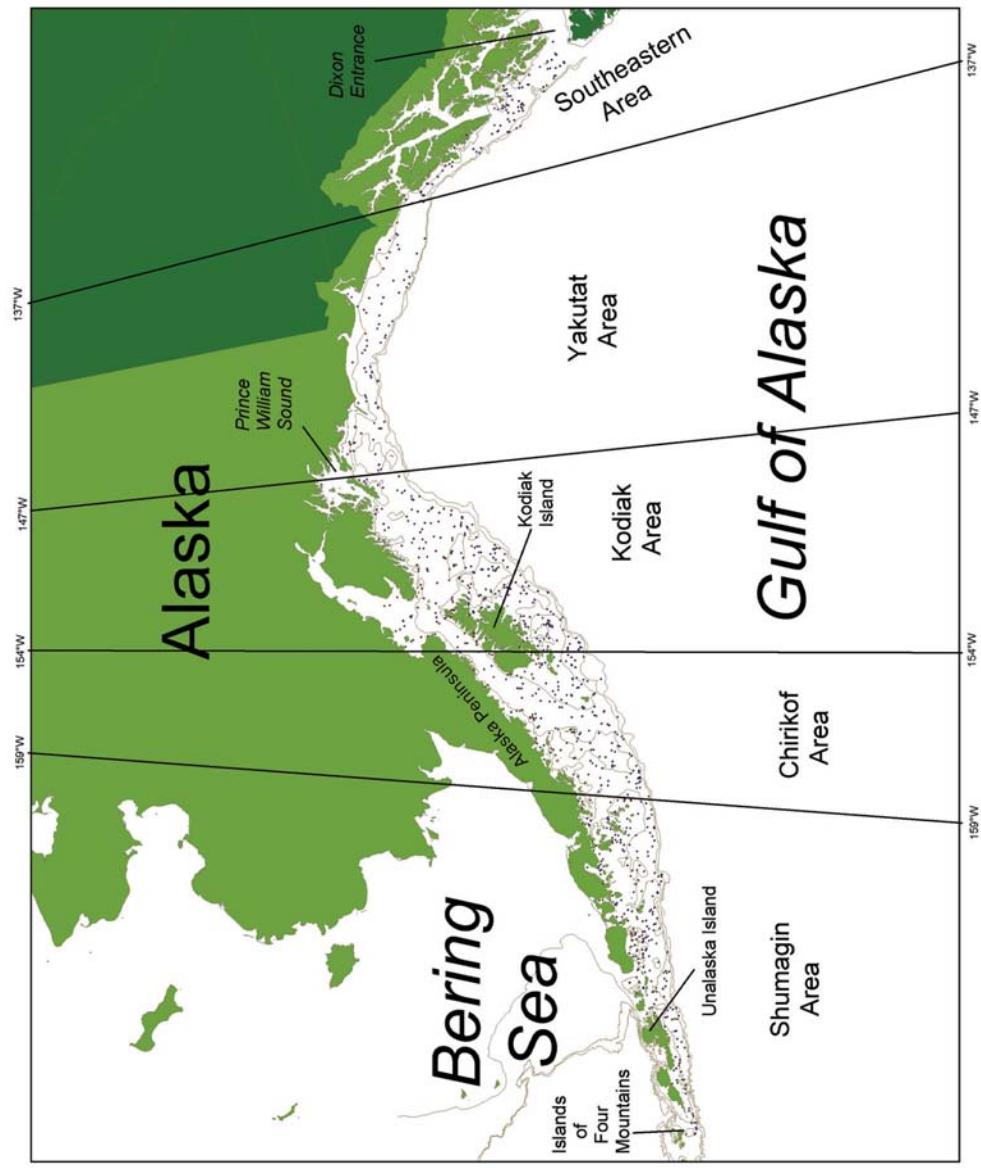


Figure 1.-- Survey stations attempted during the 2003 NMFS biennial Gulf of Alaska bottom trawl survey. Meridians shown define INPFC Management Area boundaries.

bottom contact sensor developed by the RACE Division was used to determine the actual time on bottom for the trawl. The bottom contact sensor is further described in Somerton and Weinberg (2001). Depth of each tow was measured and monitored with a Seabird (Model SBE 39) temperature-depth recorder mounted on the headrope of the net.

SURVEY DESIGN AND OPERATIONS

The 2003 survey design employed a stratified random sampling design consistent with previous surveys. The Gulf of Alaska was divided into 54 strata categorized by depth interval, type of geographical area (e.g., banks, gullies, and slopes) and International North Pacific Fisheries Commission (INPFC) statistical areas (Fig.1). Depth intervals were defined as less than 100, 101-200, 201-300, 301-500, and 501-700 m. In past years the survey included an additional depth stratum of 700 – 1,000 m, however this stratum was not sampled this particular year as none of the chartered vessels was equipped to effectively sample those depths. After the number of stations was allocated to each stratum, station grid cells were chosen randomly from a 5 x 5 km grid laid over the survey area.

During survey operations, the first suitable location encountered in the assigned grid cell was sampled. In choosing the exact location, only the condition of the seabed as indicated by the echo sounder was considered and not the presence or absence of fish. The target tow duration was 15 minutes; however, in cases where there was not enough trawlable bottom for a full 15 minute tow, shorter tows were completed. Minimal acceptable tow duration was 10 minutes. Attempts were made to maintain constant bottom depth, trawl wingspread, and towing speed (3 knots) during each tow. However, when depths changed significantly, the trawl warp was adjusted to maintain wingspread and bottom contact. The trawl opening tended to increase horizontally and decrease vertically with depth due to the increased amount of deployed trawl cable.

Catches weighing less than approximately 1,000 kg were completely sorted to species, weighed, and counted. Weights and numbers in larger catches (> 1,000 kg) were determined either by weighing with a load cell or by using volumetric calculations and subsample extrapolation. Biological data and specimens collected included fish lengths and weights, age structures, sexual maturities and special collections of stomachs, tissues, whole fish and invertebrates. Individual fish weight data were collected using a Marel Model M60 motion-compensated electronic scale.

Water temperature profiles were collected at each station using the headrope-mounted Seabird temperature-depth recorder and additional sea surface temperatures were measured using calibrated thermometers. All trawling procedures and protocols are described by Stauffer (2004).

RESULTS

Sampling proceeded east from the Islands of Four Mountains along the continental shelf to Dixon Entrance at fishing depths ranging from 13 to 667 m. Successful hauls were completed for 809 of 876 attempted tows. The average net opening was 15.9 m wide by 6.8 m high. Survey tow duration averaged 15.85 minutes, distance fished averaged 1.47 km and towing speed averaged 5.5 km (3.0 nautical miles) per hour over the bottom.

Catches included more than 180 species of fish and 350 species of invertebrates. The dominant fish species are ranked by mean catch per unit effort in Table 1, expressed as total catch in kilograms per hectare ($10,000 \text{ m}^2$) of bottom area sampled within each of the five sampled INPFC statistical areas. Arrowtooth flounder (91.41 kg/ha), Pacific halibut (20.48 kg/ha), Pacific ocean perch (14.83 kg/ha) and walleye pollock (13.73 kg/ha) accounted for the largest catches per area swept. Catch rates were generally highest in the Kodiak INPFC area (154° W long. to 147° W long.) followed by the Chirikof area (159° W long. to 154° W long.). In both areas high catch rates were due largely to very high catch rates of arrowtooth flounder (172.76 kg/ha and 77.27

kg/ha, respectively). The Shumagin area had the greatest catch rate of walleye pollock (33.70 kg/ha) as well as southern and northern rock sole (8.71 and 6.81 kg/ha, respectively), while the Kodiak area produced the highest rate for Pacific cod (13.30 kg/ha) as well as Pacific halibut (30.64 kg/ha). Catch rates were generally lowest in the Yakutat and Southeast areas (147° W long. to Dixon Entrance). Deepwater species occurring in catches along the continental slope generally included the grenadier family, sablefish, shortspine thornyhead (*Sebastolobus alascanus*), longspine thornyhead (*Sebastolobus altivelis*) and shorthraker rockfish (*Sebastodes borealis*). Catches of invertebrates are shown but should be viewed only as an index and not directly comparable to fish given our use of rollergear footropes on the trawls.

The biological data collected to determine length frequency distributions included measurements of nearly 280,000 fish representing 90 species. Specimen data were collected from 51 species including 15 rockfish, 10 flatfish, 6 skates, 3 salmonids, 2 gadids, and 3 sharks. The specimen data collection included 13,446 age structures and 13,005 individual weight measurements. Additionally, over 2,483 stomach samples were collected from 13 different species for AFSC Resource Ecology and Fisheries Management Division trophic interaction studies.

Oceanographic data included sea temperature measurements and bottom type classification. Sea surface temperatures were collected at 861 survey stations and averaged 9.93°C with a range of 5.6°C to 15.8°C. Bottom temperatures were taken from 858 stations and averaged 6.07°C with a range of 3.6°C to 11.8°C.

ORGANIZATION OF REPORT AND DATA STANDARDIZATIONS

The purpose of this report is to provide the fishing industry and public with pertinent catch information collected by the survey vessels. The report focuses on data collected at individual stations for the principal species encountered during the survey. The fishing

results are presented in Section 1 for the FV *Gladiator*, Section 2 for the FV *Northwest Explorer* and Section 3 for the FV *Sea Storm*. Each section has two parts: 1) station charts with haul numbers plotted adjacent to their respective geographical locations and 2) summary listings of species caught in each haul. A combined fishing log for all three vessels showing catches ranked by weight for selected commercial species is listed in Section 4. The combined fishing log includes catches of rockfish species, Atka mackerel (*Pleurogrammus monopterygius*), walleye pollock, Pacific cod, flatfish species, lingcod, Pacific herring, king and Tanner crab, scallops, shrimp, octopus, and red squid (*Berryteuthis magister*). Explanations of the performance codes appearing in the fishing logs are summarized in Table 2.

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Table 1-- Mean catch per unit effort (kg/ha) for the 20 most abundant groundfish and total sampling effort in each INPFC regulatory areas during the 2003 Gulf of Alaska survey.

<u>Shumagin area</u>	CPUE	<u>Chirikof area</u>	CPUE	<u>Kodiak area</u>	CPUE
Arrowtooth flounder	53.98	Arrowtooth flounder	77.27	Arrowtooth flounder	172.76
Walleye pollock	33.70	Giant grenadier	19.15	Pacific halibut	30.64
Giant grenadier	23.30	Pacific ocean perch	17.89	Pacific ocean perch	17.02
Pacific halibut	15.70	Pacific halibut	17.81	Pacific cod	13.30
Pacific cod	11.95	Pacific cod	11.80	Sablefish	12.28
Pacific ocean perch	11.51	Walleye pollock	11.01	Flathead sole	10.52
Flathead sole	10.59	Flathead sole	10.43	Walleye Pollock	10.31
Atka mackerel	9.38	Sablefish	8.51	Giant grenadier	6.85
Southern rock sole	8.71	Northern rockfish	7.66	Eulachon	6.10
Northern rock sole	6.81	Dusky rockfish	7.19	Spiny dogfish	5.91
Yellowfin sole	6.66	Southern rock sole	5.43	Dover sole	3.41
Shortspine thornyhead	3.31	Eulachon	5.41	Shortspine thornyhead	3.13
Sablefish	2.91	Rex sole	4.77	Southern rock sole	3.01
Pacific sleeper shark	2.12	Pacific sleeper shark	4.16	Starry flounder	2.97
Rex sole	2.10	Shortspine thornyhead	3.48	Rex sole	2.75
Shortraker rockfish	1.76	Northern rock sole	3.29	Big Skate	2.24
Big skate	1.52	Starry flounder	3.18	Butter sole	2.01
Yellow Irish lord	1.45	Dover sole	2.44	Longnose skate	1.96
Northern rockfish	1.45	Big skate	1.82	Northern rock sole	1.55
Rougheye rockfish	1.41	Rougheye rockfish	1.58	Rougheye rockfish	1.46
Number of hauls	230	Number of hauls	172	Number of hauls	248

<u>Yakutat area</u>	CPUE	<u>Southeastern area</u>	CPUE	<u>All areas</u>	CPUE
Arrowtooth flounder	27.73	Arrowtooth flounder	48.07	Arrowtooth flounder	91.41
Pacific halibut	17.78	Pacific ocean perch	27.48	Pacific halibut	20.48
Giant grenadier	10.15	Silvery grey rockfish	18.18	Pacific ocean perch	14.83
Spiny dogfish	6.59	Walleye pollock	7.54	Walleye pollock	13.73
Sablefish	5.91	Spotted ratfish	6.87	Giant grenadier	12.87
Dover sole	5.72	Rex sole	6.74	Pacific cod	9.64
Pacific ocean perch	5.02	Pacific halibut	6.71	Flathead sole	8.34
Lingcod	3.44	Dover sole	5.69	Sablefish	7.79
Walleye pollock	3.12	Sablefish	4.98	Southern rock sole	4.11
Flathead sole	3.10	Pacific cod	4.06	Eulachon	3.68
Shortspine thornyhead	3.06	Shortspine thornyhead	3.91	Shortspine thornyhead	3.29
Eulachon	2.71	Rougheye rockfish	2.94	Rex sole	3.24
Longnose skate	2.20	Redstripe rockfish	2.92	Dover sole	3.22
Shortraker rockfish	2.16	Lingcod	2.79	Spiny dogfish	3.20
Dusky rockfish	2.08	Pacific hake	2.67	Northern rock sole	2.58
Rex sole	1.91	Southern rock sole	2.11	Dusky rockfish	2.30
Pacific herring	1.83	Sharpchin rockfish	1.91	Northern rockfish	2.15
English sole	1.56	Big skate	1.32	Atka mackerel	2.12
Big skate	1.53	English sole	1.30	Starry flounder	1.90
Pacific sandfish	0.69	Spiny dogfish	0.88	Big skate	1.80
Number of hauls	79	Number of hauls	80	Number of hauls	809

Table 2. -- Performance codes used during the 2003 Gulf of Alaska bottom trawl survey.

Codes	Performance
0	Good performance
1	Satisfactory performance, hung up
1.1	Satisfactory performance, minor hang(s)
1.11	Satisfactory performance, completed tow
1.12	Satisfactory performance, hauled back early due to hang(s)
2	Satisfactory performance, unspecified gear damage
2.1	Satisfactory performance, wing damaged
2.3	Satisfactory performance, footrope damaged
2.4	Satisfactory performance, belly damaged
3	Satisfactory performance, gear conflict, unspecified
3.1	Satisfactory performance, caught pot, unspecified type
3.13	Satisfactory performance, Alaskan crab pot
3.2	Satisfactory performance, caught on longline gear
4.1	Satisfactory performance, caught large rock
4.2	Satisfactory performance, caught large quantity of mud
4.4	Satisfactory performance, large fish catch affected net performance
5	Satisfactory performance, unspecified gear performance problem
5.1	Satisfactory performance, net came off bottom
5.41	Satisfactory performance, door digging or falling over
5.5	Satisfactory performance, net crabbing severely
6	Satisfactory performance, unspecified problems
6.1	Satisfactory performance, depth change over tow exceeds survey defined limits
6.24	Satisfactory performance, scope change during tow
6.31	Satisfactory performance, haulback delayed due to mechanical problems
-1	Unsatisfactory performance, hung up
-1.11	Unsatisfactory performance, completed tow
-1.12	Unsatisfactory performance, hauled back early due to hang(s)
-1.2	Unsatisfactory performance, major hang, stopped forward progress of vessel
-2	Unsatisfactory performance, unspecified gear damage
-2.1	Unsatisfactory performance, wing damaged
-2.4	Unsatisfactory performance, belly damaged
-2.5	Unsatisfactory performance, bridle damaged
-2.7	Unsatisfactory performance, net completely destroyed
-3.1	Unsatisfactory performance, caught pot, unspecified type

Table 2. -- (Continued).

-3.12	Unsatisfactory performance, Dungeness crab pot
-3.13	Unsatisfactory performance, Alaskan crab pot
-4	Unsatisfactory performance, caught unspecified object
-4.1	Unsatisfactory performance, caught large rock
-4.4	Unsatisfactory performance, large fish catch affected net performance
-5	Unsatisfactory performance, unspecified gear performance problem
-5.1	Unsatisfactory performance, net came off bottom
-5.2	Unsatisfactory performance, net improperly configured, unspecified reason
-5.23	Unsatisfactory performance, headrope/footrope tangled
-5.4	Unsatisfactory performance, unspecified door problem
-5.6	Unsatisfactory performance, codend not closed properly
-5.7	Unsatisfactory performance, net unable to reach bottom due to strong currents
-6	Unsatisfactory performance, unspecified problems

Section 1

Fishing Log for the FV *Gladiator*

- Charts of stations and their respective haul numbers

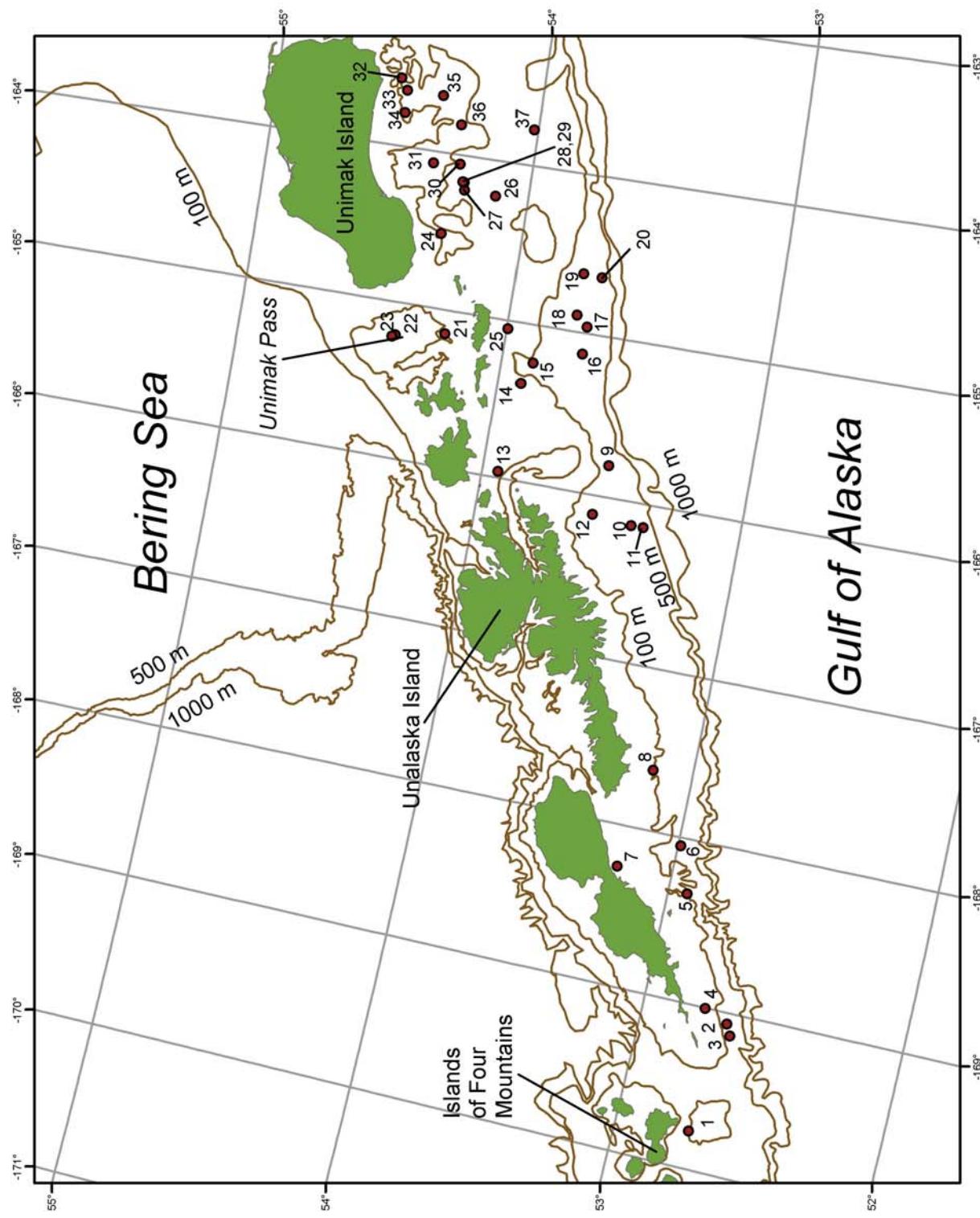


Figure 2. -- Stations surveyed by the chartered trawler FV *Gladitor* from the Island of Four Mountains to Unimak Island.

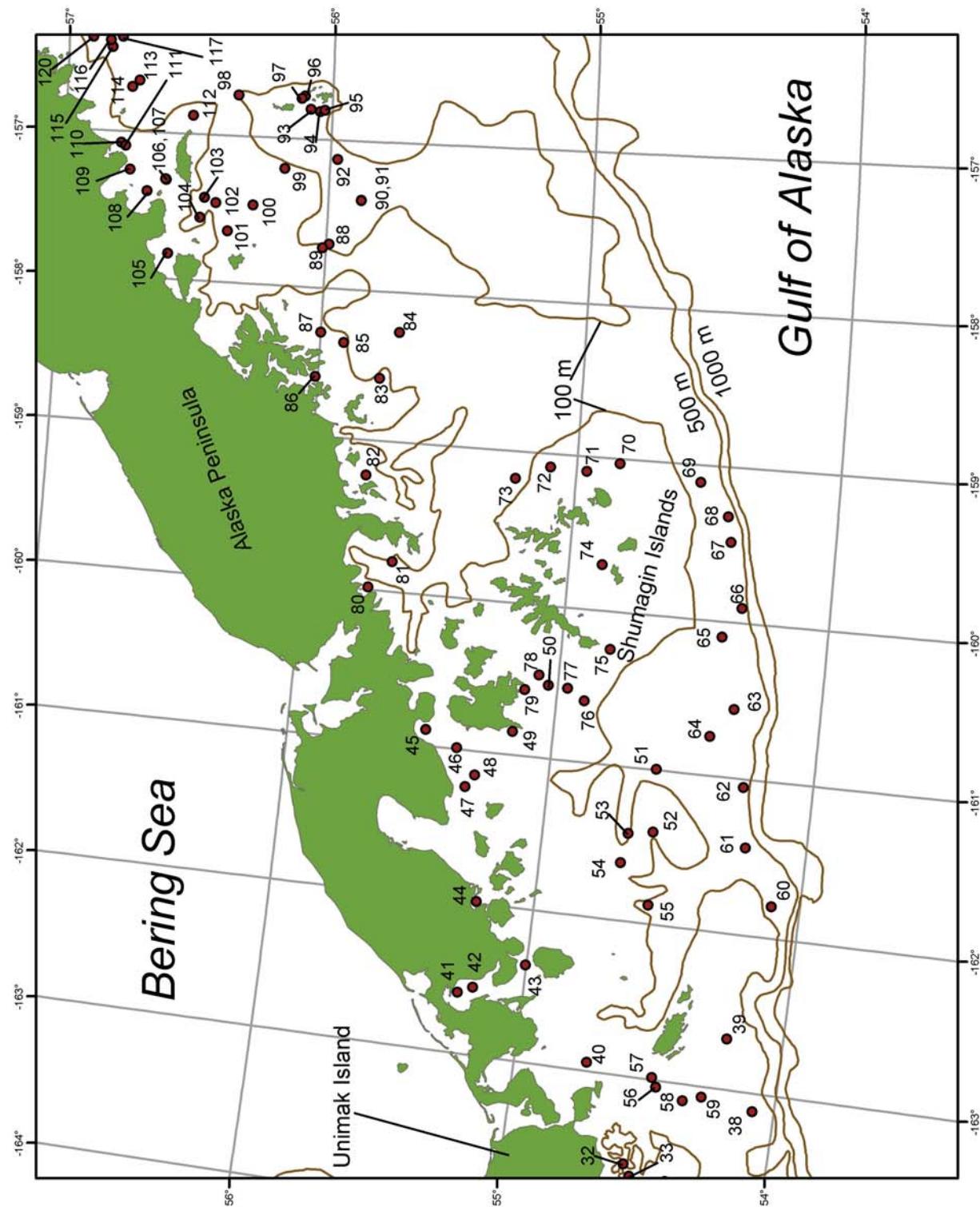


Figure 3. -- Stations surveyed by the chartered trawler FV *Gladiator* in the vicinity of the western Alaska Peninsula.

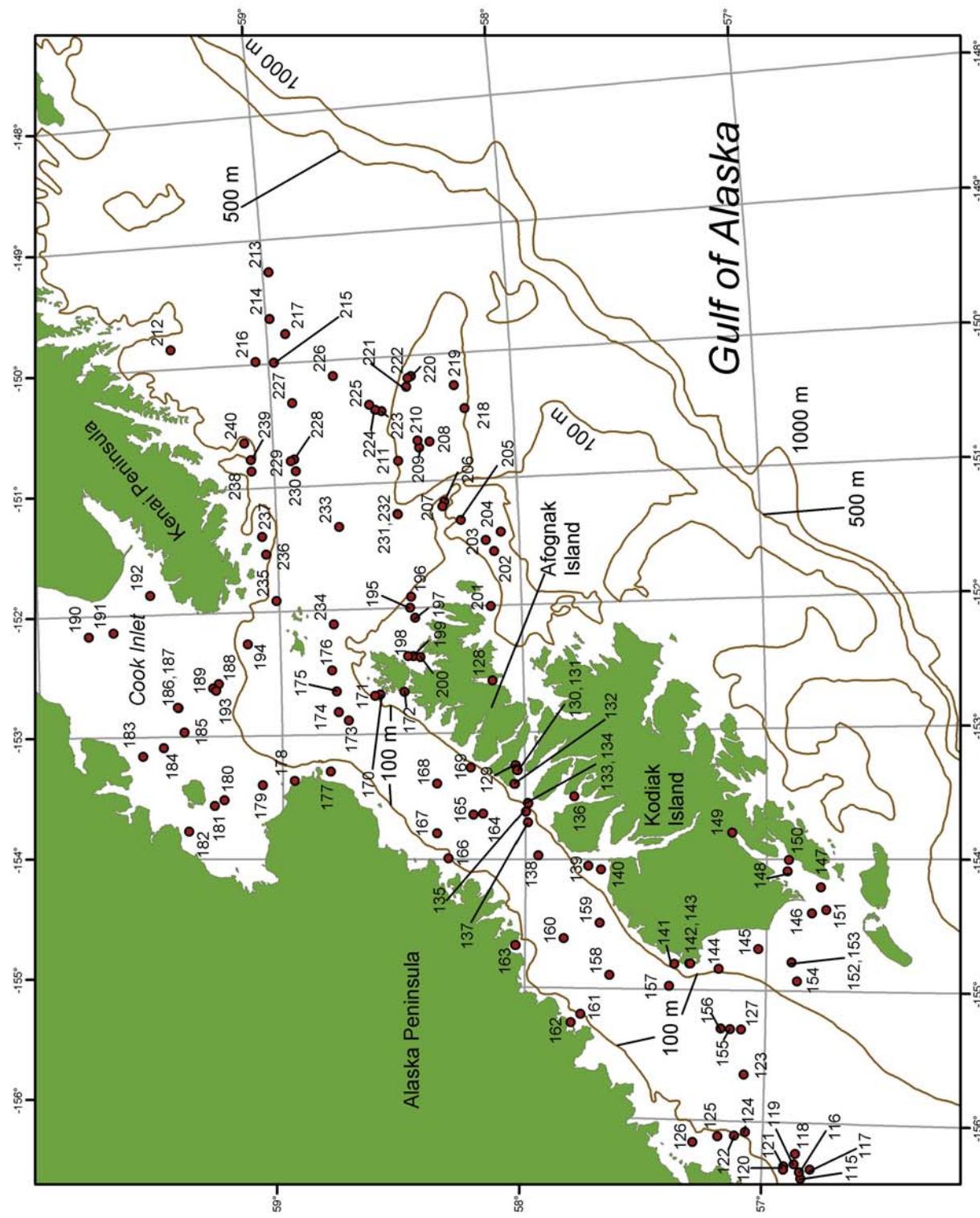


Figure 4. -- Stations surveyed by the chartered trawler FV *Gladiator* in the vicinity of Kodiak Island.

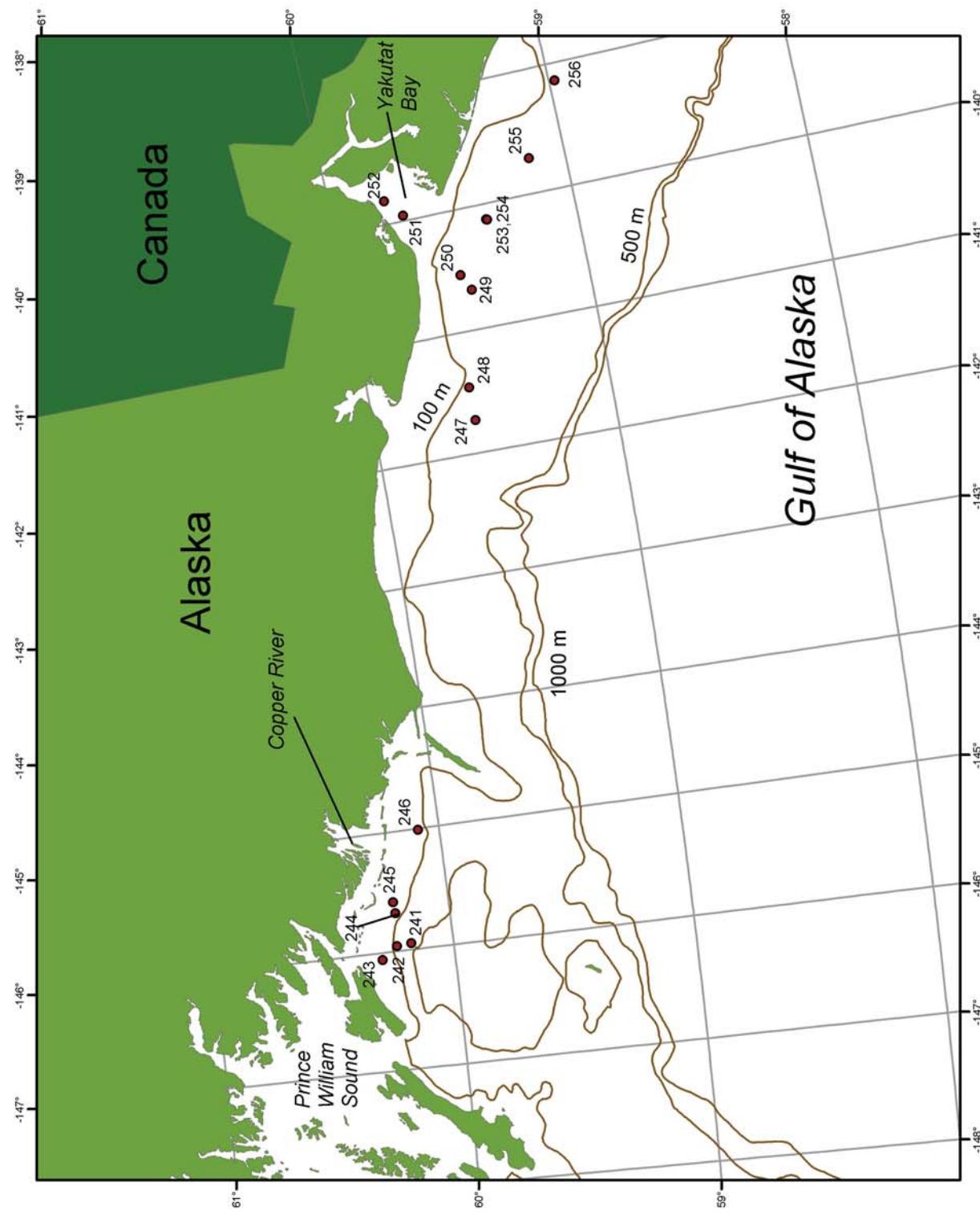


Figure 5. -- Stations surveyed by the chartered trawler FV *Gladiator* from Prince William Sound to Yakutat Bay.

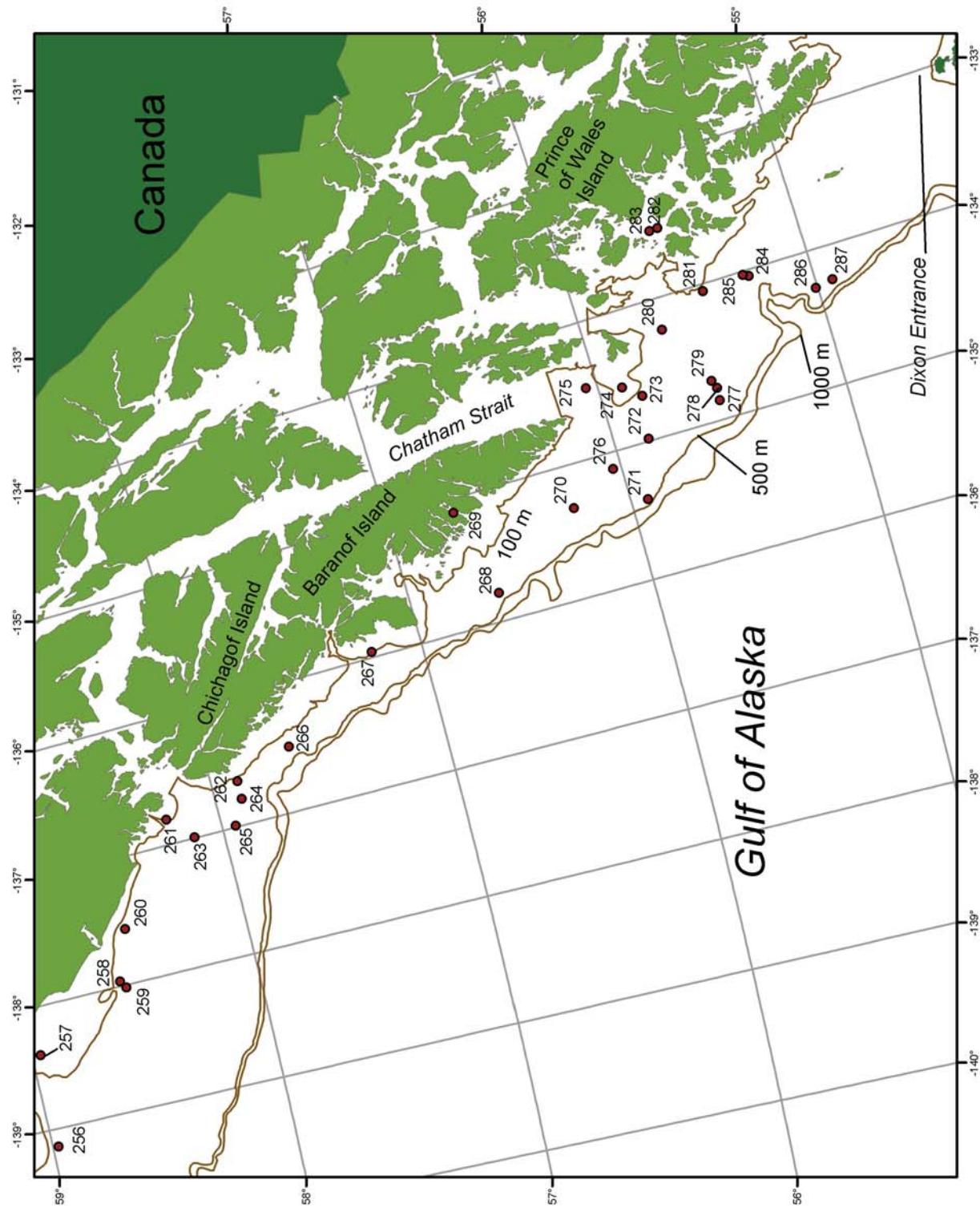


Figure 6. -- Stations surveyed by the chartered trawler FV *Gladiator* in the vicinity of Southeast Alaska.

Section 1 (continued)

Fishing Log for the FV *Gladiator*

- Summary listings of species catches by haul
- Haul start/end latitude and longitude in degrees and decimal minutes
- Catch weight (kg) of principal species or grouped taxa
- Total catch weight of all species

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	1	2	3	4	5	6	7
Start date & time	05/25/03 14	05/26/03 10	05/26/03 13	05/26/03 15	05/29/03 07	05/29/03 10	05/29/03 12
Start latitude	N 5243.27	N 5240.39	N 5239.010	N 5245.95	N 5255.68	N 5259.36	N 5312.46
Start longitude	W 16945.91	W 16903.92	W 16908.05	W 16900.14	W 16820.02	W 16802.92	W 16815.43
End latitude	N 5243.21	N 5240.37	N 5239.14	N 5245.59	N 5256.28	N 5300.00	N 5312.59
End longitude	W 16944.62	W 16904.16	W 16907.85	W 16901.15	W 16819.010	W 16802.11	W 16814.11
Bottom depth (m)	117	113	120	87	100	120	47
Duration (minutes)	15.6	16.8	10.2	13.8	15.6	15.6	15.6
Distance fished (km)	1.463	0.993	0.705	1.337	1.542	1.523	1.5
Performance	0	-1.2	-1.2	0	0	0	0
Atka mackerel	12	0	0	4	40	0	< 1
Pacific cod	62	0	1	23	46	11	3
Walleye pollock	7	10	24	32	3	54	< 1
Pacific ocean perch	1	17	64	< 1	2	0	0
Northern rockfish	< 1	19	108	0	0	< 1	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	< 1	< 1	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	10	14	0	0	1	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	0	3	< 1	13	35	12	24
Pacific halibut	0	21	26	11	6	6	19
Northern rock sole	0	2	0	7	6	3	95
Southern rock sole	0	3	< 1	29	2	2	110
Flathead sole	0	0	0	0	0	0	0
Rex sole	0	0	0	0	0	0	0
Dover sole	0	0	0	0	< 1	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	2
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	9	0	0	0	153
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	5	< 1	0	2	2	0	1
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	0	0	0	0	0
Smelts	0	0	0	< 1	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	2	6	< 1	6	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	< 1	< 1	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	351	10	33	2	5	< 1	< 1
Starfish	< 1	0	< 1	0	< 1	< 1	0
Stony coral	8	4	3	< 1	0	< 1	0
Soft coral	0	0	< 1	< 1	0	0	0
Octopus	0	0	0	0	0	3	0
Snails	< 1	< 1	0	< 1	< 1	< 1	< 1
Other invertebrates	7	8	3	4	4	< 1	< 1
Total catch (kg)	456	110	294	125	158	94	408

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	8	9	10	11	12	13	14
Start date & time	05/29/03 16	05/30/03 10	05/30/03 12	05/30/03 14	05/30/03 17	05/30/03 20	05/31/03 07
Start latitude	N 5309.05	N 5332.08	N 5324.63	N 5321.90	N 5333.70	N 5356.39	N 5354.80
Start longitude	W 16737.37	W 16547.89	W 16608.66	W 16608.61	W 16607.14	W 16557.50	W 16522.79
End latitude	N 5309.06	N 5332.40	N 5325.02	N 5321.57	N 5333.91	N 5355.79	N 5355.14
End longitude	W 16736.04	W 16549.15	W 16607.40	W 16609.77	W 16605.93	W 16558.10	W 16521.60
Bottom depth (m)	96	116	215	316	108	87	91
Duration (minutes)	16.2	15.6	16.8	15.6	15	14.4	16.2
Distance fished (km)	1.495	1.534	1.588	1.439	1.413	1.31	1.47
Performance	0	0	0	0	0	0	0
Atka mackerel	0	3	0	0	20	23	1
Pacific cod	8	31	0	0	8	11	12
Walleye pollock	0	< 1	13	3	1	< 1	95
Pacific ocean perch	0	57	15	12	98	0	0
Northern rockfish	0	2	< 1	0	5	0	0
Shortraker rockfish	0	0	0	13	0	0	0
Rougheye rockfish	0	0	0	41	0	0	0
Shortspine thornyhead	0	0	2	41	0	0	0
Dusky rockfish	0	0	1	0	< 1	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	21	0	0	0
Arrowtooth flounder	46	191	4	17	23	57	100
Pacific halibut	22	36	0	0	33	96	40
Northern rock sole	19	11	< 1	0	1	3	3
Southern rock sole	43	13	0	0	7	< 1	42
Flathead sole	0	1	2	0	0	0	0
Rex sole	< 1	< 1	4	3	< 1	0	< 1
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	2	0	0	0	0	0	0
Skates	0	0	0	0	3	17	0
Sharks	0	0	0	0	0	244	0
Yellow Irish lord	0	0	0	0	0	3	< 1
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	< 1	< 1	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	968	0	0	0
Other fish	0	< 1	0	< 1	< 1	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	< 1	0	0	0	0
Scallops	0	< 1	0	0	< 1	3	< 1
Magistrate armhook squid	0	0	< 1	11	0	0	0
Sponges	0	2	< 1	0	4	3	< 1
Starfish	< 1	0	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	< 1	< 1	< 1	< 1	2	< 1
Other invertebrates	< 1	1	< 1	8	1	4	1
Total catch (kg)	142	351	44	1140	209	468	297

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	15	16	17	18	19	20	21
Start date & time	05/31/03 09	05/31/03 11	05/31/03 13	05/31/03 15	05/31/03 16	05/31/03 18	06/01/03 09
Start latitude	N 5352.92	N 5342.26	N 5342.26	N 5344.89	N 5344.94	N 5340.67	N 5413.59
Start longitude	W 16514.44	W 16507.91	W 16457.43	W 16453.63	W 16437.61	W 16438.07	W 16508.99
End latitude	N 5352.35	N 5342.19	N 5342.42	N 5344.71	N 5345.03	N 5340.60	N 5414.36
End longitude	W 16513.46	W 16509.23	W 16458.68	W 16452.59	W 16438.93	W 16439.44	W 16509.08
Bottom depth (m)	108	272	256	158	117	291	91
Duration (minutes)	16.2	15.6	15.6	13.8	15.6	16.2	15.6
Distance fished (km)	1.528	1.479	1.425	1.204	1.471	1.534	1.436
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	< 1	< 1	0	14
Pacific cod	9	0	0	35	32	0	21
Walleye pollock	69	0	3	186	4	0	0
Pacific ocean perch	0	3	6	54	0	0	0
Northern rockfish	0	0	0	2	< 1	0	< 1
Shortraker rockfish	0	0	0	0	0	16	0
Rougheye rockfish	0	21	6	0	0	77	0
Shortspine thornyhead	0	32	21	0	0	85	0
Dusky rockfish	0	0	0	1	0	0	0
Other rockfish	0	0	< 1	0	0	0	0
Sablefish	0	40	38	39	2	24	0
Arrowtooth flounder	43	16	11	3	257	23	923
Pacific halibut	16	3	0	0	0	0	50
Northern rock sole	2	0	0	0	17	0	8
Southern rock sole	22	0	0	0	4	0	8
Flathead sole	< 1	0	0	0	2	0	0
Rex sole	2	69	44	2	11	9	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	< 1	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	0	1	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	63
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	8
Other sculpins	0	0	< 1	0	0	< 1	< 1
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	42	157	0	0	66	0
Other fish	0	0	0	0	0	0	< 1
Bairdi Tanner crab	< 1	0	0	< 1	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	< 1	0	0	0	0
Scallops	< 1	0	0	0	0	0	< 1
Magistrate armhook squid	0	8	24	2	0	7	0
Sponges	< 1	< 1	0	< 1	< 1	< 1	< 1
Starfish	1	< 1	< 1	< 1	< 1	< 1	1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	< 1
Octopus	0	< 1	0	0	0	0	0
Snails	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Other invertebrates	14	11	1	3	< 1	13	9
Total catch (kg)	179	247	311	329	330	323	1107

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	22	23	24	25	26	27	28
Start date & time	06/01/03 11	06/01/03 12	06/01/03 17	06/01/03 21	06/02/03 07	06/02/03 10	06/02/03 11
Start latitude	N 5424.63	N 5425.33	N 5418.010	N 5359.72	N 5407.30	N 5414.42	N 5414.75
Start longitude	W 16512.59	W 16513.27	W 16431.07	W 16503.05	W 16413.55	W 16413.12	W 16410.24
End latitude	N 5425.28	N 5424.63	N 5417.19	N 5359.64	N 5406.59	N 5414.53	N 5415.03
End longitude	W 16513.21	W 16512.54	W 16431.12	W 16501.74	W 16414.12	W 16411.78	W 16409.05
Bottom depth (m)	175	175	99	81	75	70	71
Duration (minutes)	15.6	16.2	18.6	16.2	16.2	16.2	15.6
Distance fished (km)	1.404	1.549	1.702	1.451	1.485	1.485	1.412
Performance	-5.7	3	0	0	0	0	-2.1
Atka mackerel	0	0	2	3	< 1	1	< 1
Pacific cod	2	3	0	6	6	0	4
Walleye pollock	46	60	11	1	6	0	2
Pacific ocean perch	0	7	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	1	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	2	38	17	85	3	20	26
Pacific halibut	1	11	7	34	8	47	38
Northern rock sole	3	16	24	4	18	17	14
Southern rock sole	0	1	6	19	20	27	63
Flathead sole	< 1	4	1	0	39	67	10
Rex sole	0	2	0	0	0	0	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	3	0
Skates	0	20	47	9	0	12	17
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	3	0	15	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	< 1	< 1	14	0	0	0
Bairdi Tanner crab	0	< 1	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	< 1	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	< 1	0	0	0	0	0	0
Sponges	< 1	< 1	< 1	2	< 1	< 1	0
Starfish	< 1	< 1	0	< 1	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	6	0	0	0
Snails	0	< 1	0	< 1	0	0	0
Other invertebrates	< 1	4	< 1	9	1	1	< 1
Total catch (kg)	56	172	115	209	102	195	174

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	29	30	31	32	33	34	35
Start date & time	06/02/03 12	06/02/03 15	06/02/03 17	06/03/03 07	06/03/03 09	06/03/03 11	06/03/03 14
Start latitude	N 5415.05	N 5416.31	N 5422.29	N 5432.19	N 5430.49	N 5430.34	N 5422.26
Start longitude	W 16410.04	W 16403.42	W 16404.55	W 16333.75	W 16338.18	W 16346.87	W 16338.21
End latitude	N 5415.21	N 5416.09	N 5422.13	N 5432.51	N 5430.42	N 5429.94	N 5422.06
End longitude	W 16408.79	W 16404.66	W 16403.29	W 16334.96	W 16339.46	W 16347.90	W 16339.45
Bottom depth (m)	72	69	103	102	102	98	111
Duration (minutes)	15.6	15.6	16.2	15.6	15.6	15.6	16.2
Distance fished (km)	1.403	1.422	1.423	1.446	1.398	1.361	1.414
Performance	0	0	0	0	0	0	0
Atka mackerel	2	< 1	0	2	10	4	0
Pacific cod	0	5	4	13	15	29	23
Walleye pollock	0	2	311	99	214	93	469
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	18	42	84	78	67	55	66
Pacific halibut	33	76	17	18	17	51	12
Northern rock sole	21	15	< 1	43	20	38	0
Southern rock sole	54	27	< 1	30	14	5	0
Flathead sole	15	15	27	3	3	9	22
Rex sole	0	0	2	0	< 1	2	18
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	5	2	0	0	0	0
Pacific salmon	0	7	0	0	0	0	0
Skates	0	14	0	0	13	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	2	1	< 1	2
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	0	0	0
Smelts	0	0	0	0	< 1	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	< 1	3	< 1	< 1	0
Bairdi Tanner crab	0	0	< 1	< 1	< 1	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	< 1	< 1	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	0	< 1	0	< 1	2	< 1
Starfish	0	< 1	< 1	< 1	0	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	< 1	< 1	< 1	< 1	< 1
Other invertebrates	1	1	3	< 1	2	2	2
Total catch (kg)	145	210	451	294	377	292	613

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	36	37	38	39	40	41	42
Start date & time	06/03/03 17	06/04/03 07	06/04/03 11	06/04/03 15	06/04/03 21	06/05/03 07	06/05/03 09
Start latitude	N 5417.29	N 5400.97	N 5404.91	N 5412.75	N 5443.63	N 5514.69	N 5511.44
Start longitude	W 16348.42	W 16346.23	W 16306.88	W 16240.33	W 16256.44	W 16235.84	W 16233.01
End latitude	N 5417.31	N 5401.17	N 5405.50	N 5412.98	N 5443.54	N 5514.65	N 5510.79
End longitude	W 16349.79	W 16344.95	W 16307.68	W 16239.13	W 16257.69	W 16234.37	W 16232.40
Bottom depth (m)	112	92	81	73	98	28	72
Duration (minutes)	16.2	16.8	16.2	15	15.6	18	16.2
Distance fished (km)	1.506	1.463	1.429	1.396	1.37	1.561	1.411
Performance	0	0	0	5.1	0	0	0
Atka mackerel	0	2	4	209	0	0	0
Pacific cod	9	8	82	16	3	27	65
Walleye pollock	28	< 1	1	0	107	44	15
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	2	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	1	0	0	0	0	0	0
Arrowtooth flounder	58	10	63	4	122	0	0
Pacific halibut	9	9	18	5	0	44	2
Northern rock sole	0	29	35	4	12	130	8
Southern rock sole	< 1	24	9	17	3	0	0
Flathead sole	117	26	37	0	86	4	293
Rex sole	7	5	< 1	0	0	0	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	< 1	589	571
Other flatfish	0	0	0	0	< 1	63	261
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	4	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	< 1	12	7	0	< 1
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	6	3
Smelts	0	0	0	0	0	0	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	< 1	4	< 1	4
Bairdi Tanner crab	< 1	0	0	0	< 1	< 1	1
Golden king crab	0	0	0	0	0	0	< 1
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	< 1	0	< 1	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	3	0	< 1	< 1	< 1	0
Starfish	< 1	< 1	0	0	5	11	20
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	< 1	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	0	< 1	1	< 1	< 1
Other invertebrates	6	7	< 1	4	5	17	3
Total catch (kg)	239	123	251	273	361	935	1247

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	43	44	45	46	47	48	49
Start date & time	06/05/03 12	06/05/03 15	06/07/03 07	06/07/03 11	06/08/03 07	06/08/03 11	06/08/03 15
Start latitude	N 5500.20	N 5513.05	N 5528.75	N 5521.37	N 5518.53	N 5516.66	N 5509.13
Start longitude	W 16221.68	W 16159.13	W 16053.42	W 16059.36	W 16114.30	W 16109.41	W 16050.65
End latitude	N 5500.37	N 5512.62	N 5529.16	N 5520.75	N 5518.60	N 5516.92	N 5508.53
End longitude	W 16220.35	W 16158.01	W 16054.64	W 16100.12	W 16115.63	W 16110.66	W 16050.72
Bottom depth (m)	118	67	48	50	62	66	54
Duration (minutes)	16.2	15.6	16.2	15.6	16.2	15.6	12.6
Distance fished (km)	1.477	1.459	1.519	1.436	1.426	1.432	1.14
Performance	3	3	0	0	0	0	5.41
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	87	20	0	9	91	1148	405
Walleye pollock	24	126	0	< 1	1418	< 1	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	2	0	0	0	0	0
Arrowtooth flounder	32	97	60	0	77	142	9
Pacific halibut	12	90	15	74	30	59	54
Northern rock sole	5	1	51	85	15	5	189
Southern rock sole	0	0	137	98	84	52	176
Flathead sole	548	328	64	0	58	106	< 1
Rex sole	0	< 1	0	0	< 1	< 1	0
Dover sole	0	0	0	0	0	< 1	0
Yellowfin sole	129	99	148	0	95	67	0
Other flatfish	2	4	54	< 1	90	17	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	0	0	0
Sharks	0	0	36	0	0	0	0
Yellow Irish lord	64	0	2	20	< 1	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	30	12	0	1	8	7	0
Other sculpins	< 1	4	0	0	< 1	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	5	< 1	0	< 1	< 1	< 1	1
Bairdi Tanner crab	0	3	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	7	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	< 1	< 1	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	< 1	< 1	6	2	< 1	< 1
Starfish	4	< 1	< 1	2	< 1	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	4	11	0	0
Snails	< 1	< 1	< 1	4	< 1	0	0
Other invertebrates	3	< 1	9	40	10	< 1	14
Total catch (kg)	945	794	578	345	1990	1604	848

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	50	51	52	53	54	55	56
Start date & time	06/08/03 19	06/09/03 08	06/09/03 10	06/09/03 12	06/09/03 15	06/09/03 18	06/10/03 07
Start latitude	N 5502.13	N 5435.84	N 5435.04	N 5440.62	N 5441.62	N 5434.30	N 5427.34
Start longitude	W 16031.02	W 16059.51	W 16124.010	W 16125.62	W 16137.35	W 16152.61	W 16302.45
End latitude	N 5502.71	N 5435.51	N 5435.77	N 5440.77	N 5441.41	N 5435.01	N 5426.65
End longitude	W 16030.010	W 16100.62	W 16124.02	W 16124.37	W 16137.49	W 16153.47	W 16303.04
Bottom depth (m)	92	119	74	148	78	145	52
Duration (minutes)	15.6	15.6	15	15.6	4.8	17.4	16.2
Distance fished (km)	1.49	1.375	1.373	1.398	0.422	1.639	1.465
Performance	0	0	4.1	0	-1.12	6.31	0
Atka mackerel	2	2	0	< 1	0	0	0
Pacific cod	0	4	0	3	0	0	0
Walleye pollock	0	0	0	2	0	5	0
Pacific ocean perch	0	0	3	2	0	0	0
Northern rockfish	0	0	14	2	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	8	0	< 1	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	5	0	0	0	0
Other rockfish	0	0	2	0	0	0	0
Sablefish	< 1	0	0	0	0	0	0
Arrowtooth flounder	490	284	0	645	0	162	4
Pacific halibut	32	14	5	0	11	11	60
Northern rock sole	11	0	< 1	0	2	0	43
Southern rock sole	38	0	< 1	0	7	0	32
Flathead sole	1	16	0	85	0	60	0
Rex sole	0	14	0	43	0	7	0
Dover sole	< 1	0	0	12	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	95
Pacific salmon	0	0	0	0	0	0	0
Skates	12	2	0	10	8	2	98
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	3	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	0	0	0
Smelts	0	0	0	< 1	0	< 1	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	10	0	2	< 1	0
Bairdi Tanner crab	0	< 1	< 1	0	0	< 1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	0	0	0	< 1	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	1	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	0	2	0	< 1	0	0
Starfish	2	< 1	< 1	1	3	4	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	0	< 1	0	< 1	0	0
Other invertebrates	4	1	1	2	2	< 1	< 1
Total catch (kg)	601	338	44	816	35	252	333

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	57	58	59	60	61	62	63
Start date & time	06/10/03 10	06/10/03 12	06/10/03 16	06/11/03 07	06/11/03 11	06/11/03 15	06/11/03 17
Start latitude	N 5428.51	N 5420.95	N 5416.81	N 5406.48	N 5413.83	N 5415.77	N 5419.71
Start longitude	W 16258.94	W 16306.28	W 16303.86	W 16147.57	W 16126.14	W 16103.00	W 16033.36
End latitude	N 5428.38	N 5420.30	N 5416.73	N 5406.38	N 5413.25	N 5415.66	N 5419.76
End longitude	W 16257.68	W 16305.63	W 16302.57	W 16146.46	W 16126.82	W 16101.72	W 16034.55
Bottom depth (m)	49	54	65	110	271	401	119
Duration (minutes)	15.6	15.6	15.6	15	15	15.6	15.6
Distance fished (km)	1.394	1.423	1.422	1.238	1.338	1.419	1.318
Performance	0	0	0	-2.4	0	0	0
Atka mackerel	0	0	2	0	0	0	0
Pacific cod	5	52	8	9	0	0	0
Walleye pollock	0	0	0	0	3	2	0
Pacific ocean perch	0	0	0	559	13	1	0
Northern rockfish	0	0	0	437	0	0	0
Shortraker rockfish	0	0	0	0	2	14	0
Rougheye rockfish	0	0	0	0	3	2	0
Shortspine thornyhead	0	0	0	0	86	34	0
Dusky rockfish	0	0	0	244	0	0	0
Other rockfish	0	0	0	121	< 1	0	0
Sablefish	0	0	0	3	38	55	0
Arrowtooth flounder	1	12	15	10	143	10	34
Pacific halibut	42	892	67	24	0	11	50
Northern rock sole	36	140	37	1	0	0	< 1
Southern rock sole	29	113	20	10	0	0	5
Flathead sole	0	< 1	323	0	0	0	< 1
Rex sole	0	0	< 1	1	26	1	0
Dover sole	0	0	0	< 1	18	15	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	32	17	< 1	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	17	0	0	0	0	0	8
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	1	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	< 1	0	0
Smelts	< 1	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	86	0
Other fish	0	0	0	19	0	< 1	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	< 1	< 1	0
Scallops	0	0	0	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	< 1	0	< 1
Sponges	0	0	0	37	< 1	0	0
Starfish	2	3	0	< 1	< 1	1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	< 1	0	0	0
Octopus	0	0	0	0	0	3	0
Snails	0	0	0	< 1	< 1	1	< 1
Other invertebrates	< 1	3	< 1	2	6	23	< 1
Total catch (kg)	165	1233	472	1482	342	260	101

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	64	65	66	67	68	69	70
Start date & time	06/11/03 19	06/12/03 07	06/12/03 09	06/12/03 12	06/12/03 17	06/13/03 07	06/13/03 13
Start latitude	N 5424.58	N 5423.97	N 5420.02	N 5423.77	N 5424.86	N 5431.73	N 5450.26
Start longitude	W 16044.72	W 16005.88	W 15954.07	W 15928.98	W 15919.12	W 15906.61	W 15901.78
End latitude	N 5424.86	N 5423.86	N 5420.01	N 5423.42	N 5424.68	N 5431.24	N 5451.00
End longitude	W 16045.90	W 16004.65	W 15953.75	W 15930.08	W 15920.38	W 15907.58	W 15901.37
Bottom depth (m)	108	128	327	353	438	150	72
Duration (minutes)	15.6	15	4.2	15	15.6	15.6	15.6
Distance fished (km)	1.395	1.362	0.349	1.383	1.425	1.417	1.465
Performance	0	0	-2.5	-4.1	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	12	23	0	0	0	139	7
Walleye pollock	0	1	0	< 1	0	< 1	0
Pacific ocean perch	3	< 1	0	< 1	0	877	0
Northern rockfish	12	< 1	0	0	0	45	0
Shortraker rockfish	0	0	13	41	4	0	0
Rougheye rockfish	0	0	10	39	0	0	0
Shortspine thornyhead	0	0	12	46	57	0	0
Dusky rockfish	1	0	0	0	0	17	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	27	57	28	4	0
Arrowtooth flounder	16	306	12	9	5	194	0
Pacific halibut	57	33	25	4	0	0	79
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	< 1
Flathead sole	13	1	0	0	0	1	0
Rex sole	< 1	4	< 1	3	3	27	0
Dover sole	0	5	11	20	8	3	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	19	0	0	0	< 1	7
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	< 1
Bigmouth sculpin	0	0	1	0	0	0	0
Great sculpin	0	0	0	0	0	0	2
Other sculpins	0	0	0	< 1	0	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	50	757	1947	0	0
Other fish	11	0	< 1	< 1	1	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	1	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	< 1	0	0	0	< 1	< 1
Magistrate armhook squid	0	0	2	0	3	0	0
Sponges	0	4	0	0	0	6	< 1
Starfish	< 1	1	< 1	< 1	< 1	< 1	3
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	< 1	0	0	30
Snails	< 1	< 1	< 1	< 1	0	< 1	1
Other invertebrates	2	2	2	47	1	2	2
Total catch (kg)	128	401	167	1026	2058	1315	133

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	71	72	73	74	75	76	77
Start date & time	06/13/03 15	06/13/03 17	06/13/03 19	06/14/03 07	06/14/03 10	06/14/03 12	06/14/03 14
Start latitude	N 5457.63	N 5505.91	N 5513.65	N 5452.49	N 5448.99	N 5453.65	N 5457.70
Start longitude	W 15905.68	W 15905.05	W 15910.58	W 15941.82	W 16014.69	W 16035.80	W 16031.51
End latitude	N 5458.41	N 5505.30	N 5513.32	N 5452.51	N 5449.07	N 5453.78	N 5457.59
End longitude	W 15905.86	W 15905.72	W 15909.38	W 15943.10	W 16015.98	W 16037.10	W 16030.20
Bottom depth (m)	80	81	155	41	80	77	100
Duration (minutes)	16.2	15	15.6	15	15.6	15.6	16.2
Distance fished (km)	1.506	1.365	1.441	1.387	1.409	1.44	1.433
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	220	0	0
Pacific cod	14	< 1	22	30	6	2	< 1
Walleye pollock	0	0	4	0	< 1	0	< 1
Pacific ocean perch	< 1	77	< 1	0	0	0	0
Northern rockfish	1	26	< 1	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	< 1	3	0	0	0	0	0
Other rockfish	0	< 1	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	12	2	127	0	46	23	306
Pacific halibut	37	5	22	89	89	7	41
Northern rock sole	2	< 1	0	56	17	7	0
Southern rock sole	16	12	< 1	98	37	41	11
Flathead sole	0	0	4	< 1	2	< 1	40
Rex sole	0	0	12	0	0	0	6
Dover sole	< 1	0	2	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	2	0	2	4
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	9	0	27	0	0
Sharks	0	0	0	0	23	0	0
Yellow Irish lord	< 1	0	0	0	30	0	0
Bigmouth sculpin	0	0	11	0	0	0	0
Great sculpin	0	0	0	0	5	0	0
Other sculpins	< 1	< 1	< 1	0	0	0	0
Smelts	0	0	2	0	0	< 1	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	< 1	0	0	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	1	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	< 1	0	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	< 1	< 1	0	< 1	0	0
Starfish	2	< 1	< 1	2	3	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	0	< 1	< 1	0	0
Other invertebrates	1	1	< 1	< 1	14	2	3
Total catch (kg)	87	130	219	279	519	86	413

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	78	79	80	81	82	83	84
Start date & time	06/14/03 15	06/14/03 18	06/15/03 08	06/15/03 10	06/15/03 14	06/15/03 17	06/15/03 19
Start latitude	N 5504.46	N 5507.33	N 5544.91	N 5539.93	N 5547.47	N 5546.03	N 5542.19
Start longitude	W 16027.40	W 16033.64	W 15958.84	W 15947.81	W 15914.05	W 15834.82	W 15815.89
End latitude	N 5504.94	N 5507.76	N 5545.38	N 5539.22	N 5546.74	N 5546.64	N 5541.62
End longitude	W 16026.35	W 16034.94	W 15959.92	W 15947.32	W 15914.31	W 15835.69	W 15816.72
Bottom depth (m)	97	44	92	123	98	88	130
Duration (minutes)	15.6	18	15.6	15.6	15.6	15.6	15
Distance fished (km)	1.467	1.641	1.462	1.445	1.404	1.48	1.387
Performance	1.11	5	5.1	0	2.1	2.1	0
Atka mackerel	2	0	0	0	0	0	0
Pacific cod	75	0	1	0	0	1	0
Walleye pollock	0	0	2	< 1	< 1	1	0
Pacific ocean perch	0	0	0	0	0	7	0
Northern rockfish	0	0	0	0	0	7	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	1	0
Other rockfish	< 1	0	0	0	0	0	0
Sablefish	0	0	0	2	0	0	0
Arrowtooth flounder	208	0	621	712	318	100	294
Pacific halibut	35	70	39	14	17	26	0
Northern rock sole	6	29	2	0	0	< 1	0
Southern rock sole	60	43	< 1	0	< 1	14	0
Flathead sole	22	0	105	64	104	< 1	19
Rex sole	< 1	0	0	11	< 1	0	2
Dover sole	0	0	< 1	2	1	0	< 1
Yellowfin sole	0	0	19	0	0	0	0
Other flatfish	< 1	18	3	2	0	0	0
Pacific salmon	0	0	5	0	0	3	0
Skates	0	0	26	0	45	< 1	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	< 1	0	0	< 1	< 1	< 1	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	14	0	4	0	0	0	0
Other sculpins	0	0	< 1	0	0	< 1	0
Smelts	0	0	< 1	< 1	< 1	0	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	< 1	0	0	5	0
Bairdi Tanner crab	0	0	0	0	< 1	0	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	< 1
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	0	0	< 1	< 1	< 1	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	0	0	0	0	< 1	0
Starfish	0	0	0	< 1	1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	12	0	0	0	0	0	0
Snails	< 1	0	0	0	0	0	0
Other invertebrates	9	2	1	< 1	< 1	1	< 1
Total catch (kg)	445	161	830	809	491	169	317

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	85	86	87	88	89	90	91
Start date & time	06/16/03 07	06/16/03 09	06/16/03 14	06/16/03 16	06/16/03 17	06/16/03 20	06/17/03 07
Start latitude	N 5554.68	N 5600.63	N 5600.03	N 5559.29	N 5600.77	N 5552.54	N 5552.54
Start longitude	W 15821.31	W 15835.77	W 15817.75	W 15742.05	W 15743.62	W 15723.69	W 15723.72
End latitude	N 5554.95	N 5559.99	N 5600.69	N 5559.63	N 5601.31	N 5552.62	N 5552.60
End longitude	W 15822.63	W 15835.05	W 15817.09	W 15741.54	W 15743.52	W 15722.30	W 15722.39
Bottom depth (m)	89	175	119	77	93	91	93
Duration (minutes)	15.6	15.6	15	9	11.4	16.2	15.6
Distance fished (km)	1.475	1.427	1.451	0.827	1.062	1.473	1.408
Performance	0	0	0	-5.4	1.12	-5	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	7	12	2	0	0	0	5
Walleye pollock	0	21	< 1	0	0	< 1	< 1
Pacific ocean perch	0	0	0	11	1	0	0
Northern rockfish	0	0	0	3	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	< 1	0	0	0
Other rockfish	0	0	0	< 1	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	290	609	308	< 1	17	12	7
Pacific halibut	31	28	15	11	10	28	3
Northern rock sole	11	< 1	0	0	< 1	0	0
Southern rock sole	58	2	< 1	13	27	3	6
Flathead sole	3	345	9	0	8	< 1	< 1
Rex sole	< 1	11	2	0	< 1	< 1	< 1
Dover sole	0	0	2	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	10	0	0	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	< 1	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	< 1	0	0	0	0
Smelts	0	7	< 1	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	2	0	2	2	0	0
Bairdi Tanner crab	0	2	< 1	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	6	< 1	0	0	0	0
Sidestripe shrimp	0	< 1	0	0	0	0	0
Scallops	0	0	0	0	< 1	1	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	0	0	< 1	0	0	0
Starfish	< 1	< 1	0	< 1	0	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	< 1	< 1	0	0	0
Other invertebrates	< 1	0	< 1	1	0	< 1	0
Total catch (kg)	401	1056	342	42	67	46	23

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	92	93	94	95	96	97	98
Start date & time	06/17/03 09	06/17/03 12	06/17/03 14	06/17/03 15	06/17/03 18	06/17/03 19	06/18/03 07
Start latitude	N 5558.33	N 5604.89	N 5602.74	N 5601.66	N 5606.30	N 5607.01	N 5621.27
Start longitude	W 15707.57	W 15647.80	W 15648.58	W 15647.89	W 15642.46	W 15643.55	W 15643.26
End latitude	N 5557.69	N 5605.62	N 5601.65	N 5602.45	N 5606.35	N 5607.04	N 5622.03
End longitude	W 15708.23	W 15647.36	W 15647.94	W 15648.36	W 15641.81	W 15642.16	W 15642.88
Bottom depth (m)	101	75	72	82	78	77	93
Duration (minutes)	15	15.6	22.2	16.2	7.8	16.2	15.6
Distance fished (km)	1.402	1.481	2.162	1.57	0.687	1.454	1.493
Performance	0	0	-5.7	0	-1.12	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	5	0	0	0	0	0
Walleye pollock	< 1	0	0	1	0	0	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	162	0	< 1	< 1	0	0	68
Pacific halibut	31	152	38	11	9	14	34
Northern rock sole	2	6	0	2	0	0	0
Southern rock sole	1	62	12	40	4	3	3
Flathead sole	32	< 1	0	0	0	0	0
Rex sole	41	0	0	0	0	0	< 1
Dover sole	3	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	4
Skates	< 1	0	0	0	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	< 1	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	0	0
Smelts	0	0	0	< 1	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	0	0	0	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	< 1	0	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	0	0	0	0
Starfish	< 1	< 1	< 1	0	0	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	0
Other invertebrates	4	< 1	0	< 1	1	< 1	< 1
Total catch (kg)	277	226	50	56	14	18	109

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	99	100	101	102	103	104	105
Start date & time	06/18/03 10	06/18/03 13	06/18/03 16	06/18/03 17	06/18/03 20	06/19/03 07	06/19/03 09
Start latitude	N 5610.22	N 5616.99	N 5622.40	N 5625.45	N 5628.03	N 5628.87	N 5635.66
Start longitude	W 15712.31	W 15727.80	W 15738.97	W 15727.58	W 15725.69	W 15733.99	W 15749.41
End latitude	N 5609.62	N 5617.64	N 5622.36	N 5625.42	N 5628.70	N 5629.50	N 5634.87
End longitude	W 15713.23	W 15728.47	W 15740.27	W 15726.23	W 15726.41	W 15734.60	W 15749.35
Bottom depth (m)	119	167	180	195	177	124	30
Duration (minutes)	15.6	15	15.6	15.6	15.6	15	16.2
Distance fished (km)	1.483	1.428	1.362	1.41	1.465	1.441	1.476
Performance	6.1	0	5	5	6.24	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	2	4	6	20
Walleye pollock	0	0	7	85	41	5	9
Pacific ocean perch	0	< 1	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	5	1	1	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	2	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	148	280	26	126	179	34	4
Pacific halibut	19	0	0	0	0	9	38
Northern rock sole	0	0	0	0	0	0	33
Southern rock sole	0	0	0	0	0	0	< 1
Flathead sole	11	33	60	84	98	50	1
Rex sole	3	< 1	3	2	< 1	< 1	0
Dover sole	0	0	0	0	< 1	< 1	0
Yellowfin sole	0	0	0	0	0	0	64
Other flatfish	0	0	0	0	0	0	17
Pacific salmon	0	0	0	0	0	0	3
Skates	0	0	0	0	6	21	8
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	2	27
Bigmouth sculpin	0	1	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	6
Other sculpins	0	< 1	< 1	0	< 1	< 1	0
Smelts	0	< 1	7	5	3	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	0	< 1	< 1	< 1	1	< 1
Bairdi Tanner crab	0	< 1	< 1	2	< 1	< 1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	4	7	7	< 1	0
Sidestripe shrimp	0	< 1	< 1	< 1	1	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	< 1	0	0
Sponges	< 1	7	0	0	< 1	0	< 1
Starfish	0	< 1	< 1	0	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	< 1	0	0	< 1
Other invertebrates	< 1	< 1	0	< 1	< 1	< 1	51
Total catch (kg)	182	329	110	315	340	129	283

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	106	107	108	109	110	111	112
Start date & time	06/19/03 11	06/19/03 12	06/19/03 14	06/19/03 16	06/19/03 18	06/19/03 19	06/20/03 09
Start latitude	N 5636.86	N 5636.98	N 5641.09	N 5645.18	N 5647.36	N 5646.38	N 5631.37
Start longitude	W 15719.19	W 15718.86	W 15724.16	W 15715.64	W 15704.70	W 15705.83	W 15652.25
End latitude	N 5636.90	N 5637.08	N 5640.51	N 5645.19	N 5646.64	N 5645.80	N 5630.68
End longitude	W 15719.85	W 15720.18	W 15723.27	W 15717.08	W 15705.43	W 15706.70	W 15652.45
Bottom depth (m)	37	37	79	48	45	45	90
Duration (minutes)	7.2	15.6	15.6	16.8	16.8	16.2	15
Distance fished (km)	0.688	1.378	1.438	1.492	1.559	1.426	1.326
Performance	-1.12	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	4	17	0	2	1
Walleye pollock	2	0	< 1	< 1	< 1	0	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	0	0	84	2	0	0	179
Pacific halibut	3	4	27	70	39	41	30
Northern rock sole	0	0	7	14	1	1	< 1
Southern rock sole	0	< 1	2	8	74	48	35
Flathead sole	0	0	26	< 1	0	0	0
Rex sole	0	0	< 1	0	0	0	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	13	5	0	0	0
Other flatfish	1	0	4	33	3	0	0
Pacific salmon	0	0	2	0	0	0	0
Skates	0	0	20	11	27	0	< 1
Sharks	0	0	4	4	0	3	0
Yellow Irish lord	0	0	3	0	1	< 1	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	1	0	3	14	2	8	0
Other sculpins	0	0	0	0	0	< 1	< 1
Smelts	0	0	0	< 1	< 1	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	< 1	< 1	0	< 1	0
Bairdi Tanner crab	0	0	0	< 1	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	0	0	< 1	< 1	8	< 1
Starfish	0	0	1	< 1	< 1	0	1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	< 1	2	< 1	< 1	< 1	< 1
Other invertebrates	1	< 1	28	66	12	55	10
Total catch (kg)	9	5	231	246	161	170	258

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	113	114	115	116	117	118	119
Start date & time	06/20/03 12	06/20/03 14	06/20/03 16	06/20/03 19	06/21/03 07	06/21/03 10	06/21/03 11
Start latitude	N 5643.80	N 5645.39	N 5650.17	N 5650.59	N 5647.93	N 5651.76	N 5651.98
Start longitude	W 15638.77	W 15641.43	W 15625.24	W 15622.34	W 15620.84	W 15613.98	W 15618.82
End latitude	N 5643.010	N 5646.04	N 5649.49	N 5651.13	N 5648.63	N 5651.67	N 5652.77
End longitude	W 15638.34	W 15642.13	W 15625.66	W 15621.34	W 15621.37	W 15613.86	W 15618.92
Bottom depth (m)	158	167	155	183	193	188	192
Duration (minutes)	15.6	15.6	15.6	15.6	15.6	4.2	15.6
Distance fished (km)	1.413	1.441	1.373	1.472	1.438	0.262	1.484
Performance	0	0	0	0	1.1	-1.12	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	2	0	0	0	18	2	2
Walleye pollock	1	4	2	< 1	< 1	0	2
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	4	2	0	0	0	0	< 1
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	2	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	< 1	0	0	0
Arrowtooth flounder	527	307	330	151	188	14	50
Pacific halibut	32	18	15	3	37	0	4
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	59	164	23	35	23	2	46
Rex sole	< 1	< 1	6	2	3	< 1	1
Dover sole	2	< 1	6	5	10	1	14
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	37	< 1	39	2	21	0	8
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	3	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	< 1	< 1	< 1	< 1	0	< 1
Smelts	0	1	< 1	49	14	4	30
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	< 1	< 1	< 1	0	0	1
Bairdi Tanner crab	< 1	< 1	< 1	< 1	< 1	0	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Sidestripe shrimp	< 1	< 1	< 1	< 1	< 1	< 1	1
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	< 1	< 1	0	< 1	0	0
Starfish	< 1	< 1	< 1	0	< 1	0	< 1
Stony coral	0	0	0	0	< 1	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	13	0	0
Snails	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Other invertebrates	2	< 1	3	2	5	< 1	1
Total catch (kg)	669	500	429	252	335	27	164

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	120	121	122	123	124	125	126
Start date & time	06/21/03 13	06/21/03 15	06/21/03 17	06/22/03 07	06/22/03 10	06/22/03 14	06/22/03 18
Start latitude	N 5654.60	N 5654.52	N 5707.05	N 5705.07	N 5704.32	N 5711.13	N 5717.32
Start longitude	W 15621.35	W 15619.83	W 15606.61	W 15538.38	W 15604.74	W 15607.03	W 15610.12
End latitude	N 5653.90	N 5655.20	N 5706.33	N 5704.38	N 5704.57	N 5710.37	N 5716.91
End longitude	W 15620.83	W 15620.53	W 15607.07	W 15537.93	W 15604.48	W 15607.16	W 15611.28
Bottom depth (m)	180	188	82	277	108	91	202
Duration (minutes)	15.6	15.6	15.6	15.6	6	15.6	15.6
Distance fished (km)	1.444	1.481	1.456	1.405	0.542	1.432	1.439
Performance	0	0	1.11	0	-1.12	2.3	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	2	5	85	8	21
Walleye pollock	5	3	0	12	0	0	11
Pacific ocean perch	0	0	0	0	19	0	0
Northern rockfish	0	0	0	0	7	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	2	0	0	27	0	0	0
Shortspine thornyhead	0	0	0	17	0	0	0
Dusky rockfish	0	0	0	0	4	0	0
Other rockfish	0	0	0	2	< 1	0	0
Sablefish	0	3	0	39	0	< 1	0
Arrowtooth flounder	124	105	311	66	1812	325	526
Pacific halibut	5	1	51	< 1	15	30	13
Northern rock sole	< 1	0	< 1	0	0	28	0
Southern rock sole	< 1	0	45	0	0	22	< 1
Flathead sole	69	43	0	16	7	2	34
Rex sole	< 1	< 1	0	9	9	5	5
Dover sole	8	10	0	0	1	6	2
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	12	33	0	0	11	9	45
Sharks	0	0	0	304	0	0	122
Yellow Irish lord	0	0	2	0	0	11	0
Bigmouth sculpin	< 1	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	< 1	0	< 1	0	0	< 1
Smelts	86	55	< 1	1	0	< 1	14
Giant grenadier	0	0	0	0	0	0	0
Other fish	2	1	2	< 1	< 1	< 1	< 1
Bairdi Tanner crab	< 1	0	0	< 1	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	0	1	0	0	< 1
Sidestripe shrimp	1	< 1	0	3	0	0	< 1
Scallops	0	0	< 1	0	< 1	< 1	0
Magistrate armhook squid	0	0	0	7	0	0	0
Sponges	0	< 1	0	0	< 1	< 1	0
Starfish	0	< 1	< 1	2	< 1	1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	11	0	0	0	0
Snails	0	0	< 1	< 1	< 1	2	< 1
Other invertebrates	< 1	< 1	3	1	5	15	1
Total catch (kg)	317	257	427	514	1977	464	796

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	127	128	129	130	131	132	133
Start date & time	06/23/03 07	06/26/03 17	06/27/03 08	06/27/03 11	06/27/03 12	06/27/03 14	06/27/03 16
Start latitude	N 5705.95	N 5807.55	N 5802.14	N 5801.73	N 5801.77	N 5802.46	N 5759.25
Start longitude	W 15517.75	W 15235.38	W 15315.50	W 15317.55	W 15317.84	W 15324.29	W 15333.29
End latitude	N 5706.37	N 5808.33	N 5801.97	N 5801.73	N 5801.88	N 5802.85	N 5759.72
End longitude	W 15518.98	W 15235.26	W 15314.02	W 15317.55	W 15318.95	W 15325.61	W 15332.01
Bottom depth (m)	249	118	46	73	133	53	63
Duration (minutes)	15.6	15	17.4		13.2	16.8	18
Distance fished (km)	1.493	1.472	1.529		1.138	1.523	1.573
Performance	0	0	0	-5.1	0	0	-3.13
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	8	6	2	7	0	0	183
Walleye pollock	19	454	< 1	128	156	0	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	5
Other rockfish	0	0	0	0	0	0	0
Sablefish	3	0	< 1	0	0	0	0
Arrowtooth flounder	180	25	83	774	875	12	0
Pacific halibut	19	2	56	0	51	85	25
Northern rock sole	0	< 1	4	0	0	3	0
Southern rock sole	0	0	100	0	0	68	54
Flathead sole	9	146	41	32	394	15	12
Rex sole	2	< 1	< 1	0	27	0	0
Dover sole	0	0	8	4	29	0	0
Yellowfin sole	0	0	27	0	0	0	0
Other flatfish	0	0	160	13	8	43	0
Pacific salmon	0	0	6	5	0	13	0
Skates	12	10	0	0	27	0	27
Sharks	118	0	0	0	0	0	0
Yellow Irish lord	0	0	2	1	0	3	3
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	17	0	0	0	0
Other sculpins	0	2	< 1	< 1	< 1	0	0
Smelts	5	0	< 1	0	2	1	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	9	< 1	0	0	0	0
Bairdi Tanner crab	< 1	19	< 1	0	< 1	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	4	0	< 1	3	0	0
Sidestripe shrimp	1	< 1	0	0	0	0	0
Scallops	0	0	< 1	0	0	1	< 1
Magistrate armhook squid	< 1	0	0	0	0	0	0
Sponges	0	0	0	0	0	0	0
Starfish	5	< 1	4	< 1	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	0	< 1	< 1	< 1	0	< 1
Other invertebrates	< 1	20	< 1	< 1	2	2	40
Total catch (kg)	383	698	512	967	1,575	247	349

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	134	135	136	137	138	139	140
Start date & time	06/27/03 18	06/27/03 20	06/28/03 07	06/28/03 10	06/28/03 12	06/28/03 15	06/28/03 18
Start latitude	N 5759.20	N 5759.74	N 5747.73	N 5759.28	N 5756.72	N 5744.32	N 5741.20
Start longitude	W 15333.41	W 15337.35	W 15330.35	W 15342.35	W 15357.86	W 15402.71	W 15404.39
End latitude	N 5759.67	N 5759.25	N 5748.51	N 5758.83	N 5756.24	N 5745.07	N 5741.57
End longitude	W 15332.07	W 15338.79	W 15330.38	W 15343.54	W 15359.09	W 15403.37	W 15405.75
Bottom depth (m)	61	161	165	190	197	252	64
Duration (minutes)	18	19.2	15	16.2	17.4	18	17.4
Distance fished (km)	1.628	1.73	1.476	1.468	1.537	1.597	1.546
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	21	0	11	0
Walleye pollock	0	15	180	278	74	296	0
Pacific ocean perch	0	1	0	0	0	0	<1
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	3	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	3	0
Sablefish	0	40	8	11	14	2	0
Arrowtooth flounder	0	1314	570	331	335	335	2
Pacific halibut	18	30	28	3	0	30	67
Northern rock sole	<1	0	0	0	0	0	0
Southern rock sole	81	0	<1	<1	0	0	81
Flathead sole	5	78	255	9	64	66	2
Rex sole	0	24	1	45	6	9	0
Dover sole	0	12	0	32	<1	<1	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	3	<1	0	0	0
Pacific salmon	12	4	0	0	0	0	0
Skates	13	12	17	8	0	124	20
Sharks	0	0	0	144	40	0	0
Yellow Irish lord	<1	0	0	0	0	0	0
Bigmouth sculpin	0	<1	0	0	0	<1	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	<1	<1	0	<1	<1	0
Smelts	0	58	61	324	32	23	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	1	0	5	<1	3	33	<1
Bairdi Tanner crab	0	1	13	1	<1	1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	<1	25	<1	4	5	0
Sidestripe shrimp	0	0	2	<1	3	9	0
Scallops	<1	0	0	0	0	0	<1
Magistrate armhook squid	0	0	0	<1	0	3	0
Sponges	0	0	0	0	0	<1	0
Starfish	<1	<1	6	<1	<1	1	<1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	<1	<1	<1	<1	<1	2	<1
Other invertebrates	32	2	2	2	<1	5	7
Total catch (kg)	164	1593	1176	1213	581	961	180

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	141	142	143	144	145	146	147
Start date & time	06/29/03 07	06/29/03 09	06/29/03 11	06/29/03 14	06/29/03 19	06/30/03 07	06/30/03 09
Start latitude	N 5722.79	N 5718.78	N 5719.05	N 5711.73	N 5701.96	N 5648.71	N 5646.44
Start longitude	W 15448.11	W 15447.82	W 15447.84	W 15450.15	W 15440.82	W 15424.44	W 15412.47
End latitude	N 5723.56	N 5719.60	N 5718.28	N 5712.52	N 5701.80	N 5648.12	N 5645.65
End longitude	W 15447.58	W 15448.11	W 15448.23	W 15449.81	W 15441.01	W 15423.44	W 15412.42
Bottom depth (m)	68	56	58	82	46	62	93
Duration (minutes)	16.8	17.4	17.4	16.2	4.8	17.4	16.8
Distance fished (km)	1.554	1.571	1.531	1.538	0.369	1.525	1.48
Performance	0	0	0	0	-1.2	0	1.11
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	15	3	< 1	0	0	9	51
Walleye pollock	0	0	0	0	0	1032	114
Pacific ocean perch	0	0	0	< 1	0	0	0
Northern rockfish	0	0	0	2494	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	2606	0	0	0
Other rockfish	0	0	0	99	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	932	23	21	1	0	30	122
Pacific halibut	35	49	53	103	0	9	55
Northern rock sole	0	38	13	1	0	1	11
Southern rock sole	11	56	22	7	1	0	0
Flathead sole	14	302	269	0	0	59	118
Rex sole	1	< 1	< 1	0	0	< 1	< 1
Dover sole	8	1	< 1	0	0	< 1	< 1
Yellowfin sole	0	0	0	0	0	1	0
Other flatfish	0	21	21	0	0	14	25
Pacific salmon	0	2	3	17	0	0	0
Skates	30	19	5	0	0	15	52
Sharks	0	20	5	7	0	4	0
Yellow Irish lord	0	1	0	< 1	< 1	< 1	2
Bigmouth sculpin	0	0	0	0	0	0	1
Great sculpin	9	4	1	0	0	0	2
Other sculpins	0	0	0	0	0	< 1	0
Smelts	0	0	0	0	0	0	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	27	< 1	10	32
Bairdi Tanner crab	0	0	0	0	0	2	35
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	86
Northern shrimp	0	0	0	0	0	< 1	< 1
Sidestripe shrimp	0	0	0	0	0	0	< 1
Scallops	< 1	< 1	0	0	< 1	17	3
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	< 1	0	0	0	< 1
Starfish	< 1	< 1	0	< 1	0	2	29
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	2
Snails	< 1	< 1	< 1	< 1	< 1	< 1	10
Other invertebrates	< 1	< 1	1	< 1	3	6	282
Total catch (kg)	1.056	539	416	5,362	5	1,213	1,033

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	148	149	150	151	152	153	154
Start date & time	06/30/03 13	06/30/03 17	07/01/03 07	07/01/03 09	07/01/03 13	07/01/03 17	07/01/03 19
Start latitude	N 5654.81	N 5708.54	N 5654.42	N 5645.16	N 5653.66	N 5653.63	N 5652.22
Start longitude	W 15405.21	W 15347.51	W 15400.06	W 15422.89	W 15446.80	W 15446.79	W 15455.43
End latitude	N 5655.39	N 5708.56	N 5655.06	N 5645.16	N 5653.90	N 5653.75	N 5653.04
End longitude	W 15404.22	W 15348.52	W 15359.09	W 15421.40	W 15448.07	W 15447.68	W 15455.14
Bottom depth (m)	87	23	67	66	104	109	72
Duration (minutes)	16.8	11.4	17.4	17.4	19.2	11.4	17.4
Distance fished (km)	1.52	1.05	1.58	1.538	1.546	0.942	1.584
Performance	0	0	0	0	-3.13	4.2	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	50	0	0	14	2	10	38
Walleye pollock	765	2	247	1007	33	31	< 1
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	1	0	0	3	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	1	< 1	0
Sablefish	0	0	< 1	0	6	0	13
Arrowtooth flounder	104	0	23	114	2647	829	11
Pacific halibut	10	16	21	27	33	10	51
Northern rock sole	0	17	0	< 1	< 1	0	0
Southern rock sole	0	0	0	0	2	< 1	1
Flathead sole	129	6	50	99	99	41	129
Rex sole	0	0	0	0	10	2	1
Dover sole	1	0	< 1	< 1	2	4	0
Yellowfin sole	6	124	60	2	0	0	0
Other flatfish	6	12	8	10	53	23	3
Pacific salmon	0	0	0	0	0	0	3
Skates	0	0	0	44	72	14	0
Sharks	0	0	0	13	4	0	3
Yellow Irish lord	0	0	0	0	< 1	0	2
Bigmouth sculpin	< 1	0	0	0	0	8	0
Great sculpin	21	4	< 1	0	6	< 1	0
Other sculpins	17	< 1	24	< 1	1	2	0
Smelts	0	0	< 1	0	0	0	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	16	2	9	9	< 1	< 1	< 1
Bairdi Tanner crab	7	0	1	4	306	138	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	0	< 1	< 1	< 1	< 1	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	< 1	2	10	16	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	0	< 1	0	< 1
Starfish	0	0	0	0	2	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	< 1	14	26	< 1
Other invertebrates	< 1	11	< 1	2	35	98	25
Total catch (kg)	1,135	195	447	1,348	3,340	1,258	282

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	155	156	157	158	159	160	161
Start date & time	07/02/03 07	07/02/03 08	07/02/03 13	07/02/03 15	07/02/03 18	07/02/03 20	07/03/03 08
Start latitude	N 5708.70	N 5711.01	N 5724.07	N 5738.89	N 5741.47	N 5750.39	N 5745.94
Start longitude	W 15517.83	W 15517.53	W 15458.32	W 15453.61	W 15429.41	W 15436.71	W 15511.95
End latitude	N 5709.27	N 5711.70	N 5723.42	N 5739.69	N 5741.84	N 5750.06	N 5745.24
End longitude	W 15516.93	W 15519.01	W 15459.03	W 15453.23	W 15428.13	W 15438.32	W 15512.77
Bottom depth (m)	247	244	232	230	212	235	42
Duration (minutes)	15	22.8	15.6	16.8	15.6	19.8	16.8
Distance fished (km)	1.429	2.009	1.436	1.586	1.468	1.732	1.608
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	7	11	32	10	0	5	0
Walleye pollock	31	56	60	44	13	20	0
Pacific ocean perch	0	0	0	0	< 1	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	2	2	2	1	2	2	0
Shortspine thornyhead	0	1	< 1	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	6	36	14	8	9	17	0
Arrowtooth flounder	59	315	388	186	487	355	0
Pacific halibut	7	22	5	0	15	0	58
Northern rock sole	0	0	0	0	0	0	1
Southern rock sole	0	0	0	0	0	0	57
Flathead sole	44	14	7	12	31	6	0
Rex sole	2	6	< 1	2	4	2	0
Dover sole	0	0	9	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	22	26	11	9	4	45	0
Sharks	100	0	0	104	0	0	0
Yellow Irish lord	0	0	0	0	0	0	4
Bigmouth sculpin	4	0	9	0	0	0	0
Great sculpin	0	0	0	0	0	0	4
Other sculpins	< 1	< 1	0	< 1	< 1	< 1	0
Smelts	13	10	180	6	25	7	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	2	< 1	3	< 1	< 1	0
Bairdi Tanner crab	0	0	< 1	< 1	3	2	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	< 1	1	< 1	< 1	0
Sidestripe shrimp	< 1	2	20	2	2	3	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	< 1	3	< 1	< 1	< 1	9	0
Sponges	0	0	0	0	0	0	< 1
Starfish	1	5	< 1	4	4	2	1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	< 1	< 1	1	< 1	0
Other invertebrates	2	1	1	2	< 1	1	6
Total catch (kg)	304	513	739	394	603	480	132

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	162	163	164	165	166	167	168
Start date & time	07/03/03 09	07/03/03 13	07/04/03 11	07/04/03 14	07/04/03 17	07/05/03 07	07/05/03 10
Start latitude	N 5748.31	N 5802.26	N 5810.30	N 5812.70	N 5818.96	N 5821.71	N 5821.67
Start longitude	W 15515.90	W 15440.16	W 15338.15	W 15338.65	W 15359.30	W 15347.33	W 15323.81
End latitude	N 5747.79	N 5803.08	N 5809.17	N 5811.90	N 5818.97	N 5820.54	N 5821.24
End longitude	W 15514.64	W 15440.27	W 15339.16	W 15338.70	W 15400.82	W 15347.03	W 15325.02
Bottom depth (m)	28	35	194	185	107	198	169
Duration (minutes)	18	17.4	25.8	16.8	17.4	26.4	15.6
Distance fished (km)	1.612	1.558	2.384	1.482	1.506	2.246	1.448
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	4	8	3	0	385	10	15
Walleye pollock	0	6	47	10	38	87	39
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	4	13	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	9	34	22	1	6	50
Arrowtooth flounder	0	32	411	216	370	404	326
Pacific halibut	113	91	11	30	21	7	0
Northern rock sole	182	55	0	0	0	0	0
Southern rock sole	7	0	0	0	0	0	0
Flathead sole	4	45	135	90	188	83	72
Rex sole	0	0	9	5	18	< 1	3
Dover sole	0	5	< 1	< 1	13	2	15
Yellowfin sole	< 1	62	0	0	0	0	0
Other flatfish	213	153	0	0	9	0	0
Pacific salmon	0	4	0	0	0	0	0
Skates	27	16	34	0	29	124	13
Sharks	4	0	0	34	188	8	0
Yellow Irish lord	< 1	0	0	0	10	0	0
Bigmouth sculpin	0	0	< 1	0	0	5	0
Great sculpin	0	3	0	0	3	0	0
Other sculpins	0	4	< 1	< 1	< 1	< 1	< 1
Smelts	0	< 1	554	397	0	32	28
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	< 1	3	< 1	< 1	11	1
Bairdi Tanner crab	0	0	8	4	0	7	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	4	5	3	3	4
Sidestripe shrimp	0	0	6	3	0	2	< 1
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	< 1	0	0	< 1	< 1
Sponges	0	0	0	0	0	0	0
Starfish	3	< 1	6	3	0	< 1	2
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	< 1	< 1	< 1	2	0
Other invertebrates	10	< 1	2	1	< 1	2	6
Total catch (kg)	566	496	1272	836	1276	796	576

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	169	170	171	172	173	174	175
Start date & time	07/05/03 12	07/05/03 16	07/05/03 18	07/06/03 07	07/06/03 11	07/06/03 13	07/06/03 15
Start latitude	N 5813.29	N 5835.45	N 5836.74	N 5829.46	N 5843.44	N 5845.82	N 5846.24
Start longitude	W 15316.35	W 15240.93	W 15241.48	W 15239.93	W 15253.04	W 15248.95	W 15239.02
End latitude	N 5813.95	N 5835.94	N 5837.40	N 5829.31	N 5844.010	N 5846.59	N 5847.02
End longitude	W 15315.44	W 15240.28	W 15240.57	W 15238.38	W 15252.28	W 15248.84	W 15239.67
Bottom depth (m)	176	55	76	175	151	165	206
Duration (minutes)	17.4	15.6	16.8	18	15.6	15.6	17.4
Distance fished (km)	1.539	1.25	1.541	1.566	1.449	1.456	1.608
Performance	0	1.12	0	1.12	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	45	23	7	64	67	39	40
Walleye pollock	7	0	0	196	10	8	11
Pacific ocean perch	< 1	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	< 1	0	0	1	2	0	8
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	< 1	< 1	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	7	0	48	0	17	17	4
Arrowtooth flounder	1742	29	1839	161	296	90	360
Pacific halibut	31	34	12	6	67	8	0
Northern rock sole	0	0	< 1	0	0	0	0
Southern rock sole	0	22	8	0	0	0	0
Flathead sole	21	< 1	38	1296	20	7	12
Rex sole	48	0	< 1	5	9	6	10
Dover sole	20	0	6	5	7	2	41
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	11	0	0	0
Pacific salmon	0	9	6	0	17	4	4
Skates	0	0	0	76	0	0	10
Sharks	0	0	17	11	8	8	8
Yellow Irish lord	0	4	2	0	0	0	3
Bigmouth sculpin	0	0	0	7	0	0	21
Great sculpin	0	0	1	0	0	0	0
Other sculpins	0	< 1	< 1	0	0	0	0
Smelts	12	71	0	0	4	3	4
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	< 1	< 1	0	5
Bairdi Tanner crab	0	0	0	< 1	0	0	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	< 1
Northern shrimp	1	0	0	7	< 1	< 1	< 1
Sidestripe shrimp	< 1	0	0	< 1	0	< 1	< 1
Scallops	0	0	< 1	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	< 1	0	< 1	< 1	0	< 1
Starfish	< 1	< 1	< 1	< 1	0	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	< 1	0	< 1	0	2
Other invertebrates	< 1	30	27	< 1	4	1	63
Total catch (kg)	1936	222	2015	1848	529	192	608

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	176	177	178	179	180	181	182
Start date & time	07/06/03 18	07/07/03 07	07/07/03 10	07/07/03 12	07/07/03 14	07/07/03 16	07/07/03 17
Start latitude	N 5847.27	N 5848.01	N 5856.97	N 5904.92	N 5914.47	N 5916.93	N 5923.30
Start longitude	W 15228.89	W 15317.47	W 15321.79	W 15323.87	W 15330.93	W 15333.68	W 15346.24
End latitude	N 5847.07	N 5848.74	N 5856.28	N 5905.07	N 5914.25	N 5916.63	N 5922.78
End longitude	W 15230.31	W 15316.84	W 15321.19	W 15325.42	W 15329.49	W 15332.27	W 15345.10
Bottom depth (m)	184	28	22	53	34	32	19
Duration (minutes)	16.2	16.8	15.6	16.8	18	16.8	15.6
Distance fished (km)	1.446	1.518	1.434	1.535	1.475	1.484	1.48
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	46	0	0	2	< 1	< 1	< 1
Walleye pollock	0	0	0	213	< 1	< 1	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	83	0	0	0	0	0	0
Arrowtooth flounder	3508	21	0	39	8	3	0
Pacific halibut	57	49	43	40	38	32	22
Northern rock sole	0	3	17	1	< 1	4	1
Southern rock sole	0	0	1	< 1	0	0	0
Flathead sole	2	< 1	0	12	< 1	< 1	0
Rex sole	8	0	0	< 1	0	0	0
Dover sole	10	0	0	0	0	0	0
Yellowfin sole	0	1	< 1	2	63	22	< 1
Other flatfish	0	60	232	15	65	57	1
Pacific salmon	0	< 1	0	< 1	6	0	< 1
Skates	34	0	12	53	132	62	0
Sharks	2	0	0	2	24	88	290
Yellow Irish lord	0	0	0	< 1	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	0	0	0
Smelts	0	< 1	0	< 1	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	0	< 1	1	1	1	7
Bairdi Tanner crab	0	0	0	< 1	< 1	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	5	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	0	0	< 1	< 1
Starfish	< 1	0	0	0	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	< 1	0	< 1	< 1
Other invertebrates	1	< 1	< 1	2	< 1	< 1	2
Total catch (kg)	3752	135	306	391	340	271	326

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	183	184	185	186	187	188	189
Start date & time	07/08/03 07	07/08/03 08	07/08/03 10	07/08/03 12	07/08/03 13	07/08/03 17	07/08/03 18
Start latitude	N 5934.63	N 5929.45	N 5924.28	N 5925.62	N 5925.78	N 5915.51	N 5916.93
Start longitude	W 15309.29	W 15305.20	W 15257.59	W 15245.63	W 15245.47	W 15234.27	W 15236.36
End latitude	N 5934.02	N 5929.90	N 5923.73	N 5926.32	N 5926.47	N 5915.07	N 5917.43
End longitude	W 15310.13	W 15303.80	W 15258.74	W 15244.85	W 15244.63	W 15235.51	W 15235.14
Bottom depth (m)	30	43	55	66	67	73	76
Duration (minutes)	15	18	18	16.2	18	15.6	16.2
Distance fished (km)	1.406	1.6	1.536	1.538	1.58	1.469	1.511
Performance	0	0	0	-3.12	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	7	< 1	9	5	< 1	0	0
Walleye pollock	< 1	0	0	0	0	0	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	< 1	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	< 1	2	56	6	20	3	6
Pacific halibut	32	48	36	41	86	59	17
Northern rock sole	2	2	< 1	2	< 1	< 1	< 1
Southern rock sole	0	0	0	0	0	6	2
Flathead sole	< 1	< 1	0	0	0	0	0
Rex sole	0	0	1	0	0	0	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	84	15	0	0	0	0	0
Other flatfish	62	87	152	81	78	65	100
Pacific salmon	< 1	5	2	3	17	2	0
Skates	8	13	121	0	0	0	0
Sharks	49	8	35	4	16	0	5
Yellow Irish lord	< 1	0	0	1	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	1	0	0	0
Other sculpins	< 1	1	7	0	0	0	0
Smelts	< 1	< 1	0	< 1	< 1	0	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	6	< 1	0	0	< 1	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	< 1	< 1	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	0	< 1	0	0
Starfish	< 1	0	0	0	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	0	< 1	< 1	< 1	0
Other invertebrates	3	1	3	10	1	2	4
Total catch (kg)	256	185	424	157	220	137	135

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	190	191	192	193	194	195	196
Start date & time	07/09/03 07	07/09/03 09	07/09/03 11	07/09/03 16	07/09/03 19	07/10/03 07	07/10/03 09
Start latitude	N 5947.49	N 5941.29	N 5931.91	N 5916.16	N 5908.09	N 5827.48	N 5827.18
Start longitude	W 15209.86	W 15208.38	W 15150.21	W 15237.48	W 15215.25	W 15159.90	W 15154.64
End latitude	N 5948.12	N 5940.52	N 5931.46	N 5915.75	N 5908.67	N 5827.39	N 5826.60
End longitude	W 15209.19	W 15208.62	W 15151.54	W 15238.66	W 15213.81	W 15201.31	W 15153.65
Bottom depth (m)	42	34	70	73	134	121	91
Duration (minutes)	14.4	18	16.8	15	19.2	15.6	16.2
Distance fished (km)	1.507	1.5	1.536	1.384	1.781	1.398	1.482
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	2	2	4	21	19
Walleye pollock	< 1	0	< 1	0	< 1	25	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	< 1	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	0	0	91	2	180	30	440
Pacific halibut	45	34	59	33	1	< 1	23
Northern rock sole	0	0	2	0	1	0	0
Southern rock sole	0	0	< 1	6	11	8	4
Flathead sole	0	0	7	0	0	0	0
Rex sole	0	0	34	0	0	< 1	0
Dover sole	0	0	1	0	< 1	< 1	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	2	3	693	59	9	0	0
Pacific salmon	0	0	6	< 1	0	0	6
Skates	0	0	50	0	0	12	18
Sharks	0	0	0	2	14	14	3
Yellow Irish lord	0	0	0	0	< 1	< 1	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	3	0	0	0	0
Other sculpins	0	0	0	0	0	0	0
Smelts	0	0	< 1	0	0	11	2
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	< 1	0	0	< 1	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	< 1	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	< 1	< 1	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	< 1	0	0	0	0	0
Starfish	0	0	0	0	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	0	0	0	0	0
Other invertebrates	4	2	5	2	1	2	< 1
Total catch (kg)	52	39	955	107	223	126	516

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	197	198	199	200	201	202	203
Start date & time	07/10/03 11	07/10/03 13	07/10/03 16	07/10/03 18	07/11/03 09	07/11/03 12	07/11/03 14
Start latitude	N 5826.36	N 5828.37	N 5827.00	N 5825.31	N 5807.47	N 5806.23	N 5808.15
Start longitude	W 15204.64	W 15222.87	W 15222.88	W 15223.58	W 15200.19	W 15134.32	W 15129.02
End latitude	N 5826.20	N 5829.08	N 5826.29	N 5824.59	N 5806.73	N 5807.01	N 5807.49
End longitude	W 15203.27	W 15221.92	W 15223.48	W 15224.22	W 15200.25	W 15133.86	W 15130.44
Bottom depth (m)	126	148	142	132	59	151	159
Duration (minutes)	15	19.2	16.2	16.8	15	17.4	21
Distance fished (km)	1.396	1.663	1.38	1.515	1.382	1.562	1.895
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	9	96	24	77	< 1	26	83
Walleye pollock	4	639	646	694	0	19	25
Pacific ocean perch	0	0	0	0	0	< 1	0
Northern rockfish	< 1	0	0	< 1	0	< 1	< 1
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	2	< 1	9	0	< 1	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	< 1	0	0	0	2	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	31	91
Arrowtooth flounder	22	33	86	104	2	323	220
Pacific halibut	20	0	8	0	4	25	0
Northern rock sole	0	0	0	0	2	0	0
Southern rock sole	3	< 1	0	1	7	0	1
Flathead sole	31	538	245	157	0	95	82
Rex sole	2	0	< 1	5	0	37	49
Dover sole	3	0	< 1	< 1	0	36	43
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	6	1	< 1	0	< 1	0
Pacific salmon	15	0	0	0	0	3	8
Skates	0	9	15	39	0	2	19
Sharks	31	4	51	4	4	5	9
Yellow Irish lord	0	< 1	< 1	< 1	0	0	0
Bigmouth sculpin	< 1	0	0	2	0	0	0
Great sculpin	0	7	11	1	0	0	0
Other sculpins	0	< 1	0	0	0	0	0
Smelts	< 1	4	< 1	3	< 1	< 1	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	3	4	23	2	< 1	3
Bairdi Tanner crab	0	< 1	4	< 1	< 1	0	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	4	7	11	0	< 1	< 1
Sidestripe shrimp	0	< 1	0	0	0	0	0
Scallops	< 1	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	0	< 1	0	0
Starfish	< 1	5	3	2	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	11	0	0	0	8	0	0
Snails	< 1	< 1	0	0	< 1	< 1	< 1
Other invertebrates	< 1	6	2	< 1	6	1	1
Total catch (kg)	154	1359	1109	1133	40	608	637

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	204	205	206	207	208	209	210
Start date & time	07/11/03 17	07/11/03 19	07/12/03 08	07/12/03 09	07/12/03 12	07/12/03 14	07/12/03 16
Start latitude	N 5804.39	N 5814.15	N 5818.07	N 5818.57	N 5821.07	N 5823.72	N 5824.06
Start longitude	W 15125.29	W 15119.03	W 15110.01	W 15112.17	W 15041.17	W 15043.81	W 15040.52
End latitude	N 5804.93	N 5814.35	N 5817.71	N 5818.63	N 5821.30	N 5824.46	N 5824.82
End longitude	W 15123.99	W 15120.50	W 15108.75	W 15113.73	W 15041.12	W 15044.55	W 15040.09
Bottom depth (m)	126	156	90	84	63	71	73
Duration (minutes)	18	17.4	16.8	17.4	9.6	16.8	16.8
Distance fished (km)	1.663	1.513	1.459	1.562	0.792	1.609	1.512
Performance	0	0	0	0	-1.2	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	19	207	0	0	0	0	0
Walleye pollock	133	0	< 1	0	0	0	0
Pacific ocean perch	0	< 1	0	0	0	0	0
Northern rockfish	< 1	1	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	3	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	12	0	0	0	0	0
Other rockfish	0	< 1	0	0	0	0	0
Sablefish	9	57	0	0	0	0	0
Arrowtooth flounder	295	1757	2	< 1	0	0	0
Pacific halibut	29	83	34	211	0	113	226
Northern rock sole	0	0	0	0	0	20	7
Southern rock sole	0	1	20	21	0	69	23
Flathead sole	29	47	0	0	0	0	0
Rex sole	40	52	0	0	0	0	0
Dover sole	21	63	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	3	0	8	7	0	0	0
Skates	0	8	< 1	0	0	29	14
Sharks	84	0	3	4	20	88	113
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	0	0
Smelts	< 1	0	0	< 1	0	0	1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	< 1	< 1	< 1	0	20	< 1
Bairdi Tanner crab	0	< 1	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	< 1	< 1	0	< 1	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	< 1	0	< 1	< 1	< 1	< 1
Starfish	4	< 1	< 1	< 1	6	7	4
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	< 1	< 1	0	< 1	< 1	1
Other invertebrates	< 1	3	1	3	8	4	4
Total catch (kg)	666	2298	68	247	35	350	393

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	211	212	213	214	215	216	217
Start date & time	07/12/03 17	07/15/03 21	07/16/03 07	07/16/03 10	07/16/03 12	07/16/03 15	07/16/03 17
Start latitude	N 5829.09	N 5924.01	N 5858.44	N 5858.97	N 5858.58	N 5903.13	N 5855.36
Start longitude	W 15049.76	W 14950.35	W 14915.62	W 14938.17	W 14959.38	W 14958.55	W 14945.98
End latitude	N 5829.22	N 5923.50	N 5857.68	N 5858.33	N 5857.88	N 5902.37	N 5855.11
End longitude	W 15048.28	W 14951.53	W 14915.33	W 14937.23	W 14959.02	W 14958.88	W 14944.41
Bottom depth (m)	92	172	218	232	219	208	238
Duration (minutes)	16.8	16.8	16.2	16.8	15.6	16.8	18
Distance fished (km)	1.49	1.52	1.469	1.52	1.407	1.47	1.609
Performance	-1.11	0	0	0	0	0	0
Atka mackerel	0	0	2	0	0	0	2
Pacific cod	< 1	11	0	0	0	0	0
Walleye pollock	0	1	14	83	30	34	18
Pacific ocean perch	0	0	66	2	25	6	< 1
Northern rockfish	< 1	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	4	2	3	3	7	3
Shortspine thornyhead	0	0	25	43	50	52	56
Dusky rockfish	0	3	2	0	0	0	0
Other rockfish	4	3	< 1	0	0	0	0
Sablefish	0	11	143	32	37	13	42
Arrowtooth flounder	359	206	172	80	94	98	131
Pacific halibut	18	75	0	0	0	0	0
Northern rock sole	2	0	0	0	0	0	0
Southern rock sole	22	0	0	0	0	0	0
Flathead sole	0	35	< 1	1	1	1	7
Rex sole	0	4	< 1	1	3	2	2
Dover sole	< 1	16	6	8	4	0	15
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	11	26	16	7	4	22	18
Sharks	15	3	5	1	4	2	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	1	0	0	0	0	0	0
Other sculpins	0	< 1	< 1	0	< 1	< 1	0
Smelts	0	21	20	44	39	27	44
Giant grenadier	0	0	0	0	0	0	0
Other fish	14	< 1	< 1	0	< 1	3	0
Bairdi Tanner crab	< 1	< 1	0	0	< 1	1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	6	< 1	< 1	< 1	6	< 1
Sidestripe shrimp	0	2	3	1	2	6	1
Scallops	< 1	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	4	11	3	< 1	< 1	0	0
Starfish	7	4	< 1	< 1	< 1	3	2
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	4	< 1	< 1	0	0	0	0
Other invertebrates	9	3	8	7	5	4	23
Total catch (kg)	472	447	490	316	302	286	367

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	218	219	220	221	222	223	224
Start date & time	07/18/03 07	07/18/03 09	07/18/03 12	07/18/03 13	07/18/03 14	07/18/03 16	07/19/03 07
Start latitude	N 5811.100	N 5814.28	N 5824.81	N 5826.15	N 5825.72	N 5832.55	N 5834.13
Start longitude	W 15026.33	W 15015.20	W 15009.71	W 15014.64	W 15010.55	W 15025.54	W 15024.82
End latitude	N 5811.97	N 5814.13	N 5824.31	N 5825.91	N 5825.13	N 5832.77	N 5834.55
End longitude	W 15026.43	W 15013.71	W 15009.22	W 15014.32	W 15009.89	W 15024.22	W 15023.64
Bottom depth (m)	90	79	73	75	77	122	161
Duration (minutes)	7.2	16.2	11.4	8.4	15	15	15
Distance fished (km)	0.507	1.509	1.079	0.732	1.324	1.38	1.411
Performance	-1.2	2.4	0	1.11	0	0	0
Atka mackerel	< 1	0	0	0	0	0	1
Pacific cod	0	0	0	0	0	267	5
Walleye pollock	0	0	0	0	0	0	7
Pacific ocean perch	0	0	0	0	0	0	100
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	305
Arrowtooth flounder	0	0	0	0	0	12934	643
Pacific halibut	30	90	363	49	626	1983	11
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	2	0	0	0	0
Flathead sole	0	0	0	0	0	0	34
Rex sole	0	0	0	0	0	0	5
Dover sole	0	0	0	0	0	0	10
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	0	6	12
Sharks	0	0	0	0	3	1	2
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	4
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	0	< 1
Smelts	0	32	< 1	0	0	0	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	2	1	< 1	0	17	23	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	< 1	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	1	0	0	< 1	0	0
Starfish	< 1	< 1	3	0	< 1	< 1	0
Stony coral	< 1	< 1	0	0	0	0	0
Soft coral	0	< 1	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	0	< 1	< 1	0	0
Other invertebrates	5	3	1	< 1	6	0	< 1
Total catch (kg)	39	128	370	49	653	15214	1138

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	225	226	227	228	229	230	231
Start date & time	07/19/03 08	07/19/03 10	07/19/03 13	07/19/03 17	07/19/03 18	07/19/03 20	07/20/03 07
Start latitude	N 5835.52	N 5844.14	N 5854.62	N 5854.83	N 5855.72	N 5854.58	N 5829.83
Start longitude	W 15022.20	W 15007.53	W 15019.49	W 15046.60	W 15047.45	W 15052.33	W 15114.98
End latitude	N 5836.00	N 5844.62	N 5854.38	N 5855.32	N 5855.03	N 5854.32	N 5830.04
End longitude	W 15021.10	W 15008.69	W 15020.96	W 15045.47	W 15047.99	W 15053.69	W 15113.63
Bottom depth (m)	170	159	142	165	162	137	134
Duration (minutes)	15	15	17.4	15	15.6	16.2	15
Distance fished (km)	1.418	1.457	1.518	1.443	1.411	1.435	1.387
Performance	0	5.8	0	0	0	0	-3.1
Atka mackerel	0	0	< 1	0	2	1	0
Pacific cod	11	0	240	0	0	13	16
Walleye pollock	13	1	< 1	< 1	< 1	< 1	0
Pacific ocean perch	57	128	4	8	13	3	1
Northern rockfish	0	< 1	0	1	0	1	7
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	7	20	0	< 1	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	2	11	0	4	0	0	39
Other rockfish	< 1	36	0	< 1	0	0	0
Sablefish	42	6	37	< 1	4	45	58
Arrowtooth flounder	223	63	123	26	108	314	4168
Pacific halibut	0	42	16	0	9	0	59
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	26	13	< 1	0	< 1	0	< 1
Rex sole	8	2	11	1	10	13	1
Dover sole	20	3	4	3	20	4	2
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	8	0
Skates	< 1	0	0	9	2	12	0
Sharks	6	4	0	0	0	3	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	0	< 1	0	0	0
Smelts	168	35	< 1	< 1	0	< 1	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	< 1	< 1	0	< 1	0
Bairdi Tanner crab	0	0	0	0	0	0	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	1	< 1	< 1	< 1	< 1	0
Sidestripe shrimp	0	< 1	0	< 1	< 1	0	0
Scallops	0	0	0	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	27	< 1	< 1	0	< 1	0
Starfish	< 1	< 1	< 1	< 1	0	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	< 1
Other invertebrates	< 1	4	6	5	< 1	2	2
Total catch (kg)	584	398	445	59	170	419	4355

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	232	233	234	235	236	237	238
Start date & time	07/20/03 09	07/20/03 11	07/20/03 15	07/20/03 17	07/20/03 21	07/21/03 07	07/21/03 11
Start latitude	N 5829.79	N 5844.47	N 5846.59	N 5900.63	N 5902.79	N 5903.64	N 5905.62
Start longitude	W 15115.22	W 15120.11	W 15206.85	W 15154.67	W 15132.01	W 15123.46	W 15051.52
End latitude	N 5830.01	N 5844.55	N 5846.63	N 5900.07	N 5902.51	N 5903.68	N 5905.49
End longitude	W 15113.85	W 15118.59	W 15205.45	W 15154.22	W 15130.71	W 15121.89	W 15050.10
Bottom depth (m)	135	160	133	195	115	68	199
Duration (minutes)	15	16.2	15	12.6	15.6	16.8	15
Distance fished (km)	1.413	1.492	1.368	1.149	1.376	1.522	1.399
Performance	0	0	0	0	0	0	0
Atka mackerel	< 1	3	< 1	0	0	0	6
Pacific cod	2	42	1	43	61	0	106
Walleye pollock	0	17	< 1	7	< 1	0	40
Pacific ocean perch	0	53	2	< 1	0	0	6
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	2
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	< 1
Sablefish	26	73	2	2	0	0	35
Arrowtooth flounder	1012	113	140	254	112	0	362
Pacific halibut	28	10	16	24	138	40	9
Northern rock sole	0	0	0	0	0	< 1	0
Southern rock sole	0	0	0	0	1	26	0
Flathead sole	2	0	0	0	0	0	0
Rex sole	< 1	7	< 1	0	0	0	10
Dover sole	0	2	3	< 1	0	0	7
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	4	0	0	0	0	0	0
Skates	0	12	0	< 1	27	0	0
Sharks	0	0	0	0	26	14	0
Yellow Irish lord	0	0	0	< 1	< 1	0	0
Bigmouth sculpin	9	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	0	0	< 1
Smelts	0	< 1	< 1	0	< 1	0	1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	< 1	< 1	< 1	13	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	0	0	0	0	< 1
Sidestripe shrimp	0	0	0	0	0	0	< 1
Scallops	0	0	< 1	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	< 1	< 1	< 1	< 1	0	1
Starfish	0	0	< 1	< 1	2	1	1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	< 1	0	< 1	< 1	0
Other invertebrates	< 1	8	5	< 1	6	2	3
Total catch (kg)	1085	341	174	333	374	96	591

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	239	240	241	242	243	244	245
Start date & time	07/21/03 12	07/21/03 14	07/22/03 07	07/22/03 08	07/22/03 09	07/22/03 11	07/22/03 13
Start latitude	N 5905.65	N 5907.06	N 6010.45	N 6014.09	N 6018.05	N 6013.48	N 6013.70
Start longitude	W 15045.91	W 15037.75	W 14556.64	W 14557.27	W 14603.37	W 14540.70	W 14535.11
End latitude	N 5905.37	N 5906.77	N 6010.47	N 6014.18	N 6018.00	N 6013.17	N 6013.37
End longitude	W 15044.60	W 15036.38	W 14555.20	W 14555.84	W 14601.92	W 14539.33	W 14533.81
Bottom depth (m)	164	104	106	107	42	82	50
Duration (minutes)	15.6	15.6	15	15	15	15.6	15
Distance fished (km)	1.372	1.435	1.342	1.358	1.354	1.413	1.385
Performance	0	0	0	0	0	0	0
Atka mackerel	108	8	4	2	0	3	< 1
Pacific cod	44	0	0	0	20	0	1
Walleye pollock	16	< 1	10	16	2	13	5
Pacific ocean perch	19	< 1	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	2	< 1	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	< 1	< 1	0	0	12	0	0
Sablefish	8	0	10	4	0	6	< 1
Arrowtooth flounder	172	8	111	107	3	43	5
Pacific halibut	33	92	9	8	< 1	4	11
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	3	0	0	0	0	0
Flathead sole	0	0	15	48	12	35	16
Rex sole	12	0	7	6	12	6	10
Dover sole	6	0	8	8	0	22	8
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	2	< 1	0	< 1	145	3	51
Pacific salmon	0	3	0	0	0	0	0
Skates	6	0	0	0	43	0	23
Sharks	2	0	2	16	0	6	4
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	< 1	< 1	0	< 1	0
Smelts	0	0	4	44	4	10	1
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	8	2	57	4	64
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	0	< 1	5	0	4	< 1
Sidestripe shrimp	0	0	0	1	< 1	< 1	0
Scallops	0	0	< 1	< 1	0	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	1	< 1	0	0	0	0	0
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	< 1	0	0	0	< 1	0
Other invertebrates	4	2	0	2	< 1	1	< 1
Total catch (kg)	434	118	190	271	312	160	201

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	246	247	248	249	250	251	252
Start date & time	07/22/03 16	07/23/03 07	07/23/03 08	07/23/03 11	07/23/03 13	07/24/03 08	07/24/03 11
Start latitude	N 6005.17	N 5934.82	N 5934.83	N 5929.53	N 5931.51	N 5942.45	N 5946.29
Start longitude	W 14500.57	W 14143.52	W 14127.23	W 14040.14	W 14031.94	W 13957.20	W 13948.25
End latitude	N 6005.16	N 5934.63	N 5934.82	N 5929.04	N 5931.09	N 5942.43	N 5946.09
End longitude	W 14459.06	W 14142.11	W 14125.80	W 14039.07	W 14030.67	W 13955.77	W 13949.66
Bottom depth (m)	95	143	120	284	251	118	59
Duration (minutes)	15.6	15.6	15	15	15.6	15	15
Distance fished (km)	1.42	1.393	1.359	1.381	1.45	1.353	1.401
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	0	0	19	5
Walleye pollock	1	4	5	11	5	77	30
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	92	12	0	0
Rougheye rockfish	4	< 1	< 1	1	0	< 1	0
Shortspine thornyhead	0	4	< 1	27	22	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	24	47	0	< 1
Arrowtooth flounder	11	31	24	35	151	18	3
Pacific halibut	0	0	0	0	0	0	2
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	< 1	< 1	1	0	< 1	25	9
Rex sole	0	< 1	1	15	7	8	0
Dover sole	0	0	0	44	83	3	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	1
Pacific salmon	0	0	0	0	0	0	0
Skates	7	0	14	12	8	36	0
Sharks	31	31	16	0	6	38	9
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	< 1	0
Smelts	4	3	1	< 1	1	7	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	3	< 1	< 1	< 1	0	62	53
Bairdi Tanner crab	0	0	0	0	< 1	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	4	< 1	0	0	0	36	2
Sidestripe shrimp	0	< 1	0	1	< 1	20	< 1
Scallops	0	0	0	0	0	< 1	0
Magistrate armhook squid	0	0	0	< 1	2	0	0
Sponges	0	0	0	< 1	0	0	0
Starfish	< 1	< 1	1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	< 1	< 1	0	0
Other invertebrates	< 1	< 1	< 1	5	2	< 1	3
Total catch (kg)	66	75	65	267	347	353	121

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	253	254	255	256	257	258	259
Start date & time	07/24/03 15	07/24/03 15	07/24/03 18	07/24/03 21	07/25/03 07	07/25/03 10	07/25/03 12
Start latitude	N 5922.20	N 5922.47	N 5908.96	N 5858.57	N 5857.79	N 5834.19	N 5833.01
Start longitude	W 14007.80	W 14007.62	W 13942.59	W 13908.42	W 13823.19	W 13757.49	W 13801.01
End latitude	N 5922.20	N 5922.52	N 5908.45	N 5858.12	N 5857.75	N 5834.05	N 5832.97
End longitude	W 14007.80	W 14006.17	W 13941.54	W 13907.27	W 13821.74	W 13756.07	W 13759.57
Bottom depth (m)	115	168	115	109	70	122	132
Duration (minutes)	0	15	15.6	15.6	15.6	15.6	15.6
Distance fished (km)	0	1.387	1.406	1.405	1.416	1.422	1.412
Performance	-5.23	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	15	0	0	0	0
Walleye pollock	0	< 1	4	3	0	18	10
Pacific ocean perch	0	< 1	< 1	0	0	< 1	< 1
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	< 1	0	< 1	0	< 1	< 1
Shortspine thornyhead	0	7	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	10	0
Sablefish	0	0	0	0	0	< 1	< 1
Arrowtooth flounder	0	58	44	11	0	70	164
Pacific halibut	0	0	65	0	155	22	29
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	8	0	0
Flathead sole	0	3	0	< 1	0	< 1	1
Rex sole	0	0	2	0	< 1	0	0
Dover sole	0	0	< 1	< 1	0	0	1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	< 1	0	0	37	< 1	< 1
Pacific salmon	0	0	0	0	3	7	0
Skates	0	0	0	24	0	0	8
Sharks	0	4	0	2	14	35	32
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	0	0	0
Smelts	0	3	3	< 1	4	20	39
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	< 1	4	< 1	16	55	21
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	1	0	2	0	< 1	< 1
Sidestripe shrimp	0	< 1	0	0	0	0	0
Scallops	0	0	0	0	0	< 1	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	< 1	0	0	0	0
Starfish	0	< 1	< 1	2	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	0
Other invertebrates	0	< 1	< 1	< 1	< 1	< 1	0
Total catch (kg)	0	79	138	45	237	240	307

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	260	261	262	263	264	265	266
Start date & time	07/25/03 14	07/25/03 17	07/25/03 20	07/26/03 07	07/26/03 09	07/26/03 11	07/26/03 14
Start latitude	N 5829.79	N 5812.99	N 5753.34	N 5807.28	N 5753.45	N 5756.61	N 5738.70
Start longitude	W 13733.68	W 13647.96	W 13639.06	W 13659.59	W 13647.60	W 13659.09	W 13629.69
End latitude	N 5829.39	N 5813.71	N 5753.37	N 5807.15	N 5754.22	N 5756.05	N 5739.24
End longitude	W 13732.53	W 13647.60	W 13639.07	W 13658.22	W 13647.50	W 13658.18	W 13630.55
Bottom depth (m)	162	89	118	273	154	440	152
Duration (minutes)	15	15	0.6	15	15.6	15.6	15
Distance fished (km)	1.374	1.418	0.062	1.38	1.456	1.399	1.357
Performance	5.8	0	-1.2	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	7	0	0	0	0	10
Walleye pollock	3	< 1	0	3	32	0	30
Pacific ocean perch	< 1	0	0	14	4	1	< 1
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	6	0
Rougheye rockfish	< 1	0	0	< 1	0	2	0
Shortspine thornyhead	0	0	0	42	< 1	48	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	< 1	30	2	19	< 1	0	0
Sablefish	0	3	0	176	0	153	0
Arrowtooth flounder	155	73	0	70	4	7	105
Pacific halibut	0	2	0	0	34	0	38
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	12	0	0
Flathead sole	< 1	14	0	0	0	0	0
Rex sole	< 1	59	0	< 1	2	4	9
Dover sole	0	133	0	34	0	111	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	< 1	7	0	0	5	0	< 1
Pacific salmon	0	< 1	4	0	0	0	0
Skates	8	9	0	1	6	1	0
Sharks	176	7	0	0	5	0	8
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	0	0	0	0	0
Smelts	60	0	0	6	0	0	0
Giant grenadier	0	0	0	0	0	67	0
Other fish	12	17	0	< 1	28	6	8
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	4	0	0	0	0	0	0
Sidestripe shrimp	2	0	0	< 1	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	< 1	0
Sponges	0	0	0	4	0	0	0
Starfish	< 1	2	0	< 1	0	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	0
Other invertebrates	< 1	1	< 1	8	< 1	30	2
Total catch (kg)	422	364	6	378	133	436	212

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	267	268	269	270	271	272	273
Start date & time	07/26/03 19	07/27/03 06	07/27/03 12	07/27/03 15	07/28/03 06	07/28/03 09	07/28/03 11
Start latitude	N 5712.50	N 5637.92	N 5643.32	N 5614.18	N 5555.76	N 5551.40	N 5549.83
Start longitude	W 13557.39	W 13546.94	W 13506.12	W 13519.25	W 13524.67	W 13458.72	W 13439.60
End latitude	N 5711.81	N 5637.31	N 5642.71	N 5613.66	N 5556.42	N 5550.78	N 5550.27
End longitude	W 13556.83	W 13546.29	W 13506.100	W 13518.30	W 13525.29	W 13459.34	W 13440.66
Bottom depth (m)	101	220	211	191	338	192	175
Duration (minutes)	16.8	15.6	16.2	15	15.6	15	15
Distance fished (km)	1.448	1.359	1.495	1.393	1.426	1.357	1.402
Performance	0	0	6.1	5.8	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	< 1	6	13	5	0	47	5
Walleye pollock	< 1	19	22	5	0	< 1	92
Pacific ocean perch	0	150	0	135	202	282	5
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	66	0	0
Rougheye rockfish	0	0	8	0	63	0	0
Shortspine thornyhead	0	59	0	1	78	< 1	0
Dusky rockfish	0	0	0	25	0	3	0
Other rockfish	0	6	< 1	236	6	6	5
Sablefish	0	2	2	5	4	1	4
Arrowtooth flounder	18	44	4	14	7	28	61
Pacific halibut	12	4	0	15	0	12	5
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	19	0	0	0	0	0	0
Flathead sole	0	0	32	0	0	0	0
Rex sole	5	1	11	7	3	2	35
Dover sole	< 1	2	2	9	33	4	6
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	33	< 1	6	< 1	< 1	1	< 1
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	< 1	0	1	0	0
Sharks	9	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	2	< 1	< 1	< 1	0	0
Smelts	0	0	< 1	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	18	< 1	93	12	10	11	11
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	23	0	0	0	< 1
Sidestripe shrimp	0	< 1	7	0	0	0	< 1
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	3	4	< 1	1	0	0
Sponges	0	0	< 1	0	2	0	< 1
Starfish	< 1	0	< 1	< 1	0	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	< 1	0	< 1	0	0
Other invertebrates	10	16	6	5	< 1	< 1	5
Total catch (kg)	125	315	236	475	477	400	235

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	274	275	276	277	278	279	280
Start date & time	07/28/03 13	07/28/03 15	07/28/03 20	07/29/03 06	07/29/03 08	07/29/03 09	07/29/03 12
Start latitude	N 5554.11	N 5602.82	N 5602.02	N 5531.60	N 5531.37	N 5532.17	N 5540.38
Start longitude	W 13433.56	W 13429.10	W 13507.26	W 13451.29	W 13445.80	W 13442.11	W 13414.01
End latitude	N 5553.38	N 5602.62	N 5602.06	N 5530.84	N 5531.58	N 5532.34	N 5540.42
End longitude	W 13433.61	W 13430.28	W 13507.04	W 13451.32	W 13445.60	W 13443.46	W 13415.43
Bottom depth (m)	90	485	391	291	300	298	198
Duration (minutes)	16.2	15	6.6	16.2	7.8	16.2	17.4
Distance fished (km)	1.377	1.307	0.381	1.429	0.553	1.484	1.506
Performance	0	0	-1.2	0	-1.12	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	< 1	0	0	0	4	0	0
Walleye pollock	1	0	0	29	2	34	5
Pacific ocean perch	0	< 1	1	35	19	28	20
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	< 1	15	0	0	0	0
Shortspine thornyhead	0	35	28	9	4	10	< 1
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	24	0	0	2	1	3	34
Sablefish	0	90	15	4	12	12	8
Arrowtooth flounder	< 1	12	106	18	11	14	281
Pacific halibut	19	0	0	0	0	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	3	0	0	0	0	0	0
Flathead sole	0	0	0	0	0	0	< 1
Rex sole	0	3	8	14	6	8	9
Dover sole	0	32	53	22	16	17	27
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	< 1	< 1	< 1	< 1
Pacific salmon	0	0	0	0	0	0	< 1
Skates	0	0	6	0	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	< 1	< 1	0
Smelts	0	0	0	0	0	0	93
Giant grenadier	0	0	0	0	0	0	0
Other fish	72	10	3	< 1	40	13	13
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	3
Sidestripe shrimp	0	0	0	< 1	0	0	< 1
Scallops	< 1	0	0	0	0	0	0
Magistrate armhook squid	0	28	< 1	12	2	8	0
Sponges	< 1	< 1	< 1	0	0	0	0
Starfish	< 1	< 1	< 1	0	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	0	0	0	0	< 1	< 1
Other invertebrates	5	6	5	9	1	< 1	6
Total catch (kg)	126	218	240	155	118	147	500

Fishing Log: FV *Gladiator*, Cruise 2003-01.

Haul number	281	282	283	284	285	286	287
Start date & time	07/29/03 15	07/29/03 18	07/29/03 19	07/30/03 05	07/30/03 08	07/30/03 11	07/30/03 13
Start latitude	N 5527.73	N 5533.88	N 5535.99	N 5515.62	N 5517.02	N 5500.44	N 5455.84
Start longitude	W 13403.16	W 13330.41	W 13330.61	W 13402.71	W 13401.49	W 13416.33	W 13414.78
End latitude	N 5527.70	N 5533.73	N 5535.29	N 5516.32	N 5517.69	N 5501.09	N 5456.55
End longitude	W 13404.45	W 13331.62	W 13331.08	W 13403.37	W 13402.16	W 13415.77	W 13415.01
Bottom depth (m)	105	147	199	161	136	207	214
Duration (minutes)	15.6	15	15.6	16.2	16.2	15	15.6
Distance fished (km)	1.38	1.321	1.424	1.525	1.463	1.379	1.374
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	< 1	16	8	5	2	117	12
Walleye pollock	0	59	31	14	49	2	8
Pacific ocean perch	0	2	< 1	8	0	15	1067
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	6	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	3	0
Dusky rockfish	0	0	0	1	0	0	0
Other rockfish	0	1	< 1	48	< 1	140	401
Sablefish	0	6	2	3	0	1	8
Arrowtooth flounder	0	19	0	424	31	25	8
Pacific halibut	11	0	0	0	205	14	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	1	0	0	0	0	0	0
Flathead sole	0	10	11	1	< 1	0	0
Rex sole	0	17	17	50	9	12	2
Dover sole	0	21	< 1	8	< 1	3	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	12	5	6	22	4	0
Pacific salmon	0	0	0	0	0	0	0
Skates	4	13	3	0	0	0	0
Sharks	0	< 1	3	0	3	2	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	2	< 1	0	0	0	< 1
Smelts	0	< 1	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	62	213	155	7	40	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	3	< 1	0	0	0
Sidestripe shrimp	0	6	1	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	< 1
Sponges	0	0	0	0	0	< 1	< 1
Starfish	< 1	< 1	< 1	0	0	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	0
Other invertebrates	5	16	21	< 1	2	1	1
Total catch (kg)	82	415	266	577	363	340	1509

Section 2

Fishing Log for the FV *Northwest Explorer*

- Charts of stations and their respective haul numbers

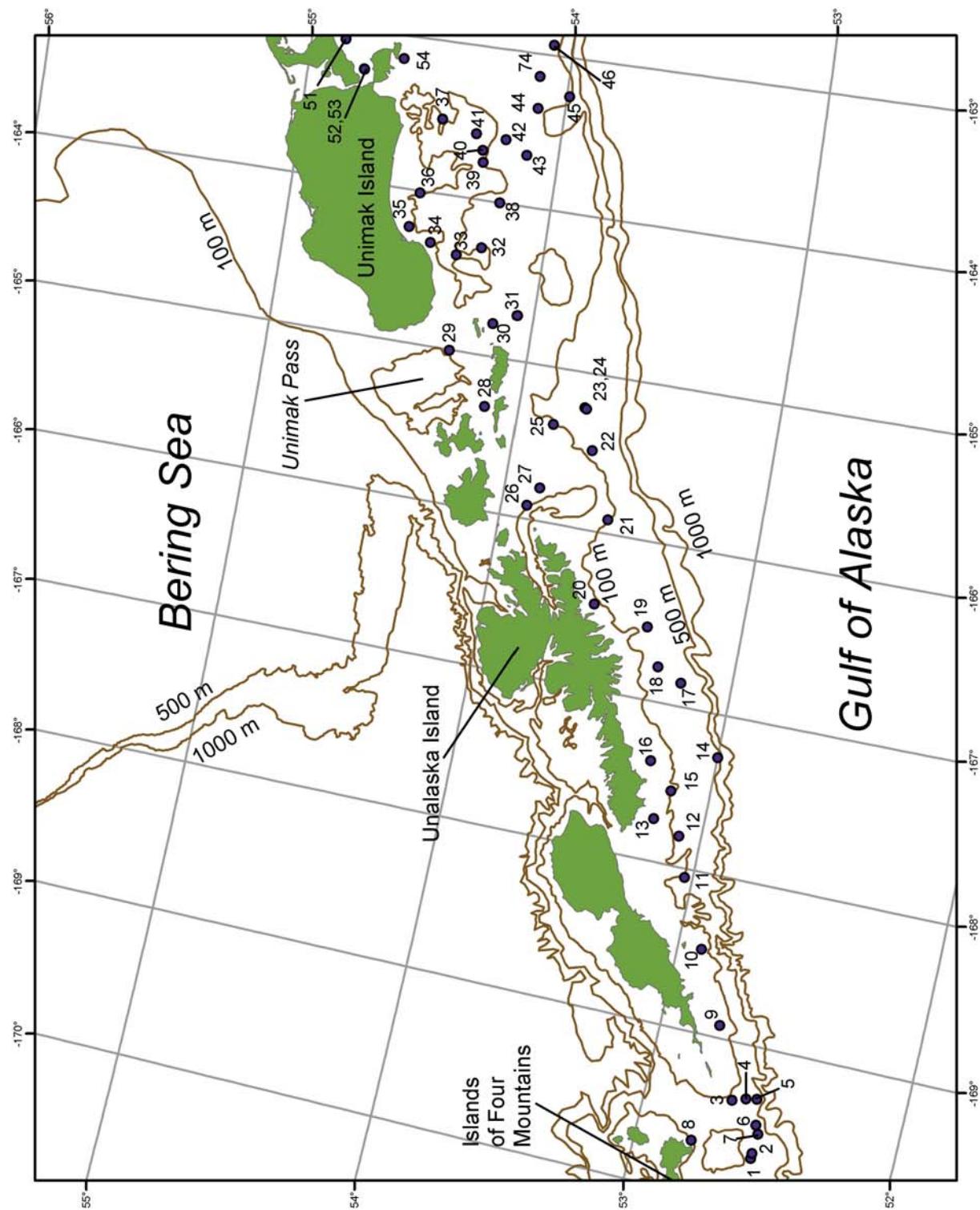


Figure 7. -- Stations surveyed by the chartered trawler FV *Northwest Explorer* from the Island of Four Mountains to Unimak Island.

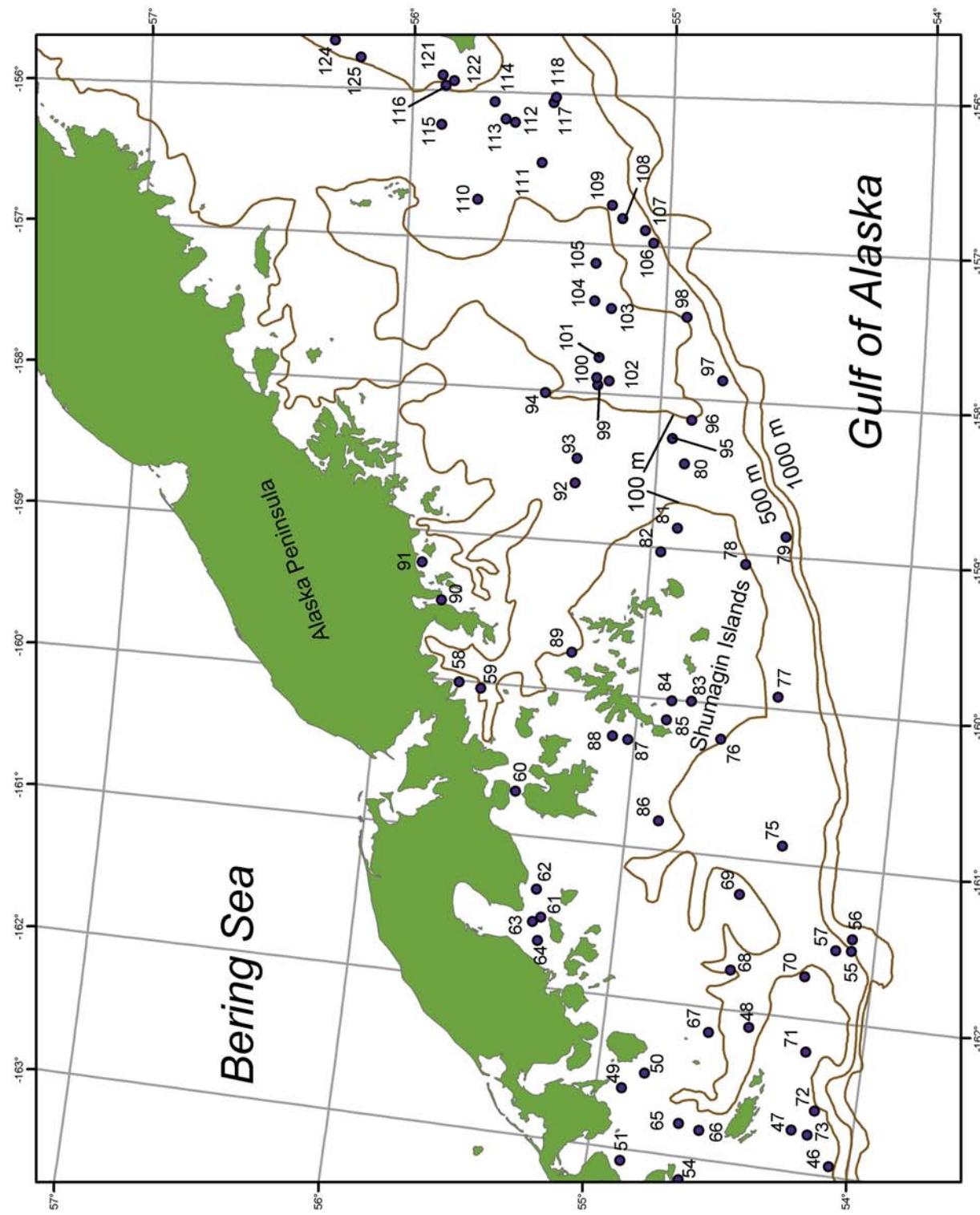


Figure 8. -- Stations surveyed by the chartered trawler FV *Northwest Explorer* in the vicinity of the western Alaska Peninsula.

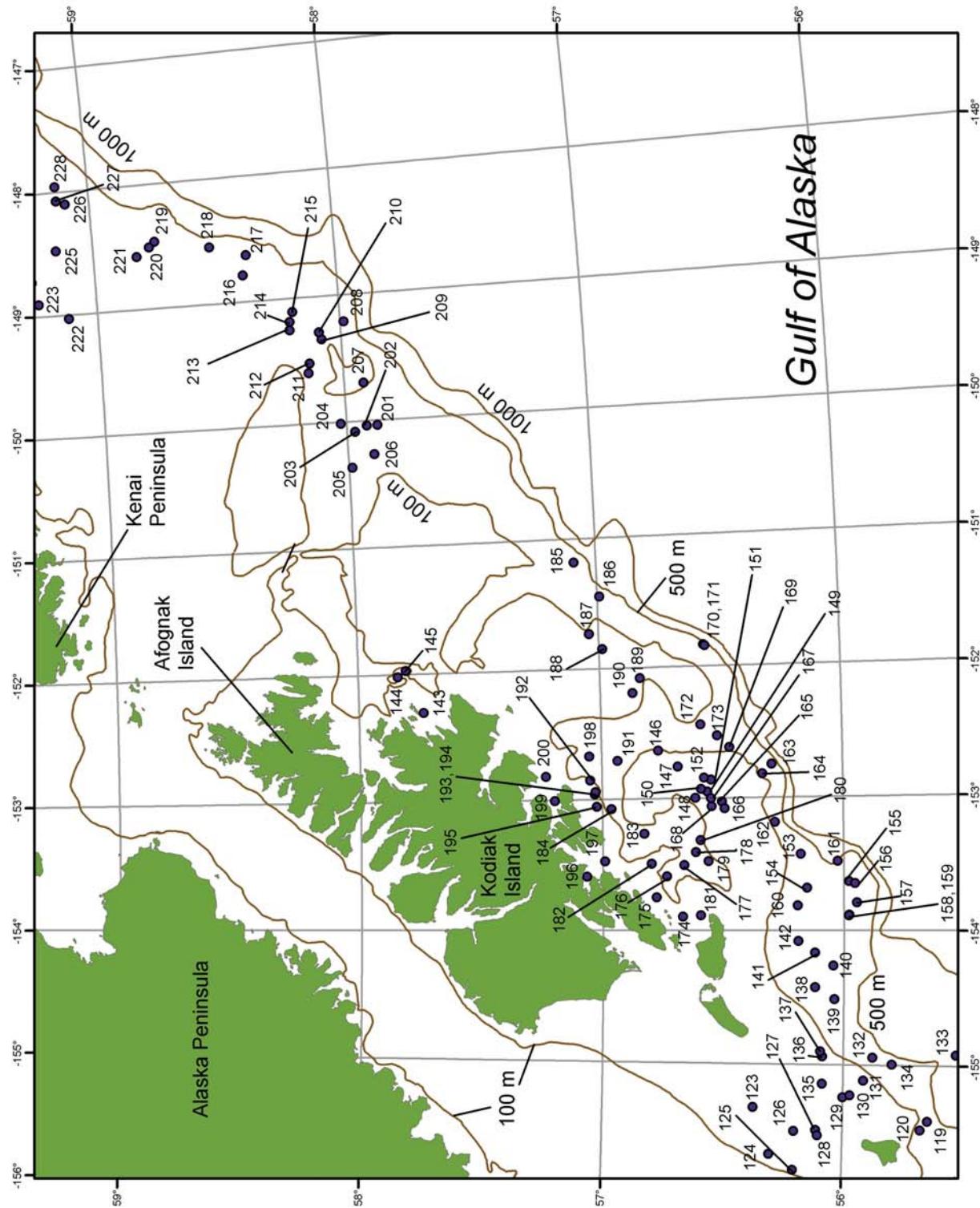


Figure 9. -- Stations surveyed by the chartered trawler FV *Northwest Explorer* in the vicinity of Kodiak Island.

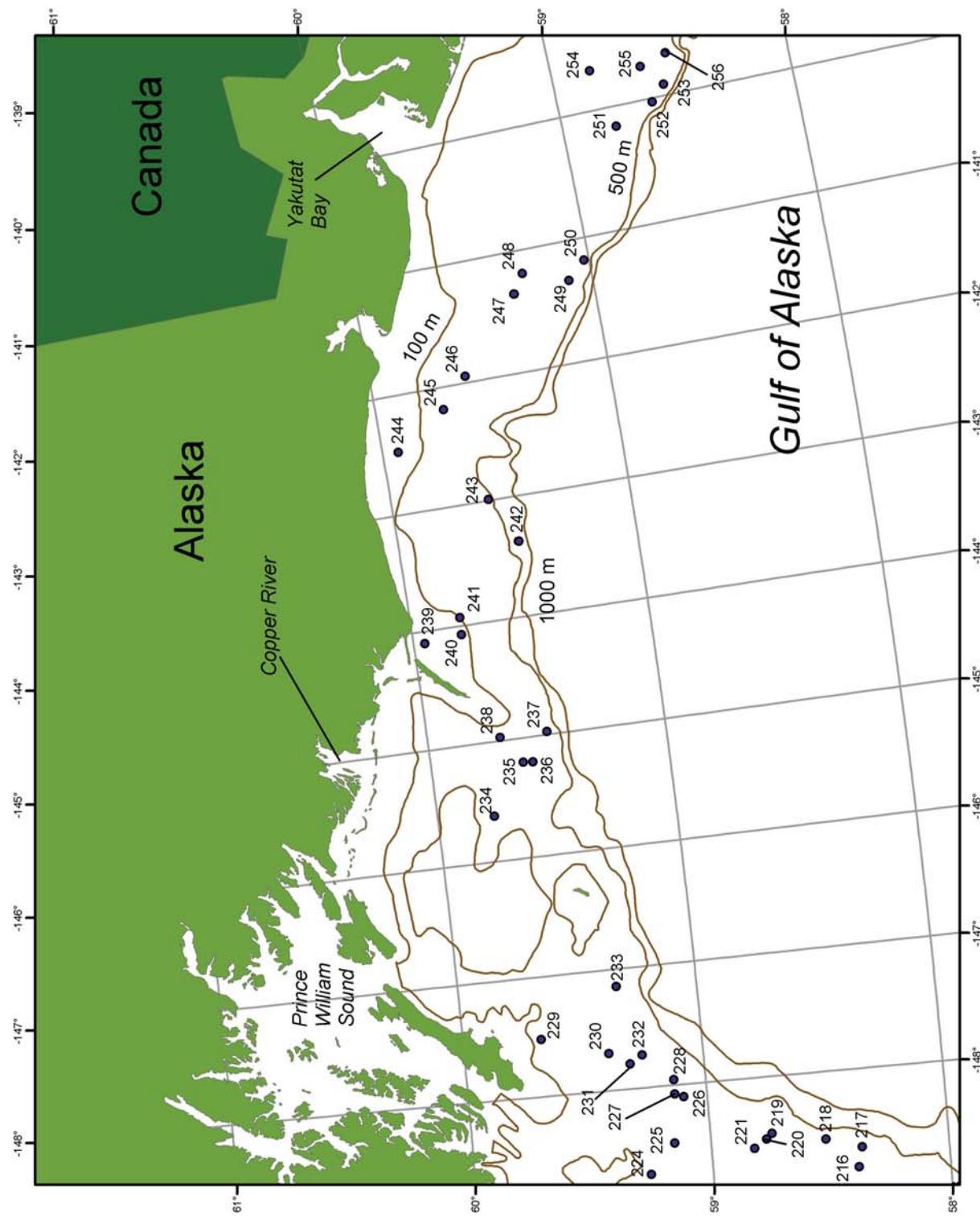


Figure 10. -- Stations surveyed by the chartered trawler FV *Northwest Explorer* from Prince William Sound to Yakutat Bay.

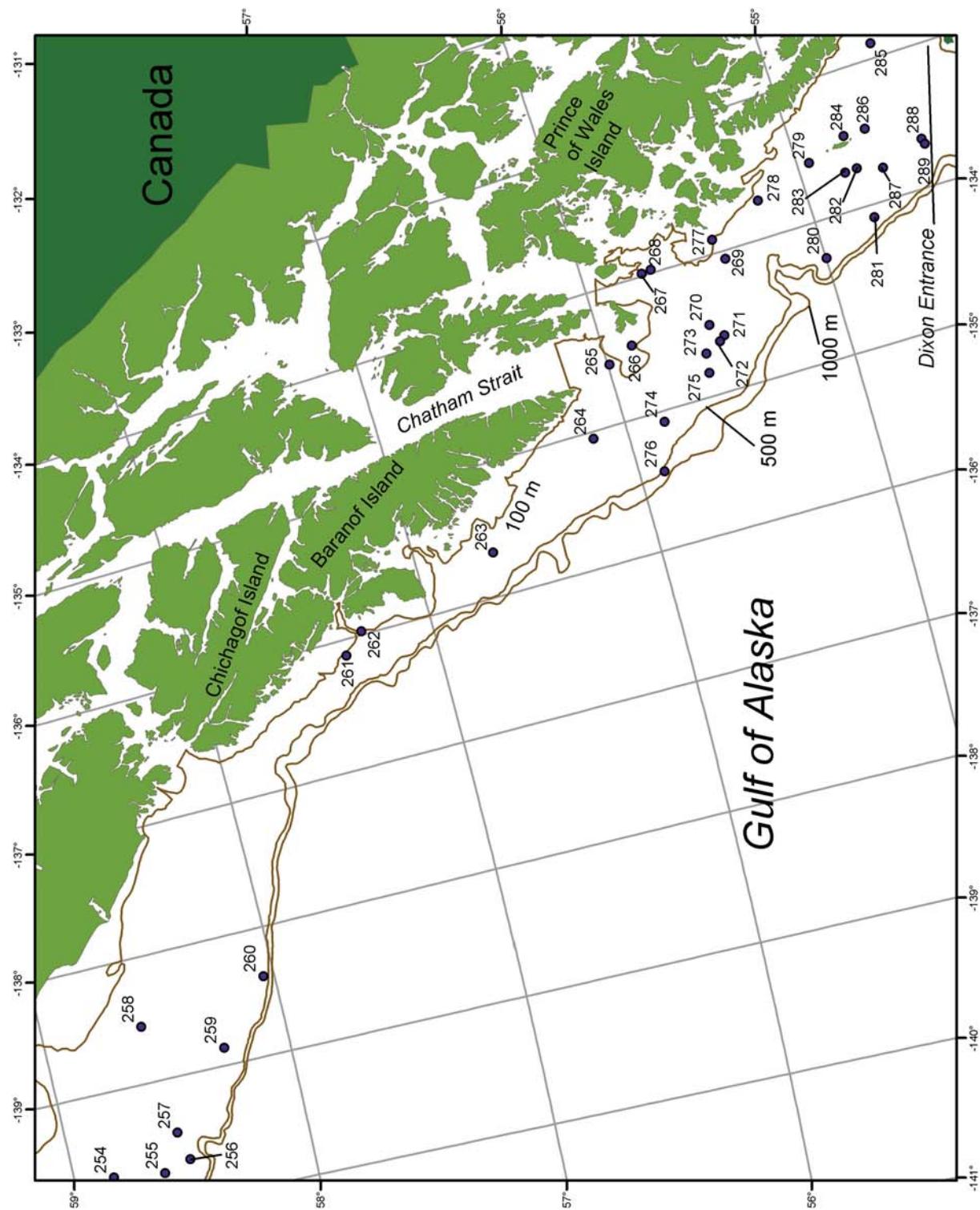


Figure 11. -- Stations surveyed by the chartered trawler FV *Northwest Explorer* in the vicinity of Southeast Alaska.

Section 2 (continued)

Fishing Log for the FV *Northwest Explorer*

- Summary listings of species catches by haul
- Haul start/end latitude and longitude in degrees and decimal minutes
- Catch weight (kg) of principal species or grouped taxa
- Total catch weight of all species

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	1	2	3	4	5	6	7
Start date & time	05/24/03 11	05/24/03 17	05/24/03 21	05/25/03 08	05/25/03 10	05/25/03 14	05/25/03 16
Start latitude	N 5232.53	N 5232.45	N 5239.84	N 5236.76	N 5234.30	N 5233.10	N 5232.19
Start longitude	W 16941.28	W 16939.39	W 16921.60	W 16919.99	W 16919.07	W 16928.73	W 16931.73
End latitude	N 5232.82	N 5232.23	N 5239.44	N 5236.95	N 5233.85	N 5232.90	N 5232.71
End longitude	W 16940.25	W 16940.56	W 16920.53	W 16918.67	W 16920.05	W 16929.18	W 16930.86
Bottom depth (m)	134	151	121	166	326	337	346
Duration (minutes)	15	15.6	15.6	16.8	15	10.2	15.6
Distance fished (km)	1.334	1.42	1.44	1.543	1.409	0.669	1.423
Performance	-2.7	0	0	0	0	-2.1	0
Atka mackerel	4	< 1	2	0	0	0	0
Pacific cod	125	45	86	15	0	0	0
Walleye pollock	13	< 1	5	17	2	0	0
Pacific ocean perch	449	8	7	110	0	3	5
Northern rockfish	268	2	< 1	0	0	0	0
Shortraker rockfish	0	0	0	0	389	87	32
Rougheye rockfish	4	3	0	0	216	29	6
Shortspine thornyhead	0	0	0	< 1	126	32	30
Dusky rockfish	41	0	1	5	0	0	0
Other rockfish	15	0	0	0	0	0	0
Sablefish	0	0	0	6	3	2	6
Arrowtooth flounder	8	26	21	50	39	19	26
Pacific halibut	18	8	24	79	0	0	0
Northern rock sole	0	2	< 1	1	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	0	0	0	0	0	0	0
Rex sole	0	0	0	0	8	< 1	6
Dover sole	0	0	0	0	< 1	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	2	8	13
Pacific salmon	0	0	0	0	0	0	0
Skates	0	7	68	32	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	2	12	0	0	0	0
Bigmouth sculpin	0	0	17	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	3	2	2	< 1	2	4	< 1
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	2096	266	561
Other fish	2	1	< 1	0	1	< 1	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	4	0	3
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	< 1	0	< 1	0	0	0
Magistrate armhook squid	0	0	< 1	1	0	< 1	< 1
Sponges	1547	189	10	27	4	114	1
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Stony coral	29	< 1	0	< 1	0	< 1	< 1
Soft coral	< 1	< 1	0	0	< 1	< 1	< 1
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	< 1	< 1	< 1	0	0
Other invertebrates	8	6	3	< 1	1	1	2
Total catch (kg)	2536	304	261	346	2895	567	692

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	8	9	10	11	12	13	14
Start date & time	05/25/03 20	05/26/03 10	05/26/03 13	05/26/03 16	05/26/03 18	05/26/03 19	05/29/03 09
Start latitude	N 5246.86	N 5246.46	N 5254.50	N 5301.80	N 5305.09	N 5311.59	N 5259.93
Start longitude	W 16939.85	W 16855.12	W 16828.49	W 16803.23	W 16748.38	W 16743.72	W 16716.09
End latitude	N 5247.37	N 5246.54	N 5254.81	N 5302.39	N 5305.27	N 5311.55	N 5300.03
End longitude	W 16938.93	W 16853.89	W 16827.34	W 16802.36	W 16747.12	W 16744.99	W 16714.82
Bottom depth (m)	145	86	100	123	108	82	357
Duration (minutes)	15	15	15.6	15.6	15.6	15.6	17.4
Distance fished (km)	1.432	1.404	1.435	1.495	1.452	1.438	1.557
Performance	0	-2.4	0	0	0	0	0
Atka mackerel	1	18	13	9	8	12	0
Pacific cod	21	20	12	12	10	14	0
Walleye pollock	4	139	45	68	106	3	0
Pacific ocean perch	0	< 1	0	0	0	0	< 1
Northern rockfish	0	25	1	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	126
Rougheye rockfish	0	0	0	0	0	0	56
Shortspine thornyhead	0	0	0	0	0	0	57
Dusky rockfish	0	10	0	0	0	1	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	19
Arrowtooth flounder	6	6	57	35	26	24	15
Pacific halibut	39	6	19	14	17	17	8
Northern rock sole	30	0	4	1	11	12	0
Southern rock sole	0	3	11	2	60	63	0
Flathead sole	0	0	0	8	0	0	0
Rex sole	0	0	0	3	< 1	0	3
Dover sole	< 1	0	< 1	0	0	0	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	3	0	0	0	0	0
Skates	0	0	0	0	0	23	1
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	23	0	4	0	< 1	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	< 1	0	< 1	< 1	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	1941
Other fish	< 1	5	< 1	0	0	0	< 1
Bairdi Tanner crab	0	0	< 1	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	1	< 1	< 1	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	93	40	< 1	< 1	0	0	0
Starfish	< 1	< 1	< 1	< 1	< 1	0	< 1
Stony coral	< 1	< 1	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	2
Snails	< 1	< 1	< 1	0	< 1	0	0
Other invertebrates	9	6	5	< 1	1	< 1	< 1
Total catch (kg)	228	283	172	153	240	170	2228

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	15	16	17	18	19	20	21
Start date & time	05/29/03 11	05/29/03 14	05/29/03 17	05/29/03 18	05/29/03 20	05/30/03 10	05/30/03 13
Start latitude	N 5309.02	N 5315.00	N 5311.67	N 5317.55	N 5321.73	N 5334.81	N 5335.21
Start longitude	W 16732.09	W 16722.37	W 16650.99	W 16646.53	W 16632.38	W 16627.46	W 16554.64
End latitude	N 5309.47	N 5315.44	N 5312.00	N 5317.98	N 5322.39	N 5335.41	N 5335.29
End longitude	W 16732.51	W 16721.38	W 16649.82	W 16645.50	W 16631.73	W 16626.62	W 16553.42
Bottom depth (m)	98	80	209	124	148	87	99
Duration (minutes)	11.4	15.6	16.2	15.6	16.2	16.2	15
Distance fished (km)	0.974	1.394	1.457	1.412	1.451	1.482	1.367
Performance	1.12	0	0	0	0	0	0
Atka mackerel	11	2	2	0	0	14	6
Pacific cod	16	17	4	4	16	< 1	13
Walleye pollock	3	0	0	6	209	12	< 1
Pacific ocean perch	1	0	120	5	12	0	20
Northern rockfish	< 1	0	8	< 1	1	0	17
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	8	0	< 1	0	0
Dusky rockfish	0	0	7	4	0	0	2
Other rockfish	0	0	0	0	0	0	4
Sablefish	0	0	5	14	0	0	0
Arrowtooth flounder	24	37	7	55	22	39	31
Pacific halibut	30	16	4	9	0	50	55
Northern rock sole	4	1	2	11	< 1	5	2
Southern rock sole	20	43	7	2	15	5	5
Flathead sole	0	0	< 1	0	< 1	< 1	0
Rex sole	< 1	0	25	4	21	2	0
Dover sole	0	0	0	0	1	< 1	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	4	0
Pacific salmon	0	0	0	2	0	0	0
Skates	0	0	0	4	33	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	1	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	< 1	0	0	0	0
Smelts	0	0	0	< 1	0	0	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	5	< 1	0	0	0	< 1	4
Bairdi Tanner crab	0	0	0	0	0	< 1	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	0	< 1	< 1	< 1	0	< 1
Magistrate armhook squid	0	0	0	0	2	< 1	0
Sponges	22	< 1	< 1	< 1	0	0	7
Starfish	< 1	< 1	0	< 1	0	0	1
Stony coral	3	0	0	0	0	0	0
Soft coral	14	0	0	0	0	0	0
Octopus	< 1	< 1	0	0	0	0	0
Snails	< 1	0	< 1	< 1	< 1	0	< 1
Other invertebrates	11	1	2	2	< 1	< 1	< 1
Total catch (kg)	166	119	204	124	334	133	166

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	22	23	24	25	26	27	28
Start date & time	05/30/03 16	05/30/03 18	05/30/03 19	05/30/03 20	05/31/03 09	05/31/03 10	05/31/03 14
Start latitude	N 5341.58	N 5344.88	N 5344.46	N 5351.40	N 5354.22	N 5352.01	N 5407.65
Start longitude	W 16529.30	W 16513.40	W 16513.92	W 16521.89	W 16554.61	W 16547.11	W 16519.58
End latitude	N 5342.07	N 5345.29	N 5344.83	N 5352.07	N 5354.02	N 5352.47	N 5407.82
End longitude	W 16528.34	W 16512.15	W 16512.82	W 16522.39	W 16553.38	W 16548.08	W 16518.39
Bottom depth (m)	144	173	177	97	81	80	66
Duration (minutes)	15.6	16.8	15	15	15	15	14.4
Distance fished (km)	1.426	1.587	1.41	1.397	1.416	1.394	1.347
Performance	0	-3.13	0	0	0	0	0
Atka mackerel	0	0	0	< 1	4	7	0
Pacific cod	11	6	5	6	13	6	19
Walleye pollock	255	31	21	11	0	0	0
Pacific ocean perch	2	16	2	0	0	0	0
Northern rockfish	4	3	< 1	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	22	0	0	0	0	0
Shortspine thornyhead	0	4	3	0	0	0	0
Dusky rockfish	1	20	5	0	0	0	0
Other rockfish	0	2	0	0	0	0	0
Sablefish	11	4	11	0	0	0	0
Arrowtooth flounder	5	2	11	57	144	16	1
Pacific halibut	2	0	6	29	17	34	103
Northern rock sole	0	0	0	9	8	4	< 1
Southern rock sole	0	0	0	38	28	18	2
Flathead sole	3	2	3	1	0	0	0
Rex sole	< 1	4	6	1	0	0	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	4	9	0
Skates	0	0	0	0	6	19	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	1	< 1	< 1	12
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	9
Other sculpins	0	0	0	< 1	0	< 1	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	< 1	< 1	< 1	< 1	< 1	16
Bairdi Tanner crab	0	< 1	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	< 1	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	< 1	< 1	< 1
Magistrate armhook squid	1	< 1	1	0	0	0	0
Sponges	1	4	0	0	< 1	< 1	25
Starfish	< 1	0	0	0	< 1	0	2
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	2	< 1	< 1	0	0	< 1
Other invertebrates	< 1	23	14	1	2	< 1	4
Total catch (kg)	299	144	89	155	227	115	193

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	29	30	31	32	33	34	35
Start date & time	05/31/03 16	05/31/03 20	06/01/03 08	06/01/03 10	06/01/03 12	06/01/03 13	06/01/03 15
Start latitude	N 5417.87	N 5408.99	N 5403.75	N 5414.30	N 5419.75	N 5426.13	N 5431.50
Start longitude	W 16500.07	W 16446.99	W 16442.49	W 16418.37	W 16422.71	W 16419.51	W 16414.50
End latitude	N 5417.15	N 5408.51	N 5404.43	N 5414.56	N 5419.97	N 5426.76	N 5431.88
End longitude	W 16459.87	W 16446.03	W 16443.16	W 16419.56	W 16423.89	W 16418.88	W 16413.31
Bottom depth (m)	82	75	100	94	101	67	65
Duration (minutes)	15	15	16.2	15	15	15	16.2
Distance fished (km)	1.381	1.404	1.487	1.391	1.365	1.374	1.49
Performance	0	0	0	0	0	0	0
Atka mackerel	797	5	1	3	9	14	6
Pacific cod	101	12	2	18	8	7	21
Walleye pollock	0	5	80	1017	54	88	41
Pacific ocean perch	< 1	< 1	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	1	7	34	16	29	71	311
Pacific halibut	165	50	49	21	21	121	94
Northern rock sole	2	3	11	19	24	51	150
Southern rock sole	0	18	24	14	7	116	24
Flathead sole	0	0	0	1	< 1	2	10
Rex sole	0	0	0	1	0	0	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	3
Other flatfish	0	0	0	0	0	0	72
Pacific salmon	0	0	0	0	0	4	0
Skates	0	0	0	0	0	0	3
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	39	15	< 1	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	17	< 1	0	0	0	0	1
Other sculpins	< 1	< 1	0	< 1	0	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	0	< 1	< 1	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	0	2	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	226	0	< 1	< 1	< 1	0	0
Starfish	7	2	< 1	< 1	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	3	< 1	< 1	< 1	< 1	0	0
Other invertebrates	168	5	4	2	1	2	< 1
Total catch (kg)	1,526	121	208	1,111	155	475	737

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	36	37	38	39	40	41	42
Start date & time	06/01/03 16	06/01/03 19	06/02/03 08	06/02/03 10	06/02/03 11	06/02/03 12	06/02/03 14
Start latitude	N 5430.17	N 5427.55	N 5411.73	N 5416.85	N 5417.31	N 5419.37	N 5412.36
Start longitude	W 16400.75	W 16330.65	W 16359.94	W 16345.18	W 16340.54	W 16334.43	W 16335.08
End latitude	N 5430.05	N 5427.41	N 5412.14	N 5417.22	N 5417.32	N 5419.60	N 5412.27
End longitude	W 16359.47	W 16329.29	W 16358.93	W 16344.04	W 16339.22	W 16333.18	W 16333.76
Bottom depth (m)	80	107	76	102	109	111	94
Duration (minutes)	16.2	16.8	15	16.2	16.2	16.2	16.2
Distance fished (km)	1.42	1.523	1.357	1.427	1.45	1.436	1.466
Performance	0	0	0	0	0	0	0
Atka mackerel	27	15	4	4	3	2	< 1
Pacific cod	4	32	2	73	4	11	3
Walleye pollock	971	433	28	12	25	775	< 1
Pacific ocean perch	0	0	0	4	< 1	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	10	0
Arrowtooth flounder	98	95	31	45	62	184	53
Pacific halibut	37	14	67	32	7	12	24
Northern rock sole	97	< 1	16	< 1	0	0	9
Southern rock sole	19	< 1	18	< 1	0	0	6
Flathead sole	13	3	37	2	53	46	9
Rex sole	< 1	5	0	18	16	23	14
Dover sole	0	0	0	< 1	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	0	5	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	< 1	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	0	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	1	0	< 1	1	< 1	< 1	0
Bairdi Tanner crab	0	1	0	< 1	< 1	< 1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	0	< 1	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	< 1	0	1	2	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	< 1	0	0	< 1
Starfish	1	< 1	< 1	0	4	8	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	< 1	0	0	0	0	0
Snails	< 1	< 1	0	< 1	1	2	< 1
Other invertebrates	< 1	6	< 1	6	3	5	3
Total catch (kg)	1269	607	203	201	180	1085	123

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	43	44	45	46	47	48	49
Start date & time	06/02/03 16	06/02/03 18	06/03/03 12	06/03/03 15	06/03/03 18	06/03/03 21	06/04/03 08
Start latitude	N 5407.28	N 5406.22	N 5359.41	N 5404.49	N 5414.13	N 5426.72	N 5454.00
Start longitude	W 16340.03	W 16321.25	W 16314.95	W 16255.91	W 16243.69	W 16205.74	W 16235.80
End latitude	N 5407.25	N 5406.20	N 5359.64	N 5404.98	N 5414.28	N 5427.23	N 5454.05
End longitude	W 16338.80	W 16319.97	W 16313.78	W 16255.03	W 16242.49	W 16204.77	W 16234.25
Bottom depth (m)	88	81	98	78	71	145	23
Duration (minutes)	15.6	15.6	15.6	15	15	15.6	18
Distance fished (km)	1.358	1.402	1.374	1.353	1.346	1.437	1.678
Performance	0	0	0	0	0	0	0
Atka mackerel	0	< 1	2	1	1	3	0
Pacific cod	0	13	12	53	148	0	10
Walleye pollock	< 1	7	0	0	202	60	0
Pacific ocean perch	0	0	0	< 1	0	0	0
Northern rockfish	0	0	0	3	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	2	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	8	0	0	0
Other rockfish	0	0	0	44	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	29	18	143	4	20	240	0
Pacific halibut	20	15	17	32	29	23	31
Northern rock sole	10	20	12	16	8	0	23
Southern rock sole	18	38	15	26	20	0	19
Flathead sole	28	11	8	12	8	56	0
Rex sole	16	5	6	0	< 1	13	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	1
Other flatfish	0	0	0	0	0	0	11
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	20	0	20	0	0
Sharks	0	0	0	0	0	32	0
Yellow Irish lord	0	1	0	< 1	< 1	0	53
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	5
Other sculpins	0	0	0	0	0	0	< 1
Smelts	0	0	0	0	0	< 1	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	< 1	0	5	< 1	< 1	< 1
Bairdi Tanner crab	0	0	0	0	0	< 1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	< 1	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	< 1	< 1	< 1	< 1	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	< 1	3	0	0	< 1
Starfish	0	0	< 1	< 1	< 1	5	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	3	0	0	0	0	0
Snails	0	0	< 1	< 1	0	< 1	0
Other invertebrates	1	3	1	63	17	< 1	15
Total catch (kg)	124	134	236	271	475	437	168

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	50	51	52	53	54	55	56
Start date & time	06/04/03 09	06/04/03 12	06/04/03 14	06/04/03 16	06/04/03 19	06/05/03 08	06/05/03 12
Start latitude	N 5449.24	N 5452.19	N 5447.010	N 5446.95	N 5438.28	N 5405.33	N 5405.37
Start longitude	W 16228.81	W 16304.55	W 16315.26	W 16315.39	W 16309.01	W 16131.50	W 16126.88
End latitude	N 5449.22	N 5452.69	N 5447.45	N 5447.29	N 5438.26	N 5405.61	N 5406.12
End longitude	W 16230.26	W 16303.54	W 16314.09	W 16314.26	W 16307.73	W 16130.26	W 16126.90
Bottom depth (m)	43	97	41	78	69	557	649
Duration (minutes)	16.8	15.6	15.6	15	15	15.6	15
Distance fished (km)	1.57	1.447	1.438	1.407	1.399	1.465	1.39
Performance	0	0	-3.13	0	0	0	0
Atka mackerel	0	0	0	0	1	0	0
Pacific cod	13	57	31	24	137	0	0
Walleye pollock	0	201	286	265	377	0	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	43	31
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	< 1	0	0	0	110	108
Arrowtooth flounder	15	88	41	18	31	2	0
Pacific halibut	51	3	100	34	38	0	0
Northern rock sole	120	4	280	45	416	0	0
Southern rock sole	117	2	0	0	7	0	0
Flathead sole	18	319	153	22	13	0	0
Rex sole	0	1	0	0	0	< 1	0
Dover sole	0	0	0	0	0	13	50
Yellowfin sole	2	28	147	28	1	0	0
Other flatfish	2	9	262	40	0	2	< 1
Pacific salmon	0	0	0	0	0	0	0
Skates	0	42	36	14	0	0	7
Sharks	0	0	0	601	0	0	0
Yellow Irish lord	21	3	22	4	4	0	0
Bigmouth sculpin	0	1	0	0	0	0	0
Great sculpin	12	1	14	4	0	0	0
Other sculpins	< 1	2	< 1	0	< 1	< 1	0
Smelts	< 1	< 1	0	0	< 1	0	0
Giant grenadier	0	0	0	0	0	262	550
Other fish	< 1	9	15	6	< 1	38	23
Bairdi Tanner crab	0	20	22	3	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	< 1	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	0	0	< 1	< 1	< 1	3
Starfish	1	< 1	0	< 1	< 1	< 1	2
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	< 1	0	0	0
Octopus	15	12	9	0	0	0	< 1
Snails	2	< 1	< 1	< 1	0	< 1	< 1
Other invertebrates	20	2	36	5	4	6	3
Total catch (kg)	412	804	1456	1114	1031	478	778

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	57	58	59	60	61	62	63
Start date & time	06/05/03 15	06/07/03 09	06/07/03 10	06/07/03 14	06/08/03 07	06/08/03 10	06/08/03 16
Start latitude	N 5408.92	N 5541.29	N 5536.19	N 5526.02	N 5517.18	N 5518.85	N 5518.91
Start longitude	W 16131.91	W 16000.44	W 16002.29	W 16042.43	W 16131.81	W 16120.86	W 16133.95
End latitude	N 5409.59	N 5540.77	N 5536.17	N 5526.04	N 5517.43	N 5518.84	N 5518.90
End longitude	W 16131.29	W 15959.50	W 16000.85	W 16042.19	W 16130.55	W 16119.61	W 16132.65
Bottom depth (m)	243	50	161	36	84	62	104
Duration (minutes)	15.6	15	16.8	3	15.6	15	15
Distance fished (km)	1.438	1.404	1.531	0.257	1.447	1.341	1.403
Performance	2.1	0	0	-1.12	0	0	0
Atka mackerel	0	0	0	< 1	0	0	0
Pacific cod	0	0	0	810	43	108	16
Walleye pollock	4	0	338	0	1181	< 1	834
Pacific ocean perch	5	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	18	0	0	0	0	0	0
Rougheye rockfish	13	0	0	0	0	0	0
Shortspine thornyhead	172	0	< 1	0	0	0	0
Dusky rockfish	0	0	0	0	< 1	0	0
Other rockfish	< 1	0	0	0	0	0	0
Sablefish	8	0	0	0	0	4	0
Arrowtooth flounder	29	< 1	654	0	169	130	61
Pacific halibut	60	< 1	0	10	97	57	40
Northern rock sole	0	0	0	< 1	2	7	2
Southern rock sole	0	1	0	0	1	3	0
Flathead sole	0	1	139	0	205	172	109
Rex sole	5	0	27	0	2	0	0
Dover sole	4	0	< 1	0	< 1	< 1	0
Yellowfin sole	0	0	0	0	109	705	68
Other flatfish	1	0	0	0	58	37	0
Pacific salmon	0	0	0	0	8	0	0
Skates	< 1	8	11	0	0	4	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	2	6	12	< 1
Bigmouth sculpin	0	0	0	0	4	0	2
Great sculpin	0	0	0	0	12	3	5
Other sculpins	4	0	< 1	0	0	0	< 1
Smelts	0	0	71	0	0	0	0
Giant grenadier	108	0	0	0	0	0	0
Other fish	< 1	0	< 1	0	2	< 1	10
Bairdi Tanner crab	0	0	< 1	0	< 1	0	23
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	0	< 1	0	0	0	< 1
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	14	0	0	0	0	0	0
Sponges	1	< 1	0	< 1	< 1	1	0
Starfish	2	0	19	0	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	< 1	0	0	0	0	0	0
Snails	3	< 1	3	0	< 1	< 1	2
Other invertebrates	4	11	2	7	40	26	9
Total catch (kg)	455	22	1265	830	1940	1272	1182

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	64	65	66	67	68	69	70
Start date & time	06/08/03 18	06/09/03 07	06/09/03 09	06/09/03 13	06/09/03 16	06/09/03 18	06/10/03 08
Start latitude	N 5517.27	N 5439.95	N 5435.13	N 5435.76	N 5432.45	N 5432.41	N 5415.29
Start longitude	W 16141.39	W 16246.94	W 16248.62	W 16209.65	W 16144.21	W 16114.05	W 16143.45
End latitude	N 5517.40	N 5440.71	N 5434.45	N 5435.09	N 5432.27	N 5432.36	N 5414.68
End longitude	W 16140.09	W 16247.12	W 16249.12	W 16209.03	W 16142.92	W 16112.79	W 16143.03
Bottom depth (m)	104	85	103	122	142	130	82
Duration (minutes)	15.6	15.6	15	15.6	15.6	15	13.8
Distance fished (km)	1.429	1.441	1.396	1.43	1.452	1.368	1.245
Performance	0	0	0	0	0	0	-2.4
Atka mackerel	0	0	0	0	5	93	73
Pacific cod	18	27	0	0	0	2	29
Walleye pollock	401	3	0	1	< 1	9	0
Pacific ocean perch	0	0	0	0	0	10	0
Northern rockfish	0	0	0	0	0	< 1	141
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	3	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	5
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	< 1	0
Arrowtooth flounder	117	72	113	221	1104	349	0
Pacific halibut	63	31	8	30	13	5	41
Northern rock sole	1	8	0	< 1	0	0	0
Southern rock sole	0	14	2	1	0	1	0
Flathead sole	143	90	197	77	15	21	0
Rex sole	2	4	7	4	1	47	0
Dover sole	< 1	< 1	0	0	0	7	0
Yellowfin sole	85	0	0	0	0	0	0
Other flatfish	10	0	0	0	0	0	0
Pacific salmon	4	0	0	0	0	0	0
Skates	0	0	0	0	7	< 1	0
Sharks	0	0	57	0	0	0	0
Yellow Irish lord	2	7	0	< 1	0	0	< 1
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	11	0	1	0	0	0	0
Other sculpins	2	< 1	0	0	< 1	0	< 1
Smelts	0	0	0	< 1	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	4	1	< 1	< 1	< 1	0	6
Bairdi Tanner crab	7	< 1	< 1	< 1	3	< 1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	< 1	< 1	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	< 1	0	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	< 1	< 1	< 1	0	0	5
Starfish	31	0	1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	12	0	0
Snails	< 1	< 1	0	0	< 1	< 1	< 1
Other invertebrates	1	6	6	6	1	8	1
Total catch (kg)	902	265	393	342	1162	558	302

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	71	72	73	74	75	76	77
Start date & time	06/10/03 15	06/10/03 17	06/10/03 18	06/10/03 20	06/11/03 06	06/11/03 10	06/11/03 13
Start latitude	N 5412.99	N 5409.34	N 5410.33	N 5406.76	N 5423.70	N 5440.30	N 5428.00
Start longitude	W 16212.63	W 16235.12	W 16244.74	W 16308.75	W 16053.39	W 16013.69	W 15955.16
End latitude	N 5413.20	N 5409.80	N 5409.88	N 5406.91	N 5423.83	N 5440.67	N 5427.59
End longitude	W 16213.81	W 16236.12	W 16243.71	W 16307.46	W 16054.64	W 16014.80	W 15956.26
Bottom depth (m)	79	82	75	83	108	101	135
Duration (minutes)	15	15	15	15.6	15	15	15
Distance fished (km)	1.356	1.406	1.417	1.442	1.389	1.403	1.427
Performance	-2.4	0	0	0	0	0	0
Atka mackerel	0	713	1	432	0	217	0
Pacific cod	0	3	12	33	4	2	0
Walleye pollock	0	0	0	0	0	0	0
Pacific ocean perch	0	3	0	0	0	< 1	0
Northern rockfish	3	6	0	1	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	1
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	4	< 1	< 1	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	0	20	5	78	22	926	460
Pacific halibut	0	98	63	18	20	63	19
Northern rock sole	0	15	5	70	7	1	0
Southern rock sole	< 1	14	13	7	16	12	1
Flathead sole	0	0	0	25	11	0	7
Rex sole	0	0	< 1	1	< 1	< 1	45
Dover sole	0	0	0	0	0	0	5
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	0	0	0
Sharks	0	4	0	0	0	0	0
Yellow Irish lord	0	13	2	1	< 1	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	4	0	0	0
Other sculpins	0	0	0	0	0	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	3	5	0	0	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	< 1	0	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	4	2	< 1	< 1	0	< 1	< 1
Starfish	0	< 1	< 1	0	0	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	5
Snails	< 1	3	< 1	< 1	0	< 1	0
Other invertebrates	16	7	10	3	< 1	2	< 1
Total catch (kg)	25	908	119	674	82	1225	544

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	78	79	80	81	82	83	84
Start date & time	06/11/03 17	06/11/03 20	06/12/03 08	06/12/03 13	06/12/03 15	06/12/03 21	06/13/03 07
Start latitude	N 5437.97	N 5429.21	N 5453.68	N 5454.21	N 5457.61	N 5447.75	N 5452.31
Start longitude	W 15904.01	W 15852.00	W 15825.83	W 15851.69	W 15901.57	W 15959.81	W 16000.38
End latitude	N 5437.53	N 5430.37	N 5452.96	N 5454.86	N 5458.06	N 5447.02	N 5452.73
End longitude	W 15905.15	W 15851.98	W 15825.62	W 15852.13	W 15902.56	W 16000.08	W 15959.24
Bottom depth (m)	97	381	189	95	89	70	59
Duration (minutes)	15.6	15	15	14.4	15	15	15.6
Distance fished (km)	1.507	1.16	1.394	1.314	1.382	1.419	1.469
Performance	0	0	0	1.11	0	0	0
Atka mackerel	0	0	0	0	0	2	2
Pacific cod	0	0	20	2	12	4	0
Walleye pollock	0	< 1	18	< 1	0	18	526
Pacific ocean perch	< 1	0	9	< 1	0	0	0
Northern rockfish	20	0	0	0	0	0	0
Shortraker rockfish	0	21	0	0	0	0	0
Rougheye rockfish	0	0	< 1	0	0	0	0
Shortspine thornyhead	0	107	1	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	43	34	0	0	0	0
Arrowtooth flounder	4	7	205	12	107	20	4
Pacific halibut	42	9	61	19	17	180	6
Northern rock sole	7	0	0	< 1	2	4	6
Southern rock sole	23	0	0	45	47	46	23
Flathead sole	< 1	0	8	0	< 1	5	12
Rex sole	0	26	74	0	0	0	0
Dover sole	0	14	8	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	3	0	0	0	0	0	0
Skates	0	< 1	19	0	0	0	62
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	< 1	0	< 1
Bigmouth sculpin	0	0	< 1	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	0	0	0	0	0
Smelts	0	0	12	1	0	0	0
Giant grenadier	0	324	0	0	0	0	0
Other fish	4	< 1	< 1	0	< 1	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	< 1	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	0	0	< 1	< 1	< 1	0
Magistrate armhook squid	0	3	2	0	0	0	0
Sponges	< 1	< 1	< 1	< 1	0	0	0
Starfish	< 1	< 1	1	< 1	< 1	< 1	0
Stony coral	< 1	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	< 1	0	< 1	0	0	0
Snails	< 1	< 1	< 1	< 1	< 1	0	0
Other invertebrates	< 1	6	7	< 1	< 1	1	1
Total catch (kg)	105	562	480	83	188	280	641

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	85	86	87	88	89	90	91
Start date & time	06/13/03 09	06/13/03 12	06/13/03 15	06/13/03 17	06/13/03 22	06/14/03 07	06/14/03 10
Start latitude	N 5453.11	N 5452.70	N 5501.52	N 5505.11	N 5516.17	N 5546.93	N 5552.010
Start longitude	W 16008.04	W 16048.46	W 16017.35	W 16016.41	W 15944.46	W 15927.87	W 15913.05
End latitude	N 5452.44	N 5453.22	N 5500.77	N 5505.85	N 5516.88	N 5546.23	N 5551.36
End longitude	W 16008.54	W 16049.43	W 16017.38	W 16016.33	W 15944.87	W 15927.41	W 15913.21
Bottom depth (m)	55	89	75	84	87	85	63
Duration (minutes)	15	15.6	15	15	15	15	15
Distance fished (km)	1.384	1.457	1.401	1.402	1.43	1.419	1.402
Performance	0	0	1.1	0	0	0	0
Atka mackerel	< 1	1	2	0	0	0	0
Pacific cod	7	0	0	0	15	19	4
Walleye pollock	565	< 1	0	< 1	< 1	1080	1
Pacific ocean perch	0	0	0	0	< 1	0	0
Northern rockfish	0	0	0	0	< 1	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	< 1	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	5	268	17	77	28	398	251
Pacific halibut	58	22	123	136	22	34	35
Northern rock sole	30	2	8	13	0	2	21
Southern rock sole	39	31	77	54	1	0	36
Flathead sole	8	6	15	80	2	136	67
Rex sole	0	1	0	0	5	3	< 1
Dover sole	0	0	0	0	1	< 1	1
Yellowfin sole	0	0	0	0	0	19	39
Other flatfish	3	< 1	0	0	0	< 1	5
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	7	0	0	0	51
Sharks	0	18	0	0	0	0	0
Yellow Irish lord	1	0	0	15	1	< 1	1
Bigmouth sculpin	0	0	0	0	0	1	0
Great sculpin	0	0	0	5	8	0	0
Other sculpins	0	0	0	< 1	< 1	0	0
Smelts	0	0	< 1	0	0	< 1	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	0	0	0	1	2	< 1
Bairdi Tanner crab	0	0	0	0	< 1	< 1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	< 1	< 1	2	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	< 1	0	0	< 1
Starfish	0	0	1	< 1	< 1	< 1	10
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	6	0	0	0
Snails	< 1	0	0	< 1	< 1	0	< 1
Other invertebrates	1	< 1	16	12	42	4	7
Total catch (kg)	717	351	266	398	128	1703	533

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	92	93	94	95	96	97	98
Start date & time	06/14/03 14	06/14/03 17	06/14/03 19	06/15/03 07	06/15/03 09	06/15/03 11	06/15/03 14
Start latitude	N 5518.37	N 5518.35	N 5526.57	N 5456.81	N 5452.64	N 5446.07	N 5455.03
Start longitude	W 15836.38	W 15826.42	W 15800.82	W 15816.13	W 15808.33	W 15751.91	W 15727.50
End latitude	N 5519.00	N 5518.99	N 5526.15	N 5456.76	N 5453.46	N 5445.44	N 5455.45
End longitude	W 15837.15	W 15827.11	W 15801.97	W 15817.43	W 15808.06	W 15752.62	W 15726.39
Bottom depth (m)	179	174	117	180	157	336	188
Duration (minutes)	15.6	15	15.6	15	16.8	17.4	15
Distance fished (km)	1.446	1.432	1.463	1.411	1.589	1.395	1.436
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	2	1	0	0
Pacific cod	20	0	29	16	3	0	1
Walleye pollock	13	6	0	2	0	0	23
Pacific ocean perch	129	< 1	2	17	16	1	50
Northern rockfish	2	< 1	2	6	< 1	0	< 1
Shortraker rockfish	0	0	0	0	0	31	0
Rougheye rockfish	2	0	0	< 1	0	244	1
Shortspine thornyhead	0	0	0	0	0	16	4
Dusky rockfish	0	0	0	5	6	0	4
Other rockfish	5	0	0	0	0	0	< 1
Sablefish	119	3	3	2	1	78	39
Arrowtooth flounder	451	162	143	104	816	7	37
Pacific halibut	112	3	36	7	27	15	15
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	24	41	16	36	26	0	0
Rex sole	55	21	97	63	13	5	8
Dover sole	17	0	28	11	< 1	5	5
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	14	12	2	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	21	0	0	0	0	0	7
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	0	< 1	< 1	0	< 1
Smelts	12	24	2	12	0	0	0
Giant grenadier	0	0	0	0	0	1064	0
Other fish	4	0	0	0	0	< 1	< 1
Bairdi Tanner crab	0	< 1	0	< 1	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	0	< 1	0	0	< 1
Sidestripe shrimp	< 1	< 1	0	< 1	0	< 1	< 1
Scallops	0	0	0	0	< 1	0	0
Magistrate armhook squid	0	< 1	0	< 1	0	5	< 1
Sponges	3	< 1	< 1	0	0	< 1	2
Starfish	< 1	1	< 1	6	0	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	14	0	0	0	0	0
Snails	1	< 1	0	< 1	0	0	< 1
Other invertebrates	7	< 1	2	3	2	7	3
Total catch (kg)	998	291	372	296	913	1478	203

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	99	100	101	102	103	104	105
Start date & time	06/16/03 07	06/16/03 08	06/16/03 10	06/16/03 11	06/16/03 14	06/16/03 16	06/16/03 18
Start latitude	N 5514.69	N 5515.01	N 5514.74	N 5512.12	N 5512.46	N 5516.42	N 5516.57
Start longitude	W 15756.45	W 15753.60	W 15745.47	W 15754.65	W 15725.55	W 15722.84	W 15707.61
End latitude	N 5515.41	N 5515.01	N 5515.43	N 5512.77	N 5513.21	N 5515.92	N 5515.84
End longitude	W 15755.99	W 15752.06	W 15745.93	W 15754.55	W 15725.09	W 15721.85	W 15707.82
Bottom depth (m)	84	82	82	82	96	94	100
Duration (minutes)	15.6	17.4	15	13.2	15.6	15	15
Distance fished (km)	1.468	1.616	1.402	1.219	1.495	1.412	1.396
Performance	0	0	0	2.4	0	0	0
Atka mackerel	0	0	0	0	1	0	0
Pacific cod	376	54	8	871	0	5	2
Walleye pollock	0	< 1	0	0	2	< 1	0
Pacific ocean perch	5	< 1	0	< 1	< 1	0	0
Northern rockfish	0	0	0	3	197	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	2	< 1	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	5	2	2	< 1	6	76	49
Pacific halibut	268	199	212	307	24	301	43
Northern rock sole	9	7	13	17	0	< 1	0
Southern rock sole	49	62	82	195	7	1	4
Flathead sole	0	0	0	0	0	0	0
Rex sole	0	0	0	0	0	0	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	15	0	0	0	11	0
Skates	0	0	0	0	18	0	0
Sharks	0	0	0	0	52	0	0
Yellow Irish lord	0	0	0	< 1	< 1	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	0	0	0	0	0
Smelts	0	0	0	0	0	< 1	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	2	< 1	< 1	7	< 1	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	1	2	1	3	2	3	< 1
Magistrate armhook squid	< 1	0	0	0	0	0	0
Sponges	< 1	1	2	4	2	< 1	< 1
Starfish	< 1	< 1	< 1	2	2	4	2
Stony coral	0	0	0	0	< 1	0	< 1
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	< 1	< 1	< 1	< 1	< 1	0
Other invertebrates	< 1	3	8	6	13	5	8
Total catch (kg)	717	347	329	1410	333	407	109

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	106	107	108	109	110	111	112
Start date & time	06/17/03 07	06/17/03 10	06/17/03 11	06/17/03 14	06/17/03 18	06/18/03 07	06/18/03 09
Start latitude	N 5503.50	N 5505.52	N 5510.85	N 5513.40	N 5544.30	N 5529.87	N 5536.32
Start longitude	W 15658.57	W 15653.71	W 15649.21	W 15644.00	W 15643.85	W 15627.96	W 15611.96
End latitude	N 5503.69	N 5505.75	N 5511.24	N 5513.74	N 5545.07	N 5529.90	N 5536.84
End longitude	W 15657.31	W 15652.45	W 15648.22	W 15642.82	W 15643.67	W 15626.63	W 15612.93
Bottom depth (m)	414	333	167	167	210	215	249
Duration (minutes)	15	15	13.8	15	15	15	15
Distance fished (km)	1.406	1.426	1.31	1.436	1.463	1.409	1.431
Performance	0	0	0	0	0	5.8	0
Atka mackerel	0	0	0	2	0	0	0
Pacific cod	0	0	17	34	22	31	0
Walleye pollock	0	4	0	0	8	87	<1
Pacific ocean perch	0	2	1459	1127	8	1	<1
Northern rockfish	0	0	2	47	0	2	0
Shortraker rockfish	3	46	3	0	0	0	0
Rougheye rockfish	1	15	2	0	1	0	24
Shortspine thornyhead	65	39	1	0	0	0	41
Dusky rockfish	0	0	4	35	2	0	0
Other rockfish	0	0	<1	0	12	8	0
Sablefish	175	28	7	0	16	198	37
Arrowtooth flounder	3	7	338	766	178	404	52
Pacific halibut	0	0	9	24	0	96	4
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	0	0	0	<1	6	4	11
Rex sole	2	28	2	<1	27	19	21
Dover sole	8	24	3	<1	15	11	14
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	12	0	17
Sharks	0	0	0	0	0	0	4
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	<1	0	0
Smelts	0	0	0	0	14	0	<1
Giant grenadier	2724	0	0	0	0	0	0
Other fish	<1	<1	0	0	10	0	2
Bairdi Tanner crab	0	0	0	0	0	0	<1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	<1	0	0	0	<1
Sidestripe shrimp	0	0	0	0	2	<1	<1
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	7	2	<1	0	0	0	0
Sponges	<1	0	11	4	<1	0	1
Starfish	<1	<1	<1	<1	<1	<1	8
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	<1	0	<1	<1	0	0	<1
Other invertebrates	9	19	2	3	7	2	24
Total catch (kg)	2,997	213	1,861	2,043	341	863	264

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	113	114	115	116	117	118	119
Start date & time	06/18/03 11	06/18/03 13	06/18/03 16	06/18/03 17	06/19/03 07	06/19/03 09	06/19/03 12
Start latitude	N 5538.47	N 5541.18	N 5553.17	N 5552.46	N 5527.62	N 5527.13	N 5538.77
Start longitude	W 15610.73	W 15603.84	W 15613.83	W 15557.86	W 15603.59	W 15601.42	W 15524.50
End latitude	N 5539.04	N 5541.90	N 5552.47	N 5551.70	N 5527.63	N 5527.02	N 5539.17
End longitude	W 15611.72	W 15604.43	W 15613.44	W 15557.88	W 15602.26	W 15602.71	W 15523.17
Bottom depth (m)	248	250	216	87	196	195	249
Duration (minutes)	16.2	15.6	15	15	15	15	16.8
Distance fished (km)	1.505	1.499	1.4	1.411	1.416	1.398	1.598
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	2	3	< 1	55	9	0
Walleye pollock	< 1	5	17	92	17	< 1	3
Pacific ocean perch	0	< 1	< 1	0	134	368	97
Northern rockfish	< 1	< 1	0	0	8	15	< 1
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	61	2	0	0	< 1	1	0
Shortspine thornyhead	7	8	< 1	0	0	0	46
Dusky rockfish	0	0	0	0	0	1	2
Other rockfish	0	0	0	0	1	0	< 1
Sablefish	17	431	36	0	10	2	255
Arrowtooth flounder	79	76	192	12	58	29	66
Pacific halibut	0	0	0	188	30	14	3
Northern rock sole	0	0	0	16	0	0	0
Southern rock sole	0	0	0	4	0	0	0
Flathead sole	6	14	31	< 1	0	< 1	< 1
Rex sole	13	171	28	0	48	14	31
Dover sole	16	47	8	0	7	5	5
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	3	0	6	0	0	0
Skates	22	17	13	0	0	0	0
Sharks	0	0	0	4	3	0	0
Yellow Irish lord	0	0	0	< 1	0	0	0
Bigmouth sculpin	0	4	0	0	7	4	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	< 1	< 1	0	0	1
Smelts	< 1	< 1	64	5	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	0	2	4	< 1	2	< 1
Bairdi Tanner crab	< 1	< 1	< 1	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	< 1	0	1	0	0
Sidestripe shrimp	3	1	< 1	0	0	< 1	< 1
Scallops	0	0	0	< 1	0	0	0
Magistrate armhook squid	2	< 1	0	0	0	0	0
Sponges	< 1	< 1	< 1	1	< 1	< 1	< 1
Starfish	5	< 1	2	< 1	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	1	3	< 1	< 1	< 1
Other invertebrates	8	16	6	86	10	6	7
Total catch (kg)	241	800	404	423	394	472	518

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	120	121	122	123	124	125	126
Start date & time	06/19/03 14	06/19/03 17	06/19/03 18	06/20/03 07	06/20/03 09	06/20/03 11	06/20/03 12
Start latitude	N 5540.57	N 5553.28	N 5550.58	N 5622.31	N 5618.19	N 5612.15	N 5612.11
Start longitude	W 15528.45	W 15553.57	W 15555.87	W 15519.43	W 15540.42	W 15547.22	W 15529.80
End latitude	N 5540.88	N 5552.54	N 5549.98	N 5621.42	N 5617.50	N 5612.86	N 5612.84
End longitude	W 15527.17	W 15553.64	W 15556.62	W 15519.69	W 15540.97	W 15546.70	W 15529.66
Bottom depth (m)	154	72	86	46	73	70	53
Duration (minutes)	16.2	15	15	18	16.2	15.6	15
Distance fished (km)	1.486	1.398	1.384	1.703	1.44	1.453	1.384
Performance	0	5.8	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	84	0	7	0	< 1	0	0
Walleye pollock	837	0	< 1	0	< 1	0	0
Pacific ocean perch	248	0	0	0	0	0	0
Northern rockfish	1	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	1	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	< 1	0	0	0	0	0	0
Sablefish	3	0	0	0	0	0	0
Arrowtooth flounder	292	0	12	0	5	3	0
Pacific halibut	44	80	100	49	36	27	217
Northern rock sole	0	2	8	45	52	4	5
Southern rock sole	0	1	22	20	25	9	34
Flathead sole	4	0	0	0	2	0	0
Rex sole	96	0	0	0	0	0	0
Dover sole	9	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	17	1	0
Pacific salmon	0	0	0	0	0	0	0
Skates	2	0	0	44	4	0	120
Sharks	2	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	< 1	0	< 1	0	0
Smelts	0	< 1	< 1	0	0	< 1	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	0	< 1	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	< 1	< 1	< 1	0	< 1	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	< 1	2	2	0	0	0
Starfish	< 1	1	< 1	< 1	0	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	< 1	2	< 1	< 1	0	0
Other invertebrates	3	4	17	4	< 1	< 1	2
Total catch (kg)	1627	91	171	162	144	44	378

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	127	128	129	130	131	132	133
Start date & time	06/20/03 13	06/20/03 15	06/21/03 07	06/21/03 08	06/21/03 09	06/21/03 12	06/21/03 15
Start latitude	N 5606.64	N 5606.15	N 5600.03	N 5558.26	N 5554.96	N 5552.69	N 5531.86
Start longitude	W 15529.17	W 15531.51	W 15514.36	W 15513.33	W 15506.71	W 15456.47	W 15455.01
End latitude	N 5605.89	N 5605.43	N 5559.29	N 5557.60	N 5554.30	N 5551.100	N 5532.39
End longitude	W 15529.39	W 15531.67	W 15514.20	W 15513.93	W 15507.35	W 15456.98	W 15453.68
Bottom depth (m)	41	43	48	55	99	271	571
Duration (minutes)	15.6	15	15	15	15	15	18.6
Distance fished (km)	1.442	1.379	1.405	1.409	1.426	1.421	1.758
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	5	870	4	5	175	0	0
Walleye pollock	0	0	0	0	0	4	0
Pacific ocean perch	0	0	0	0	0	222	0
Northern rockfish	0	0	0	0	0	4	0
Shortraker rockfish	0	0	0	0	0	13	2
Rougheye rockfish	0	0	0	0	0	19	0
Shortspine thornyhead	0	0	0	0	0	53	36
Dusky rockfish	0	0	0	0	0	4	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	183	104
Arrowtooth flounder	0	0	0	0	876	74	0
Pacific halibut	71	113	77	136	12	3	0
Northern rock sole	1	45	0	8	52	0	0
Southern rock sole	3	25	3	12	5	0	0
Flathead sole	0	0	0	0	33	0	0
Rex sole	0	0	0	0	< 1	24	0
Dover sole	0	0	0	0	0	5	105
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	28	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	122	0	27	2	10	0
Sharks	0	4	5	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	0	0	0	< 1	< 1
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	152	349
Other fish	< 1	< 1	0	0	19	0	2
Bairdi Tanner crab	0	0	0	0	0	< 1	0
Golden king crab	0	0	0	0	0	0	< 1
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	< 1	0
Scallops	< 1	0	0	< 1	< 1	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	< 1	0	< 1	8
Starfish	5	< 1	3	135	11	< 1	< 1
Stony coral	0	0	0	0	0	0	< 1
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	1
Snails	< 1	0	0	< 1	0	< 1	< 1
Other invertebrates	58	< 1	6	16	< 1	1	5
Total catch (kg)	144	1,180	96	340	1,216	773	612

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	134	135	136	137	138	139	140
Start date & time	06/21/03 18	06/22/03 07	06/22/03 08	06/22/03 09	06/22/03 12	06/22/03 15	06/22/03 16
Start latitude	N 5547.81	N 5605.18	N 5605.21	N 5605.76	N 5607.11	N 5602.32	N 5602.60
Start longitude	W 15459.51	W 15508.40	W 15456.19	W 15454.04	W 15425.33	W 15430.52	W 15415.56
End latitude	N 5547.11	N 5604.75	N 5604.66	N 5605.14	N 5607.88	N 5602.03	N 5602.65
End longitude	W 15459.90	W 15507.27	W 15457.010	W 15454.77	W 15425.34	W 15429.21	W 15414.13
Bottom depth (m)	257	53	81	93	149	232	132
Duration (minutes)	15	15	15	15	15	15.6	16.2
Distance fished (km)	1.398	1.431	1.411	1.417	1.423	1.477	1.509
Performance	0	0	5.8	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	8	11	4	51	8	< 1
Walleye pollock	3	0	0	0	0	5	0
Pacific ocean perch	976	0	0	0	< 1	32	4
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	8	0	0	0	0	0	0
Rougheye rockfish	6	0	0	0	0	< 1	0
Shortspine thornyhead	40	0	0	0	0	62	0
Dusky rockfish	3	0	0	0	0	0	0
Other rockfish	2	0	0	0	0	1	0
Sablefish	232	0	0	0	1	105	0
Arrowtooth flounder	310	0	3	133	349	12	48
Pacific halibut	0	274	81	26	16	0	15
Northern rock sole	0	149	20	11	0	0	0
Southern rock sole	0	43	9	1	0	0	0
Flathead sole	0	0	0	< 1	0	0	0
Rex sole	13	0	0	0	10	< 1	23
Dover sole	3	0	0	0	0	< 1	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	2	9	0	0	0
Pacific salmon	0	0	10	0	0	0	0
Skates	0	52	48	0	0	< 1	0
Sharks	0	8	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	4	15
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	0	0	0	2	0
Smelts	0	0	< 1	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	0	0	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	< 1	0	0	0	0	< 1	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	< 1	0	< 1	0	< 1	< 1
Starfish	< 1	136	3	10	0	3	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	< 1	0
Snails	< 1	0	0	0	0	0	0
Other invertebrates	4	2	2	3	7	1	13
Total catch (kg)	1604	672	190	198	434	237	119

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	141	142	143	144	145	146	147
Start date & time	06/22/03 18	06/22/03 19	06/26/03 07	06/26/03 12	06/26/03 15	06/27/03 07	06/27/03 09
Start latitude	N 5607.14	N 5611.32	N 5743.92	N 5750.14	N 5748.07	N 5645.89	N 5641.03
Start longitude	W 15409.83	W 15404.62	W 15218.02	W 15201.06	W 15158.25	W 15237.98	W 15245.36
End latitude	N 5607.86	N 5611.30	N 5743.70	N 5749.68	N 5747.30	N 5645.03	N 5641.83
End longitude	W 15409.29	W 15403.26	W 15219.51	W 15159.78	W 15157.89	W 15238.14	W 15245.44
Bottom depth (m)	116	165	136	77	93	86	78
Duration (minutes)	15.6	15	16.8	16.8	16.2	17.4	16.2
Distance fished (km)	1.484	1.424	1.558	1.561	1.5	1.626	1.503
Performance	0	0	0	0	0	0	0
Atka mackerel	< 1	0	0	0	0	0	0
Pacific cod	3	0	17	< 1	144	5	0
Walleye pollock	0	1	127	0	2	0	0
Pacific ocean perch	< 1	302	4	0	0	< 1	0
Northern rockfish	235	< 1	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	2	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	39	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	12	0	0	0	0	0
Arrowtooth flounder	114	687	426	0	346	26	33
Pacific halibut	25	4	6	69	23	73	937
Northern rock sole	0	0	0	< 1	18	3	< 1
Southern rock sole	0	0	< 1	35	127	48	32
Flathead sole	42	24	208	0	8	0	0
Rex sole	20	63	5	0	2	0	0
Dover sole	0	11	4	0	4	0	0
Yellowfin sole	0	0	< 1	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	14	0	9	0
Skates	0	< 1	4	< 1	24	11	0
Sharks	0	0	0	5	4	0	3
Yellow Irish lord	0	0	0	0	9	< 1	0
Bigmouth sculpin	0	0	< 1	0	0	0	0
Great sculpin	0	0	18	0	1	0	0
Other sculpins	0	0	< 1	0	< 1	< 1	< 1
Smelts	0	0	1	0	0	< 1	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	2	0	< 1	0	< 1	4	< 1
Bairdi Tanner crab	0	0	40	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	< 1	0	0	0	0
Sidestripe shrimp	0	0	< 1	0	0	0	0
Scallops	0	0	0	< 1	< 1	4	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	< 1	0	0	0
Starfish	0	0	14	11	2	2	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	< 1	0	< 1	0
Other invertebrates	5	1	< 1	7	< 1	15	< 1
Total catch (kg)	486	1,107	882	144	714	202	1,007

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	148	149	150	151	152	153	154
Start date & time	06/27/03 11	06/27/03 13	06/27/03 15	06/27/03 17	06/27/03 19	06/28/03 07	06/28/03 10
Start latitude	N 5636.81	N 5633.82	N 5635.33	N 5632.84	N 5634.53	N 5610.67	N 5609.17
Start longitude	W 15259.66	W 15256.89	W 15255.75	W 15251.62	W 15250.59	W 15325.51	W 15340.73
End latitude	N 5637.29	N 5634.57	N 5634.91	N 5632.84	N 5633.89	N 5611.11	N 5609.02
End longitude	W 15258.47	W 15257.43	W 15254.59	W 15251.58	W 15251.44	W 15324.37	W 15339.31
Bottom depth (m)	86	91	90	69	83	195	296
Duration (minutes)	16.2	16.2	15.6	0.6	16.2	15.6	16.2
Distance fished (km)	1.524	1.542	1.446	0.042	1.531	1.463	1.515
Performance	0	0	0	-1.2	5.1	0	0
Atka mackerel	0	0	0	0	0	4	0
Pacific cod	0	14	< 1	0	1	15	0
Walleye pollock	0	< 1	< 1	0	0	5	0
Pacific ocean perch	0	< 1	0	0	27	735	8
Northern rockfish	0	0	0	0	112	6	0
Shortraker rockfish	0	0	0	0	0	0	194
Rougheye rockfish	0	0	0	0	0	0	42
Shortspine thornyhead	0	0	0	0	0	18	89
Dusky rockfish	0	0	0	0	1	7	3
Other rockfish	0	0	0	0	< 1	< 1	2
Sablefish	0	0	0	0	0	128	228
Arrowtooth flounder	1	310	91	0	0	25	10
Pacific halibut	458	122	127	0	68	0	0
Northern rock sole	< 1	8	2	0	3	0	0
Southern rock sole	5	14	6	0	8	0	0
Flathead sole	0	1	0	0	0	4	0
Rex sole	0	< 1	0	0	0	1	6
Dover sole	0	0	0	0	0	4	8
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	33	30	0	0	0	0	0
Skates	0	< 1	0	0	0	0	0
Sharks	0	14	14	0	0	0	0
Yellow Irish lord	0	< 1	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	< 1	0	0	< 1	0	3
Smelts	0	< 1	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	1	< 1	< 1	0	8	0	< 1
Bairdi Tanner crab	0	< 1	0	0	0	< 1	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	< 1	0
Sidestripe shrimp	0	0	0	0	0	< 1	< 1
Scallops	0	< 1	< 1	0	< 1	0	0
Magistrate armhook squid	0	0	0	0	0	0	< 1
Sponges	4	2	< 1	0	2	0	1
Starfish	< 1	< 1	< 1	0	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	8	< 1
Snails	< 1	< 1	0	0	< 1	0	< 1
Other invertebrates	10	3	2	0	2	3	11
Total catch (kg)	514	519	243	0	235	965	608

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	155	156	157	158	159	160	161
Start date & time	06/28/03 13	06/28/03 15	06/28/03 17	06/28/03 19	06/28/03 20	06/29/03 07	06/29/03 09
Start latitude	N 5558.73	N 5557.17	N 5556.73	N 5558.61	N 5558.73	N 5611.47	N 5601.45
Start longitude	W 15337.82	W 15338.69	W 15347.39	W 15352.79	W 15353.07	W 15348.59	W 15328.80
End latitude	N 5558.75	N 5557.44	N 5556.50	N 5558.38	N 5558.15	N 5611.35	N 5600.50
End longitude	W 15336.53	W 15337.31	W 15346.04	W 15352.41	W 15352.12	W 15347.24	W 15328.10
Bottom depth (m)	107	138	171	198	195	183	399
Duration (minutes)	15.6	16.2	15.6	6.6	15.6	15	21
Distance fished (km)	1.35	1.54	1.49	0.582	1.497	1.428	1.955
Performance	-2.5	0	0	-5.2	0	0	0
Atka mackerel	0	0	0	0	0	3	0
Pacific cod	0	0	3	8	19	35	0
Walleye pollock	0	0	0	5	3	55	0
Pacific ocean perch	2	1	2033	191	352	307	< 1
Northern rockfish	1	0	0	0	7	7	0
Shortraker rockfish	4	0	0	0	0	0	200
Rougheye rockfish	0	0	0	0	0	0	130
Shortspine thornyhead	< 1	0	0	2	9	0	120
Dusky rockfish	0	0	0	7	46	6	0
Other rockfish	0	0	0	< 1	2	0	0
Sablefish	0	0	0	0	3	48	904
Arrowtooth flounder	< 1	11	50	7	21	43	60
Pacific halibut	14	35	0	3	0	8	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	1	2	0	0	0	0	0
Flathead sole	0	0	< 1	0	< 1	0	0
Rex sole	0	0	< 1	< 1	< 1	5	16
Dover sole	0	0	0	1	2	2	132
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	0	0	3
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	4	0	0	7	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	< 1	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	156
Other fish	1	< 1	0	0	0	0	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	< 1	< 1	< 1	0
Sidestripe shrimp	0	0	0	< 1	< 1	0	0
Scallops	< 1	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	< 1
Sponges	< 1	< 1	0	0	0	0	0
Starfish	< 1	< 1	0	< 1	0	0	< 1
Stony coral	< 1	< 1	< 1	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	< 1	0	0	0	< 1
Other invertebrates	3	1	< 1	1	< 1	2	3
Total catch (kg)	28	52	2090	226	466	527	1727

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	162	163	164	165	166	167	168
Start date & time	06/29/03 13	06/29/03 16	06/30/03 07	06/30/03 09	06/30/03 12	06/30/03 13	06/30/03 15
Start latitude	N 5617.03	N 5617.63	N 5620.06	N 5630.19	N 5629.49	N 5632.88	N 5632.72
Start longitude	W 15311.01	W 15244.80	W 15249.09	W 15301.53	W 15304.54	W 15300.04	W 15303.62
End latitude	N 5616.65	N 5618.19	N 5620.59	N 5630.35	N 5629.50	N 5632.21	N 5632.48
End longitude	W 15309.71	W 15243.85	W 15249.88	W 15300.08	W 15303.14	W 15259.33	W 15302.23
Bottom depth (m)	360	358	139	80	72	94	97
Duration (minutes)	16.2	15.6	13.8	16.2	15	15.6	16.2
Distance fished (km)	1.543	1.464	1.303	1.535	1.451	1.475	1.52
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	< 1	0	0	0	0
Pacific cod	0	0	61	29	6	139	184
Walleye pollock	0	0	1	0	0	0	0
Pacific ocean perch	0	0	997	0	0	0	0
Northern rockfish	0	0	1	0	0	0	0
Shortraker rockfish	109	403	0	0	0	0	0
Rougheye rockfish	8	116	0	0	0	0	0
Shortspine thornyhead	72	25	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	440	359	88	0	0	0	< 1
Arrowtooth flounder	60	23	282	769	37	360	247
Pacific halibut	30	0	14	17	89	52	36
Northern rock sole	0	0	0	49	88	15	7
Southern rock sole	0	0	2	48	46	2	< 1
Flathead sole	0	0	< 1	56	0	21	27
Rex sole	7	1	22	< 1	0	5	28
Dover sole	43	11	9	0	0	< 1	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	55	49	42	107
Skates	< 1	0	10	0	0	8	0
Sharks	0	0	0	4	3	5	3
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	1
Other sculpins	0	< 1	0	0	0	0	< 1
Smelts	0	0	0	< 1	< 1	0	0
Giant grenadier	339	1592	0	0	0	0	0
Other fish	< 1	< 1	< 1	0	0	< 1	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	< 1	< 1	0	0	0	0	0
Scallops	0	0	0	< 1	0	0	0
Magistrate armhook squid	2	0	0	0	0	0	0
Sponges	0	< 1	0	0	0	< 1	0
Starfish	< 1	< 1	0	0	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	< 1	0	0	0	0	0	0
Snails	2	< 1	0	0	0	< 1	< 1
Other invertebrates	2	2	2	< 1	< 1	1	< 1
Total catch (kg)	1118	2535	1490	1029	318	651	643

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	169	170	171	172	173	174	175
Start date & time	06/30/03 17	07/01/03 07	07/01/03 09	07/01/03 12	07/01/03 15	07/03/03 09	07/03/03 13
Start latitude	N 5628.10	N 5633.97	N 5633.63	N 5635.18	N 5631.16	N 5640.08	N 5646.61
Start longitude	W 15237.01	W 15150.17	W 15150.58	W 15226.46	W 15231.61	W 15353.57	W 15344.74
End latitude	N 5628.95	N 5633.98	N 5634.49	N 5635.99	N 5631.65	N 5639.32	N 5646.88
End longitude	W 15237.00	W 15150.16	W 15149.80	W 15226.67	W 15230.45	W 15353.99	W 15343.35
Bottom depth (m)	130	542	530	146	282	68	78
Duration (minutes)	16.8	0	18.6	16.8	16.2	15.6	16.2
Distance fished (km)	1.591	0.02	1.813	1.556	1.53	1.512	1.523
Performance	0	-5.7	5.1	0	0	3.13	0
Atka mackerel	0	0	0	0	0	< 1	0
Pacific cod	25	0	0	8	0	12	0
Walleye pollock	0	0	0	0	4	0	0
Pacific ocean perch	19	0	0	1016	26	< 1	0
Northern rockfish	50	0	0	3	4	< 1	0
Shortraker rockfish	0	< 1	7	0	59	0	0
Rougheye rockfish	0	0	< 1	0	28	0	0
Shortspine thornyhead	0	9	121	2	111	0	0
Dusky rockfish	5	0	0	1	0	1	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	6	25	233	< 1	289	0	0
Arrowtooth flounder	814	0	0	381	43	31	9
Pacific halibut	49	0	0	40	42	63	56
Northern rock sole	0	0	0	0	0	86	65
Southern rock sole	0	0	0	0	0	66	59
Flathead sole	0	0	0	2	0	0	13
Rex sole	12	< 1	0	17	3	0	0
Dover sole	3	5	163	5	21	0	0
Yellowfin sole	0	0	0	0	0	0	4
Other flatfish	0	0	4	0	0	0	46
Pacific salmon	4	0	0	0	0	0	0
Skates	11	0	< 1	0	19	11	0
Sharks	0	0	0	0	0	47	7
Yellow Irish lord	0	0	0	0	0	47	0
Bigmouth sculpin	2	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	23	0
Other sculpins	0	< 1	1	0	4	< 1	< 1
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	18	277	0	0	0	0
Other fish	0	3	1	0	0	14	49
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	< 1	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	< 1	0	0
Scallops	< 1	0	0	0	0	1	0
Magistrate armhook squid	0	< 1	< 1	0	< 1	0	0
Sponges	0	0	< 1	0	< 1	2	0
Starfish	0	< 1	2	< 1	< 1	1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	< 1	0	0	0	0
Octopus	0	0	0	< 1	0	0	0
Snails	< 1	0	< 1	0	< 1	< 1	< 1
Other invertebrates	2	< 1	4	< 1	2	116	12
Total catch (kg)	1001	61	816	1476	658	524	320

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	176	177	178	179	180	181	182
Start date & time	07/03/03 15	07/03/03 19	07/03/03 20	07/04/03 07	07/04/03 09	07/04/03 12	07/04/03 14
Start latitude	N 5644.04	N 5639.70	N 5636.82	N 5633.70	N 5635.62	N 5635.64	N 5647.86
Start longitude	W 15335.21	W 15330.14	W 15324.37	W 15328.48	W 15318.95	W 15353.00	W 15329.39
End latitude	N 5643.94	N 5639.69	N 5637.47	N 5634.43	N 5635.69	N 5635.69	N 5647.97
End longitude	W 15333.74	W 15328.74	W 15323.64	W 15327.84	W 15317.46	W 15354.49	W 15329.25
Bottom depth (m)	156	152	147	133	120	47	78
Duration (minutes)	16.2	15.6	15	16.2	16.2	16.2	3
Distance fished (km)	1.535	1.441	1.447	1.5	1.546	1.536	0.251
Performance	0	0	0	0	0	-5.1	-2.5
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	556	0	4	4	8	0	0
Walleye pollock	399	0	0	0	0	0	< 1
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	< 1
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	6	5	2	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	299	279	234	460	577	0	< 1
Pacific halibut	111	12	11	18	10	163	2
Northern rock sole	0	0	0	0	0	50	1
Southern rock sole	0	0	0	0	0	57	12
Flathead sole	72	65	61	29	74	0	0
Rex sole	43	3	3	4	73	0	0
Dover sole	5	1	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	2	< 1	0	0	0	< 1	0
Pacific salmon	3	11	8	32	44	3	0
Skates	9	15	23	7	0	30	0
Sharks	4	0	2	0	136	56	6
Yellow Irish lord	< 1	0	< 1	< 1	0	< 1	0
Bigmouth sculpin	8	0	2	< 1	0	0	0
Great sculpin	3	10	0	4	0	12	0
Other sculpins	< 1	< 1	1	< 1	0	< 1	0
Smelts	0	< 1	15	1	< 1	< 1	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	2	3	1	< 1	11	0
Bairdi Tanner crab	0	< 1	< 1	1	< 1	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	< 1	< 1	0	0	0
Sidestripe shrimp	0	< 1	0	0	0	0	0
Scallops	0	< 1	< 1	0	0	< 1	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	0	0	< 1	< 1
Starfish	< 1	< 1	< 1	2	< 1	2	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	0	0	< 1	< 1	0	< 1
Other invertebrates	2	< 1	3	< 1	2	8	2
Total catch (kg)	1517	406	376	568	924	392	24

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	183	184	185	186	187	188	189
Start date & time	07/04/03 16	07/04/03 19	07/05/03 08	07/05/03 10	07/05/03 13	07/05/03 14	07/05/03 17
Start latitude	N 5649.57	N 5657.77	N 5705.46	N 5659.40	N 5702.33	N 5659.15	N 5649.99
Start longitude	W 15315.80	W 15304.28	W 15110.78	W 15126.78	W 15143.85	W 15150.99	W 15204.62
End latitude	N 5650.40	N 5658.51	N 5705.24	N 5658.63	N 5701.73	N 5658.36	N 5650.47
End longitude	W 15315.75	W 15303.48	W 15112.28	W 15127.16	W 15142.82	W 15151.20	W 15205.77
Bottom depth (m)	167	133	376	448	89	79	99
Duration (minutes)	16.8	17.4	16.8	16.2	16.8	16.2	16.2
Distance fished (km)	1.565	1.635	1.6	1.506	1.557	1.494	1.514
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	158	413	0	0	12	0	266
Walleye pollock	115	29	< 1	0	0	0	0
Pacific ocean perch	0	0	0	0	12	0	0
Northern rockfish	0	0	0	0	4	0	0
Shortraker rockfish	0	0	18	2	0	0	0
Rougheye rockfish	8	0	16	0	0	0	0
Shortspine thornyhead	0	0	63	30	0	0	0
Dusky rockfish	0	2	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	3	109	83	0	0	0
Arrowtooth flounder	492	547	5	0	82	< 1	1533
Pacific halibut	88	4	0	0	7	342	4
Northern rock sole	0	0	0	0	< 1	3	0
Southern rock sole	0	0	0	0	28	24	18
Flathead sole	121	156	0	0	0	0	3
Rex sole	3	83	8	0	< 1	0	0
Dover sole	0	39	16	< 1	0	0	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	23	8	0	0	3	8	12
Skates	13	2	0	0	0	18	0
Sharks	3	2	0	0	0	0	0
Yellow Irish lord	0	5	0	0	0	0	0
Bigmouth sculpin	< 1	0	0	0	0	0	0
Great sculpin	3	0	0	0	0	0	0
Other sculpins	< 1	< 1	< 1	0	< 1	0	0
Smelts	3	0	0	0	4	0	0
Giant grenadier	0	0	332	504	0	0	0
Other fish	< 1	1	< 1	< 1	< 1	0	16
Bairdi Tanner crab	1	< 1	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	0	0	0	0	0
Sidestripe shrimp	< 1	0	0	0	0	0	0
Scallops	0	0	0	0	< 1	< 1	< 1
Magistrate armhook squid	0	0	< 1	< 1	0	0	0
Sponges	0	0	< 1	0	1	< 1	0
Starfish	3	< 1	0	< 1	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	< 1	0	0	0
Snails	< 1	< 1	< 1	< 1	< 1	< 1	0
Other invertebrates	5	1	< 1	2	2	4	< 1
Total catch (kg)	1043	1297	570	624	156	400	1852

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	190	191	192	193	194	195	196
Start date & time	07/06/03 07	07/06/03 10	07/06/03 12	07/06/03 15	07/06/03 17	07/06/03 19	07/07/03 07
Start latitude	N 5651.89	N 5656.01	N 5702.92	N 5701.84	N 5701.63	N 5701.38	N 5703.97
Start longitude	W 15211.45	W 15242.36	W 15251.11	W 15257.53	W 15256.51	W 15303.22	W 15335.16
End latitude	N 5651.90	N 5655.91	N 5703.21	N 5701.30	N 5701.68	N 5700.77	N 5703.68
End longitude	W 15209.96	W 15243.75	W 15250.61	W 15256.51	W 15255.05	W 15304.13	W 15333.91
Bottom depth (m)	95	141	102	84	89	77	94
Duration (minutes)	16.2	15.6	7.8	15.6	15.6	15.6	15
Distance fished (km)	1.532	1.436	0.76	1.471	1.498	1.497	1.388
Performance	0	0	5.1	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	5	0	< 1	7	3	18	39
Walleye pollock	< 1	< 1	0	5	< 1	5	627
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	< 1	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	1	0	0	0	0	2
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	< 1	0	0	0
Sablefish	0	46	0	0	0	0	1
Arrowtooth flounder	108	909	251	14	42	5	14
Pacific halibut	178	18	19	70	33	28	15
Northern rock sole	0	0	2	4	5	13	0
Southern rock sole	14	0	10	57	50	108	0
Flathead sole	0	65	0	0	0	3	226
Rex sole	0	< 1	0	0	0	2	0
Dover sole	0	0	0	0	0	< 1	0
Yellowfin sole	0	0	0	0	0	0	37
Other flatfish	0	0	0	0	0	< 1	2
Pacific salmon	0	43	0	0	8	0	0
Skates	0	3	0	0	< 1	< 1	< 1
Sharks	0	0	7	4	10	19	0
Yellow Irish lord	0	0	0	3	2	< 1	0
Bigmouth sculpin	0	0	0	0	0	0	4
Great sculpin	0	0	0	0	0	0	6
Other sculpins	0	< 1	< 1	< 1	< 1	< 1	10
Smelts	0	0	322	< 1	26	0	1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	1	< 1	7	4
Bairdi Tanner crab	0	< 1	0	0	0	0	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	< 1	< 1	< 1	< 1	< 1	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	< 1	6	6	2	0
Starfish	0	2	0	2	7	< 1	3
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	< 1	0
Snails	< 1	< 1	0	< 1	< 1	< 1	0
Other invertebrates	1	3	5	17	6	7	14
Total catch (kg)	307	1092	617	193	199	222	1006

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	197	198	199	200	201	202	203
Start date & time	07/07/03 09	07/07/03 13	07/07/03 16	07/07/03 19	07/08/03 15	07/08/03 17	07/08/03 19
Start latitude	N 5659.46	N 5703.09	N 5711.80	N 5713.94	N 5752.31	N 5755.04	N 5757.95
Start longitude	W 15328.16	W 15239.97	W 15300.31	W 15249.01	W 15002.24	W 15002.24	W 15004.79
End latitude	N 5658.66	N 5703.81	N 5712.18	N 5713.61	N 5753.13	N 5755.82	N 5758.75
End longitude	W 15328.19	W 15239.53	W 15259.04	W 15247.74	W 15002.29	W 15002.29	W 15004.85
Bottom depth (m)	132	149	121	131	245	250	239
Duration (minutes)	16.2	15	15.6	15	16.8	15.6	16.2
Distance fished (km)	1.512	1.429	1.487	1.434	1.543	1.464	1.492
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	4	0	98	36	0	23	0
Walleye pollock	205	2	194	821	30	23	4
Pacific ocean perch	0	0	0	0	98	35	46
Northern rockfish	0	< 1	0	0	< 1	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	3	7	2	0	< 1	1	0
Shortspine thornyhead	0	0	0	0	76	60	37
Dusky rockfish	0	0	0	0	3	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	< 1	13	0	0	17	15	51
Arrowtooth flounder	918	3914	492	1462	70	47	187
Pacific halibut	8	0	12	52	9	0	2
Northern rock sole	3	0	0	6	0	0	0
Southern rock sole	< 1	0	0	< 1	0	0	0
Flathead sole	246	86	874	620	10	20	32
Rex sole	41	< 1	4	22	16	30	6
Dover sole	29	0	9	40	7	8	14
Yellowfin sole	0	0	< 1	0	0	0	0
Other flatfish	10	0	3	1	0	0	0
Pacific salmon	6	87	18	3	0	0	0
Skates	10	0	54	3	0	2	2
Sharks	2	5	442	129	0	0	0
Yellow Irish lord	< 1	0	0	3	0	0	0
Bigmouth sculpin	< 1	0	0	0	0	0	0
Great sculpin	19	0	11	2	0	0	0
Other sculpins	< 1	0	2	0	0	0	0
Smelts	4	0	< 1	< 1	61	30	2
Giant grenadier	0	0	0	0	0	0	0
Other fish	3	< 1	< 1	1	0	< 1	0
Bairdi Tanner crab	< 1	< 1	< 1	< 1	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	0	4	< 1	< 1	0	0
Sidestripe shrimp	0	0	0	0	< 1	< 1	< 1
Scallops	0	< 1	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	< 1	< 1	0
Sponges	0	0	0	0	0	0	0
Starfish	0	4	1	0	< 1	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	< 1	0
Snails	0	2	0	0	< 1	< 1	0
Other invertebrates	12	< 1	5	< 1	5	3	< 1
Total catch (kg)	1526	4121	2225	3205	403	299	385

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	204	205	206	207	208	209	210
Start date & time	07/08/03 21	07/09/03 07	07/09/03 09	07/09/03 12	07/09/03 15	07/09/03 16	07/09/03 18
Start latitude	N 5801.45	N 5759.14	N 5753.50	N 5755.17	N 5759.08	N 5804.87	N 5805.38
Start longitude	W 15000.67	W 15021.62	W 15015.85	W 14941.96	W 14912.57	W 14920.25	W 14916.78
End latitude	N 5801.41	N 5759.86	N 5754.16	N 5755.79	N 5759.19	N 5805.66	N 5804.63
End longitude	W 15002.18	W 15022.63	W 15016.64	W 14942.96	W 14911.12	W 14921.16	W 14916.39
Bottom depth (m)	290	176	170	188	141	144	141
Duration (minutes)	16.2	17.4	15.6	16.8	16.2	18	16.2
Distance fished (km)	1.514	1.704	1.479	1.548	1.463	1.739	1.49
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	68	10	29	0	0	0
Walleye pollock	5	12	6	0	0	0	< 1
Pacific ocean perch	8	1821	78	0	< 1	0	< 1
Northern rockfish	0	0	0	0	0	0	< 1
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	< 1	0	0	0	0	0	0
Shortspine thornyhead	42	0	0	0	0	0	0
Dusky rockfish	0	2	0	0	0	0	0
Other rockfish	0	0	0	0	< 1	0	< 1
Sablefish	29	107	7	0	0	0	0
Arrowtooth flounder	109	345	232	33	14	70	57
Pacific halibut	3	15	0	138	26	176	108
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	24	8
Flathead sole	1	5	56	0	0	0	0
Rex sole	6	16	12	9	0	0	0
Dover sole	6	19	1	1	< 1	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	38	0	3	0	0
Skates	2	6	0	0	12	66	0
Sharks	0	2	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	10	7	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	< 1	0	0
Smelts	75	5	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	0	10	< 1	17
Bairdi Tanner crab	0	< 1	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	0	0	0	0	0	0
Sidestripe shrimp	3	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	3	0	0	0	0	0	0
Sponges	5	0	0	0	< 1	< 1	0
Starfish	< 1	< 1	0	0	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	0	0	0	< 1	0	< 1
Other invertebrates	3	2	6	< 1	< 1	< 1	< 1
Total catch (kg)	301	2432	451	211	67	336	192

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	211	212	213	214	215	216	217
Start date & time	07/10/03 07	07/10/03 09	07/10/03 13	07/10/03 15	07/10/03 17	07/11/03 07	07/11/03 09
Start latitude	N 5808.67	N 5808.26	N 5812.61	N 5812.43	N 5811.65	N 5823.20	N 5822.05
Start longitude	W 14935.89	W 14931.27	W 14914.98	W 14910.96	W 14906.38	W 14847.23	W 14837.73
End latitude	N 5808.60	N 5808.010	N 5812.88	N 5812.66	N 5812.31	N 5823.24	N 5822.010
End longitude	W 14934.34	W 14929.81	W 14913.40	W 14909.39	W 14906.55	W 14845.67	W 14836.19
Bottom depth (m)	143	137	119	122	135	123	139
Duration (minutes)	16.8	15.6	17.4	17.4	13.2	16.2	16.2
Distance fished (km)	1.548	1.48	1.651	1.627	1.252	1.538	1.528
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	75	378	0	0	1911	0	27
Walleye pollock	0	0	0	0	2	< 1	0
Pacific ocean perch	0	0	< 1	0	0	< 1	2
Northern rockfish	0	0	0	0	0	9	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	< 1	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	16	0	0	0	3	4
Other rockfish	0	0	0	0	0	15	8
Sablefish	124	1402	0	0	24	0	0
Arrowtooth flounder	1468	13907	7	< 1	711	1	57
Pacific halibut	21	47	187	550	29	35	3
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	8	1	< 1	0	0
Flathead sole	185	0	0	0	< 1	0	0
Rex sole	14	0	0	0	30	0	< 1
Dover sole	17	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	13	14	0	0	0
Skates	26	0	9	22	4	0	< 1
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	< 1	< 1
Smelts	0	0	0	0	< 1	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	11	< 1	< 1	0	36	11
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	< 1	< 1	0	< 1	4
Starfish	0	0	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	16	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	< 1	0	< 1	0
Other invertebrates	< 1	0	< 1	< 1	< 1	3	4
Total catch (kg)	1932	15761	225	590	2714	121	122

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	218	219	220	221	222	223	224
Start date & time	07/11/03 11	07/11/03 13	07/11/03 16	07/11/03 19	07/12/03 07	07/12/03 09	07/12/03 11
Start latitude	N 5830.99	N 5844.51	N 5845.93	N 5849.17	N 5907.15	N 5914.36	N 5915.68
Start longitude	W 14832.65	W 14827.66	W 14830.17	W 14834.33	W 14901.71	W 14854.02	W 14842.99
End latitude	N 5831.38	N 5844.63	N 5845.58	N 5849.81	N 5907.18	N 5915.16	N 5914.91
End longitude	W 14831.15	W 14825.100	W 14831.44	W 14835.26	W 14900.12	W 14854.08	W 14842.50
Bottom depth (m)	135	287	284	298	156	165	135
Duration (minutes)	17.4	17.4	19.2	15.6	16.8	16.2	16.2
Distance fished (km)	1.647	1.651	1.468	1.522	1.536	1.485	1.534
Performance	0	2.4	2.1	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	0	0	4	0
Walleye pollock	0	1	< 1	0	< 1	6	0
Pacific ocean perch	3	8	32	9	6	10	0
Northern rockfish	13	0	0	0	0	2	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	8	14	7	0	< 1	0
Shortspine thornyhead	0	134	120	140	0	0	0
Dusky rockfish	197	0	0	0	0	2	0
Other rockfish	24	0	0	< 1	2	0	0
Sablefish	0	88	113	112	6	6	15
Arrowtooth flounder	3	34	73	102	308	431	486
Pacific halibut	69	34	2	2	4	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	4	0	0	0	0	0	0
Flathead sole	0	0	0	0	0	28	17
Rex sole	< 1	18	32	76	7	13	7
Dover sole	0	24	114	114	7	2	41
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	< 1	0	0	0	0	0
Pacific salmon	8	0	0	0	3	5	2
Skates	24	26	0	20	22	11	10
Sharks	0	0	0	0	0	2	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	8	6	0	10	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	< 1	0	0	< 1	0
Smelts	0	< 1	< 1	5	13	12	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	7	0	< 1	0	2	6	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	2	0	0	0
Northern shrimp	0	< 1	0	0	< 1	< 1	0
Sidestripe shrimp	0	0	< 1	0	< 1	< 1	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	1	< 1	1	1	4	0
Starfish	1	< 1	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	< 1	0	0	< 1	0
Other invertebrates	< 1	4	3	1	11	3	3
Total catch (kg)	354	381	512	599	392	560	581

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	225	226	227	228	229	230	231
Start date & time	07/12/03 13	07/12/03 15	07/12/03 16	07/12/03 18	07/15/03 07	07/15/03 09	07/15/03 11
Start latitude	N 5909.11	N 5905.91	N 5908.04	N 5908.03	N 5940.38	N 5923.71	N 5918.57
Start longitude	W 14828.40	W 14805.93	W 14804.21	W 14757.23	W 14731.10	W 14741.27	W 14747.41
End latitude	N 5908.38	N 5905.87	N 5908.85	N 5908.79	N 5940.100	N 5922.96	N 5917.82
End longitude	W 14827.62	W 14807.48	W 14804.55	W 14757.85	W 14730.18	W 14742.02	W 14747.26
Bottom depth (m)	143	143	166	200	118	111	176
Duration (minutes)	16.8	16.2	16.8	16.2	15.6	16.2	15.6
Distance fished (km)	1.589	1.502	1.576	1.559	1.472	1.602	1.428
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	5	0	0	0	0	0	0
Walleye pollock	0	0	< 1	0	2	< 1	< 1
Pacific ocean perch	0	0	0	18	< 1	1	4
Northern rockfish	0	0	0	< 1	0	0	< 1
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	3	2	0	1
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	14	0	0	0	0	0
Other rockfish	0	62	3	0	0	0	< 1
Sablefish	0	0	22	10	0	0	8
Arrowtooth flounder	1206	2	957	69	49	96	187
Pacific halibut	17	108	0	16	2	3	9
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	0	0	0	< 1	26	0	3
Rex sole	5	< 1	42	3	2	2	4
Dover sole	1	0	2	13	14	2	8
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	< 1	0	0	0
Pacific salmon	5	0	0	0	0	1	0
Skates	< 1	13	23	8	4	0	0
Sharks	0	0	0	0	0	2	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	< 1	0	0
Smelts	0	0	0	1	2	< 1	40
Giant grenadier	0	0	0	0	0	0	0
Other fish	17	38	4	< 1	< 1	0	< 1
Bairdi Tanner crab	0	0	0	< 1	< 1	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	< 1	0	2
Sidestripe shrimp	0	0	0	< 1	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	1	5	0	0	0	< 1	0
Starfish	< 1	< 1	< 1	< 1	0	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	< 1	0	0	0
Snails	0	< 1	< 1	0	0	0	0
Other invertebrates	1	1	1	5	2	3	3
Total catch (kg)	1260	245	1055	148	106	112	271

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	232	233	234	235	236	237	238
Start date & time	07/15/03 13	07/15/03 16	07/16/03 07	07/16/03 09	07/16/03 11	07/16/03 16	07/16/03 18
Start latitude	N 5915.36	N 5920.22	N 5945.73	N 5936.84	N 5934.43	N 5929.87	N 5941.71
Start longitude	W 14743.51	W 14708.48	W 14536.94	W 14511.89	W 14512.46	W 14458.37	W 14458.19
End latitude	N 5915.38	N 5920.95	N 5945.23	N 5937.34	N 5935.00	N 5930.36	N 5940.90
End longitude	W 14741.98	W 14708.09	W 14535.87	W 14510.79	W 14511.54	W 14457.18	W 14457.92
Bottom depth (m)	194	196	113	122	117	283	133
Duration (minutes)	15.6	15	15	15	15	15.6	16.8
Distance fished (km)	1.463	1.432	1.385	1.429	1.407	1.463	1.563
Performance	0	0	0	0	0	3.2	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	0	0	0	6
Walleye pollock	2	< 1	2	< 1	< 1	12	0
Pacific ocean perch	103	8	< 1	< 1	0	28	2
Northern rockfish	< 1	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	46	0
Rougheye rockfish	< 1	0	3	< 1	< 1	16	0
Shortspine thornyhead	0	< 1	0	0	0	101	< 1
Dusky rockfish	5	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	< 1	0
Sablefish	39	20	< 1	0	0	42	1
Arrowtooth flounder	78	70	122	239	39	20	583
Pacific halibut	0	0	0	12	14	137	7
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	8	0	30	32	< 1	0	82
Rex sole	7	5	6	2	9	11	57
Dover sole	41	13	42	0	< 1	57	234
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	< 1	< 1	0	0	0	0	0
Pacific salmon	0	0	0	5	4	0	0
Skates	0	0	12	54	21	17	22
Sharks	0	0	4	9	0	5	61
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	< 1	< 1	0	0	0
Smelts	31	3	26	3	< 1	< 1	5
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	2	3	10	0	< 1	9
Bairdi Tanner crab	0	0	< 1	< 1	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	5	3	3	< 1	0	0	< 1
Sidestripe shrimp	< 1	< 1	< 1	0	0	< 1	< 1
Scallops	0	0	0	0	< 1	0	0
Magistrate armhook squid	0	0	0	0	0	3	0
Sponges	0	< 1	0	0	0	0	0
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	2
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	< 1	0
Snails	0	0	0	0	0	0	0
Other invertebrates	5	1	2	< 1	< 1	2	< 1
Total catch (kg)	326	125	254	368	88	497	1071

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	239	240	241	242	243	244	245
Start date & time	07/17/03 07	07/17/03 08	07/17/03 10	07/17/03 17	07/17/03 20	07/18/03 07	07/18/03 09
Start latitude	N 5957.12	N 5947.66	N 5947.46	N 5929.81	N 5935.55	N 5956.06	N 5942.87
Start longitude	W 14405.90	W 14404.15	W 14355.55	W 14322.33	W 14259.24	W 14228.33	W 14211.15
End latitude	N 5957.010	N 5947.74	N 5947.40	N 5930.07	N 5936.02	N 5956.40	N 5942.68
End longitude	W 14404.43	W 14402.58	W 14353.99	W 14323.87	W 14258.05	W 14229.67	W 14209.71
Bottom depth (m)	31	98	114	666	431	96	156
Duration (minutes)	15	16.2	16.2	16.2	15	15	15.6
Distance fished (km)	1.38	1.501	1.492	1.572	1.44	1.434	1.42
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	0	0	0	0
Walleye pollock	0	6	32	0	0	4	4
Pacific ocean perch	0	< 1	2	< 1	< 1	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	179	0	0
Rougheye rockfish	0	0	< 1	0	0	0	< 1
Shortspine thornyhead	0	0	0	66	62	0	7
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	611	27	0	< 1
Arrowtooth flounder	0	20	46	0	7	24	44
Pacific halibut	21	4	19	0	0	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	0	< 1	< 1	0	0	< 1	0
Rex sole	0	1	1	0	0	< 1	< 1
Dover sole	0	0	0	7	< 1	< 1	1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	26	0	0	0	0	0	0
Pacific salmon	2	3	0	0	0	0	0
Skates	7	0	8	3	0	0	12
Sharks	39	27	9	0	0	27	20
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	< 1	0
Smelts	< 1	2	1	0	0	< 1	10
Giant grenadier	0	0	0	432	393	0	0
Other fish	13	6	4	13	3	< 1	< 1
Bairdi Tanner crab	0	< 1	0	0	0	0	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	0	0	0	< 1	< 1
Sidestripe shrimp	0	0	0	0	0	0	< 1
Scallops	0	0	0	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	3	0	0
Sponges	0	< 1	0	0	0	0	0
Starfish	0	2	0	0	< 1	0	3
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	2	0	0	0
Snails	0	0	0	1	< 1	0	0
Other invertebrates	< 1	3	9	3	2	< 1	< 1
Total catch (kg)	110	75	130	1139	677	58	104

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	246	247	248	249	250	251	252
Start date & time	07/18/03 11	07/18/03 15	07/18/03 17	07/18/03 19	07/19/03 07	07/19/03 12	07/19/03 14
Start latitude	N 5936.02	N 5920.14	N 5917.18	N 5905.97	N 5901.24	N 5846.54	N 5836.37
Start longitude	W 14156.51	W 14120.79	W 14111.48	W 14119.22	W 14110.91	W 14009.77	W 14001.69
End latitude	N 5935.45	N 5920.78	N 5917.95	N 5906.18	N 5900.95	N 5847.14	N 5837.03
End longitude	W 14155.51	W 14119.95	W 14111.28	W 14118.16	W 14109.43	W 14010.76	W 14002.45
Bottom depth (m)	161	333	290	299	321	182	208
Duration (minutes)	15.6	15.6	15.6	11.4	16.2	15.6	15
Distance fished (km)	1.448	1.472	1.456	1.108	1.545	1.488	1.455
Performance	0	0	0	1.12	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	0	0	5	0
Walleye pollock	3	2	12	7	3	28	<1
Pacific ocean perch	<1	2	18	238	126	<1	<1
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	30	0	20	16	0	0
Rougheye rockfish	0	9	0	2	2	0	<1
Shortspine thornyhead	9	49	36	34	73	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	<1	<1	4	1	0	5
Sablefish	0	15	23	5	0	18	28
Arrowtooth flounder	44	20	18	30	55	50	31
Pacific halibut	0	0	0	0	0	12	82
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	<1	0	1	<1	0	<1	0
Rex sole	<1	5	22	2	2	8	18
Dover sole	<1	57	50	14	22	3	8
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	3	<1	1	<1	3
Pacific salmon	0	0	0	0	0	0	0
Skates	0	6	8	0	0	0	56
Sharks	6	2	0	0	0	5	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	<1	0	0	<1	<1	0	<1
Smelts	15	1	<1	0	0	<1	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	1	<1	<1	<1	<1	2	<1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	<1	<1	0	0	0	<1	0
Sidestripe shrimp	<1	<1	<1	<1	<1	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	<1	1	<1	<1	<1	0
Sponges	0	0	0	0	0	<1	1
Starfish	4	<1	<1	<1	0	<1	<1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	<1	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	<1	0	<1	0
Other invertebrates	1	3	3	1	<1	<1	1
Total catch (kg)	87	202	197	360	301	134	235

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	253	254	255	256	257	258	259
Start date & time	07/19/03 17	07/20/03 07	07/20/03 09	07/20/03 11	07/20/03 13	07/20/03 17	07/21/03 07
Start latitude	N 5832.61	N 5850.16	N 5837.43	N 5830.54	N 5832.31	N 5835.15	N 5816.25
Start longitude	W 13954.47	W 13940.47	W 13943.75	W 13939.83	W 13926.12	W 13832.67	W 13851.49
End latitude	N 5832.90	N 5849.82	N 5836.69	N 5829.73	N 5833.07	N 5834.71	N 5816.06
End longitude	W 13953.53	W 13939.14	W 13943.42	W 13939.38	W 13925.86	W 13831.43	W 13850.10
Bottom depth (m)	209	162	194	262	179	118	152
Duration (minutes)	11.4	15.6	15	16.8	15.6	15.6	15.6
Distance fished (km)	1.072	1.449	1.45	1.611	1.459	1.478	1.425
Performance	2.1	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	0	0	0	0
Walleye pollock	2	0	4	9	0	3	0
Pacific ocean perch	98	< 1	84	125	0	3	< 1
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	< 1	0	7	0	0	0
Shortspine thornyhead	< 1	0	< 1	24	0	0	0
Dusky rockfish	735	0	28	0	0	0	0
Other rockfish	296	0	14	6	0	25	6
Sablefish	0	0	8	6	10	0	0
Arrowtooth flounder	15	45	36	51	165	< 1	733
Pacific halibut	39	0	14	0	314	26	74
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	5	0
Flathead sole	0	< 1	< 1	< 1	0	0	0
Rex sole	6	< 1	5	< 1	< 1	0	6
Dover sole	1	< 1	9	39	< 1	0	2
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	< 1	< 1	< 1	< 1	0	1	3
Pacific salmon	0	9	0	0	0	3	0
Skates	< 1	0	0	0	14	0	0
Sharks	2	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	< 1	0	0	0	0
Smelts	0	5	13	10	< 1	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	< 1	< 1	21	0	14
Bairdi Tanner crab	0	< 1	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	3	< 1	< 1	0	0	< 1
Sidestripe shrimp	0	0	0	< 1	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	< 1	0	0	2	0	0	0
Sponges	13	0	2	0	0	< 1	0
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Stony coral	< 1	0	0	0	0	0	0
Soft coral	17	0	0	0	0	0	0
Octopus	< 1	0	0	< 1	0	0	0
Snails	< 1	0	< 1	0	0	0	0
Other invertebrates	6	< 1	2	5	< 1	1	< 1
Total catch (kg)	1232	64	221	286	524	68	838

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	260	261	262	263	264	265	266
Start date & time	07/21/03 10	07/22/03 07	07/22/03 09	07/22/03 15	07/22/03 20	07/23/03 09	07/23/03 12
Start latitude	N 5802.67	N 5722.63	N 5717.42	N 5640.50	N 5608.62	N 5559.48	N 5552.78
Start longitude	W 13822.78	W 13607.30	W 13558.31	W 13539.87	W 13503.08	W 13433.30	W 13428.10
End latitude	N 5802.17	N 5721.95	N 5716.59	N 5641.30	N 5608.66	N 5559.32	N 5553.59
End longitude	W 13821.53	W 13606.29	W 13558.14	W 13539.92	W 13501.69	W 13434.57	W 13428.49
Bottom depth (m)	234	117	98	164	263	323	85
Duration (minutes)	16.8	17.4	16.8	16.2	15.6	15	16.8
Distance fished (km)	1.565	1.642	1.566	1.51	1.457	1.384	1.581
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	0	0	0	0
Walleye pollock	26	0	0	18	2	0	<1
Pacific ocean perch	8	0	0	36	77	34	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	18	0
Rougheye rockfish	<1	0	0	0	0	105	0
Shortspine thornyhead	14	0	0	0	53	16	0
Dusky rockfish	0	0	0	14	0	0	0
Other rockfish	189	0	0	60	6	3	0
Sablefish	1	0	0	5	55	66	0
Arrowtooth flounder	7	2	5	74	273	790	0
Pacific halibut	5	29	33	6	34	0	10
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	5	25	0	0	0	0
Flathead sole	<1	0	0	0	0	0	0
Rex sole	1	7	1	111	29	118	0
Dover sole	9	<1	0	<1	55	42	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	1	8	12	5	0	0	<1
Pacific salmon	0	6	0	0	0	0	0
Skates	0	0	0	0	0	2	0
Sharks	0	0	0	0	3	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	6	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	<1	0	0	0	<1	0	0
Smelts	0	0	0	<1	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	1	66	31	5	3	10	145
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	<1	0	0	0
Sidestripe shrimp	<1	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	<1
Magistrate armhook squid	<1	0	0	0	<1	14	<1
Sponges	<1	0	0	0	1	<1	<1
Starfish	<1	0	0	0	<1	<1	<1
Stony coral	0	0	0	0	0	0	0
Soft coral	4	0	0	0	0	<1	0
Octopus	<1	0	0	0	0	0	0
Snails	0	0	0	0	<1	0	<1
Other invertebrates	5	<1	12	6	8	3	<1
Total catch (kg)	274	124	119	341	599	1227	158

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	267	268	269	270	271	272	273
Start date & time	07/23/03 15	07/23/03 16	07/24/03 07	07/24/03 10	07/24/03 11	07/24/03 13	07/24/03 15
Start latitude	N 5545.19	N 5542.73	N 5524.06	N 5532.70	N 5529.87	N 5531.36	N 5535.48
Start longitude	W 13358.91	W 13358.34	W 13403.59	W 13429.29	W 13435.62	W 13437.58	W 13440.95
End latitude	N 5544.43	N 5541.99	N 5524.47	N 5533.22	N 5530.62	N 5532.01	N 5535.42
End longitude	W 13358.31	W 13358.54	W 13404.72	W 13428.22	W 13435.64	W 13436.91	W 13442.25
Bottom depth (m)	279	281	113	197	203	264	255
Duration (minutes)	16.2	15	15.6	15.6	15.6	15	15
Distance fished (km)	1.563	1.413	1.439	1.51	1.413	1.434	1.382
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	26	1	24	25	0	0
Walleye pollock	103	152	< 1	19	7	14	53
Pacific ocean perch	< 1	1	0	18	120	276	101
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	5	23	0	0	0	0	0
Shortspine thornyhead	11	8	0	0	0	8	19
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	6	7	0	85	15	3	5
Sablefish	0	5	0	3	3	8	< 1
Arrowtooth flounder	53	63	< 1	12	21	22	14
Pacific halibut	0	8	39	0	0	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	11	0	0	0	0
Flathead sole	< 1	0	0	0	0	0	0
Rex sole	34	18	< 1	2	< 1	28	34
Dover sole	22	16	0	< 1	1	11	10
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	5	< 1	4	37	< 1
Pacific salmon	0	< 1	0	0	0	0	0
Skates	0	2	0	0	0	0	10
Sharks	0	3	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	0	0
Smelts	16	< 1	0	0	0	38	1
Giant grenadier	0	0	0	0	0	0	0
Other fish	27	25	31	10	2	< 1	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	0	< 1	< 1	< 1	< 1
Sidestripe shrimp	2	< 1	0	0	0	< 1	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	< 1	< 1	0	0	0	2	< 1
Sponges	0	0	0	< 1	< 1	0	0
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	< 1	< 1	0	< 1	0
Other invertebrates	1	1	< 1	< 1	< 1	< 1	4
Total catch (kg)	280	361	88	176	199	449	254

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	274	275	276	277	278	279	280
Start date & time	07/24/03 19	07/25/03 18	07/26/03 07	07/26/03 14	07/26/03 17	07/26/03 20	07/27/03 07
Start latitude	N 5550.37	N 5536.14	N 5553.85	N 5525.89	N 5511.99	N 5456.99	N 5459.80
Start longitude	W 13504.62	W 13449.51	W 13525.90	W 13353.81	W 13343.40	W 13334.57	W 13416.31
End latitude	N 5550.96	N 5536.69	N 5554.66	N 5526.61	N 5512.03	N 5457.22	N 5500.55
End longitude	W 13505.49	W 13450.22	W 13527.53	W 13354.14	W 13342.01	W 13335.81	W 13416.49
Bottom depth (m)	188	223	601	93	133	141	208
Duration (minutes)	15.6	14.4	24	15	15.6	15	15
Distance fished (km)	1.451	1.298	2.316	1.396	1.498	1.416	1.421
Performance	0	2.1	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	17	26	0	0	36	3	32
Walleye pollock	< 1	4	0	< 1	80	8	0
Pacific ocean perch	20	156	0	0	0	0	6
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	5	95	0	0	0	8
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	35	25	0	0	0	0	23
Sablefish	0	6	103	0	0	5	0
Arrowtooth flounder	18	5	0	< 1	1257	52	12
Pacific halibut	6	0	0	69	19	15	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	5	0	0	0
Flathead sole	0	0	0	0	< 1	< 1	0
Rex sole	3	4	5	< 1	14	28	11
Dover sole	2	1	50	0	2	< 1	3
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	3	< 1	< 1	6	57	0	11
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	15	0	0	0	0
Sharks	0	0	0	0	0	4	5
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	0	0	0	0	< 1
Smelts	< 1	0	0	0	0	0	0
Giant grenadier	0	0	36	0	0	0	0
Other fish	10	4	49	50	28	21	3
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	0	0	0	< 1	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	3	0	0	0	< 1
Sponges	< 1	< 1	< 1	0	0	0	< 1
Starfish	< 1	< 1	< 1	< 1	< 1	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	< 1	0	0	0	0
Octopus	0	0	< 1	0	0	0	0
Snails	0	< 1	< 1	0	0	< 1	0
Other invertebrates	< 1	< 1	2	5	4	< 1	< 1
Total catch (kg)	115	239	357	136	1497	138	116

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	281	282	283	284	285	286	287
Start date & time	07/27/03 09	07/27/03 12	07/27/03 14	07/27/03 16	07/28/03 07	07/28/03 15	07/28/03 18
Start latitude	N 5445.34	N 5445.96	N 5449.07	N 5446.64	N 5433.12	N 5441.01	N 5439.60
Start longitude	W 13405.43	W 13343.01	W 13343.33	W 13327.98	W 13253.50	W 13327.73	W 13346.09
End latitude	N 5444.58	N 5445.20	N 5448.89	N 5447.40	N 5432.85	N 5440.79	N 5439.59
End longitude	W 13405.51	W 13343.10	W 13344.59	W 13327.61	W 13252.72	W 13329.14	W 13344.77
Bottom depth (m)	211	192	153	116	385	288	244
Duration (minutes)	15.6	15	15	16.2	10.8	16.2	15.6
Distance fished (km)	1.431	1.425	1.411	1.5	0.991	1.581	1.435
Performance	0	0	0	0	1.12	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	4	39	76	4	0	0	1
Walleye pollock	9	39	3	32	0	30	2
Pacific ocean perch	297	46	275	0	0	0	38
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	23	5	0
Shortspine thornyhead	3	0	0	0	18	26	23
Dusky rockfish	5	3	0	0	0	0	0
Other rockfish	360	71	85	31	2	42	17
Sablefish	1	4	8	0	16	2	6
Arrowtooth flounder	28	78	1266	170	2	73	5
Pacific halibut	7	0	4	33	0	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	< 1	0	0	0	0
Flathead sole	0	0	0	< 1	0	0	0
Rex sole	4	32	20	19	6	24	5
Dover sole	3	3	0	< 1	40	17	2
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	2	< 1	11	6	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	6	0	1	0	< 1
Sharks	0	0	1	8	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	2	0	0	0	< 1	< 1	< 1
Smelts	0	0	0	0	< 1	2	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	5	2	12	22	25	7	2
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	< 1	0	0	0	< 1	< 1
Sidestripe shrimp	0	0	0	0	0	< 1	< 1
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	11	< 1	0
Sponges	3	< 1	0	0	13	2	< 1
Starfish	< 1	< 1	0	< 1	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	174	25	0
Octopus	0	0	0	0	< 1	0	0
Snails	0	0	0	0	0	< 1	< 1
Other invertebrates	2	2	< 1	1	3	1	2
Total catch (kg)	735	318	1767	326	337	257	105

Fishing Log: *FV Northwest Explorer*, Cruise 2008-01.

Haul number	288	289
Start date & time	07/29/03 07	07/29/03 09
Start latitude	N 5428.25	N 5427.86
Start longitude	W 13339.20	W 13341.76
End latitude	N 5428.25	N 5427.84
End longitude	W 13340.48	W 13343.13
Bottom depth (m)	250	221
Duration (minutes)	15	16.2
Distance fished (km)	1.396	1.495
Performance	0	0
Atka mackerel	0	0
Pacific cod	5	7
Walleye pollock	4	2
Pacific ocean perch	783	561
Northern rockfish	0	0
Shortraker rockfish	0	0
Rougheye rockfish	0	0
Shortspine thornyhead	< 1	0
Dusky rockfish	0	0
Other rockfish	155	215
Sablefish	9	1
Arrowtooth flounder	15	15
Pacific halibut	3	83
Northern rock sole	0	0
Southern rock sole	0	0
Flathead sole	0	0
Rex sole	7	3
Dover sole	4	2
Yellowfin sole	0	0
Other flatfish	< 1	1
Pacific salmon	0	0
Skates	0	0
Sharks	0	0
Yellow Irish lord	0	0
Bigmouth sculpin	0	0
Great sculpin	0	0
Other sculpins	< 1	0
Smelts	0	0
Giant grenadier	0	0
Other fish	86	1
Bairdi Tanner crab	0	0
Golden king crab	0	0
Red king crab	0	0
Northern shrimp	0	< 1
Sidestripe shrimp	0	0
Scallops	0	0
Magistrate armhook squid	< 1	< 1
Sponges	< 1	0
Starfish	0	0
Stony coral	0	0
Soft coral	0	0
Octopus	0	0
Snails	0	0
Other invertebrates	< 1	< 1
Total catch (kg)	1076	891

Section 3

Fishing Log for the FV *Sea Storm*

- Charts of stations and their respective haul numbers

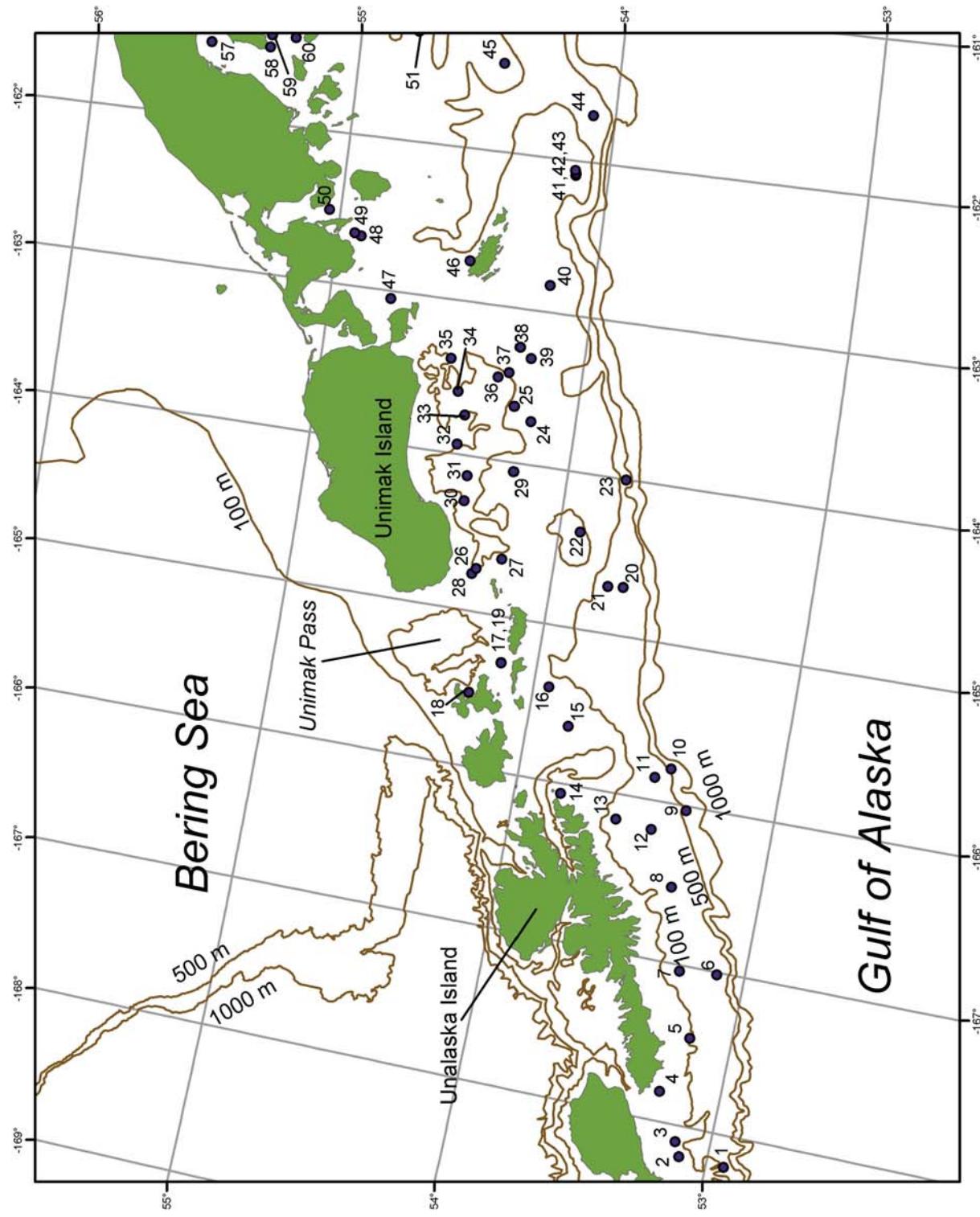


Figure 12. -- Stations surveyed by the chartered trawler FV *Sea Storm* from the Island of Four Mountains to Unimak Island.

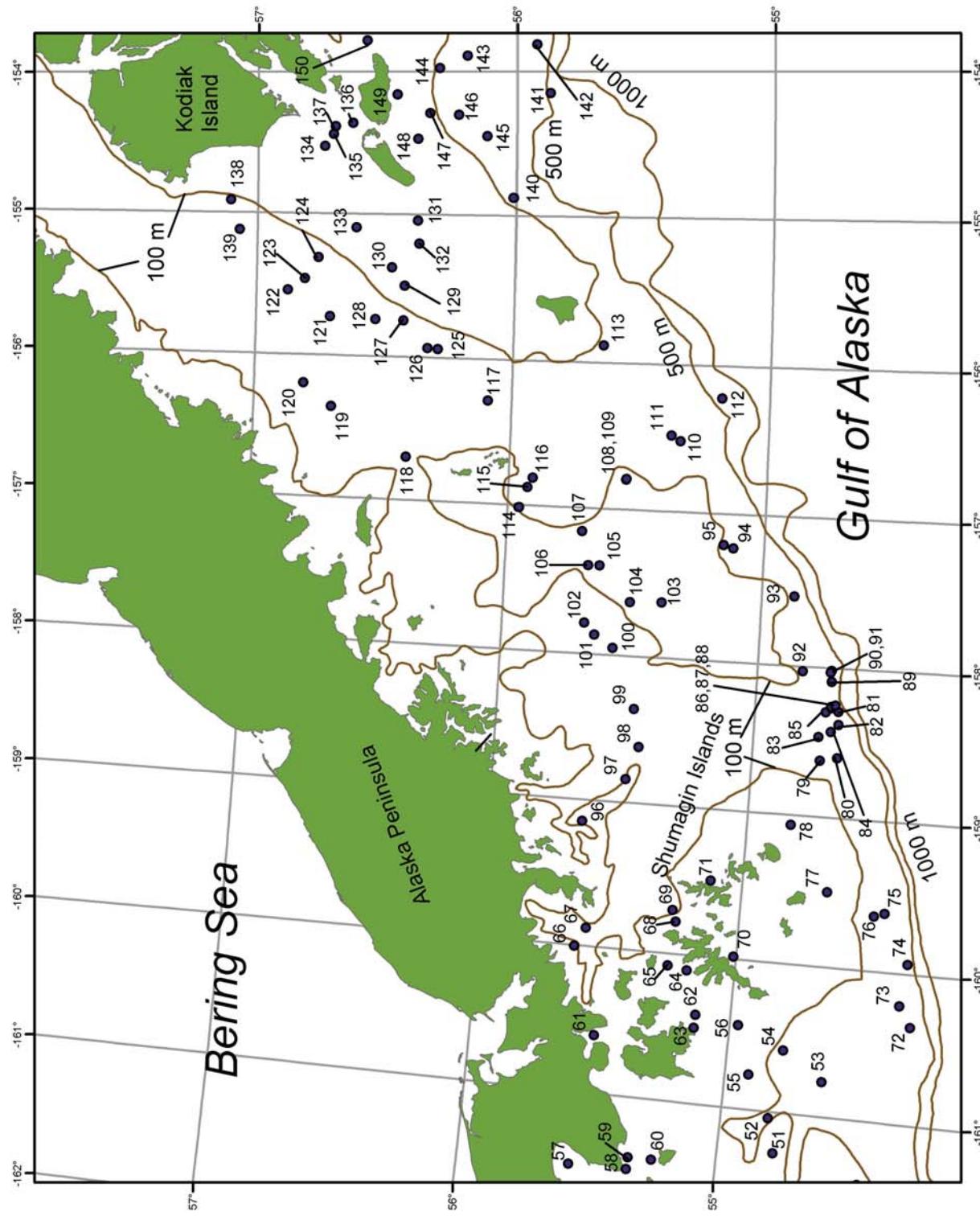


Figure 13. -- Stations surveyed by the chartered trawler FV *Sea Storm* in the vicinity of the western Alaska Peninsula.

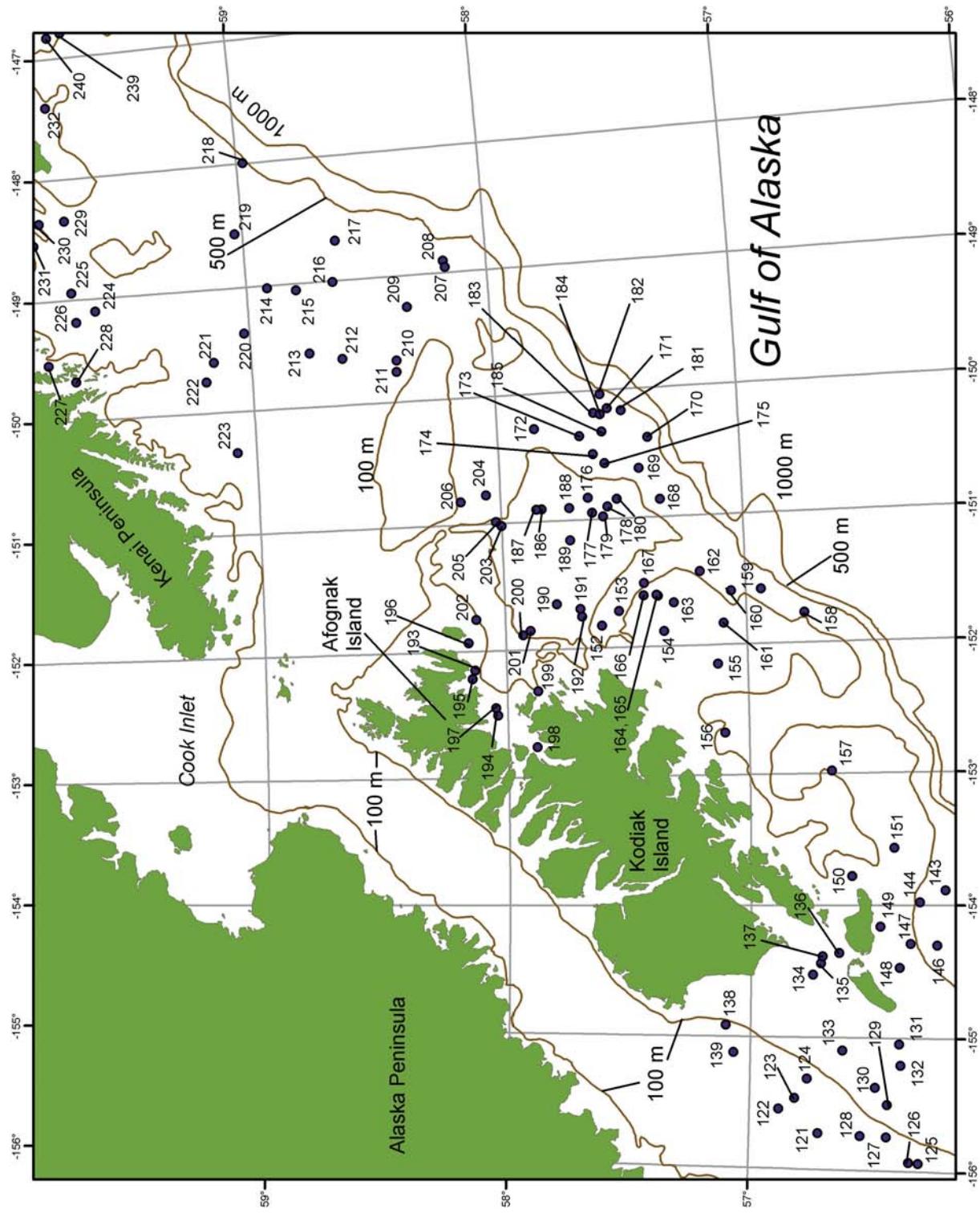


Figure 14. -- Stations surveyed by the chartered trawler FV Sea Storm in the vicinity of Kodiak Island.

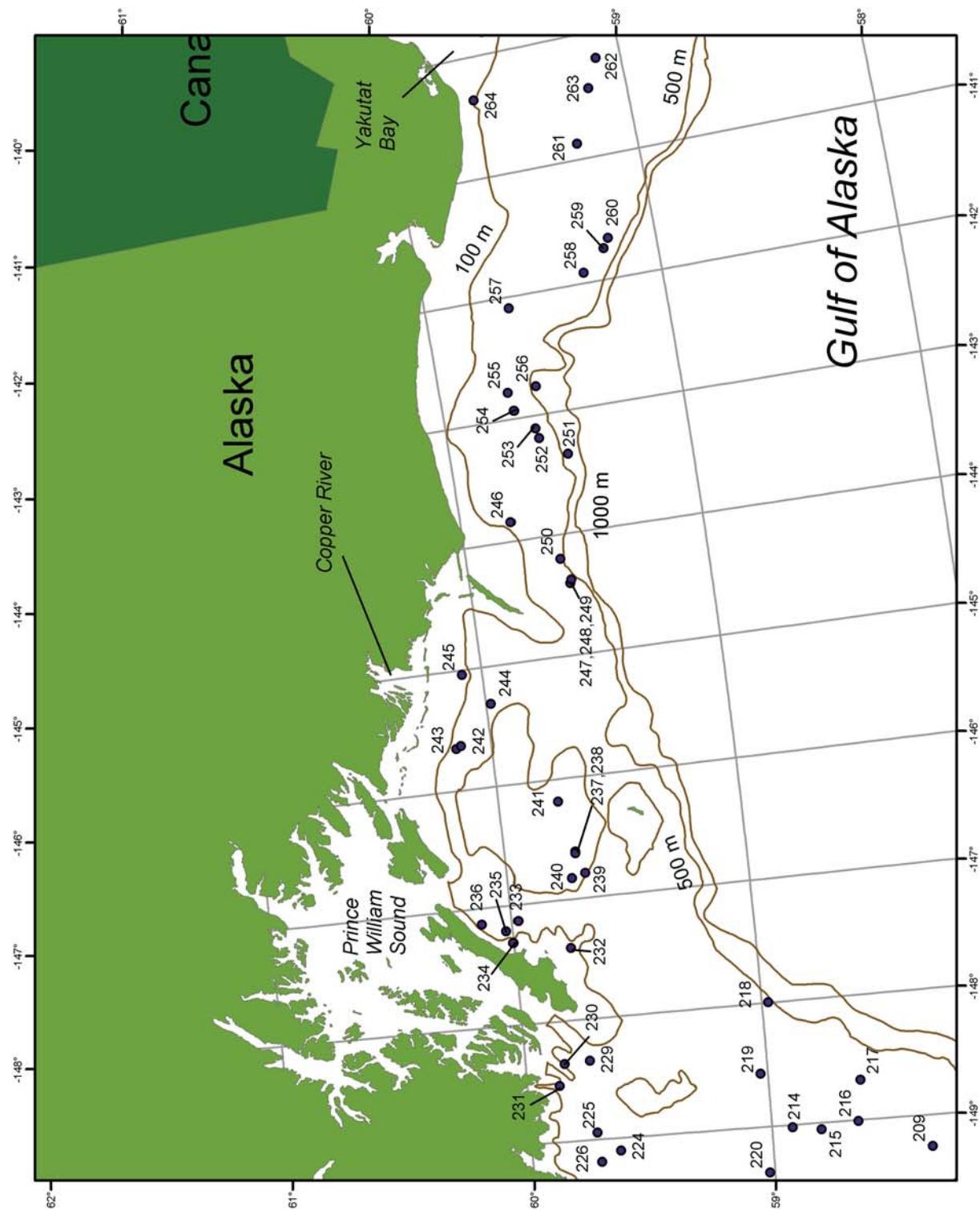


Figure 15. -- Stations surveyed by the chartered trawler FV Sea Storm from Prince William Sound to Yakutat Bay.

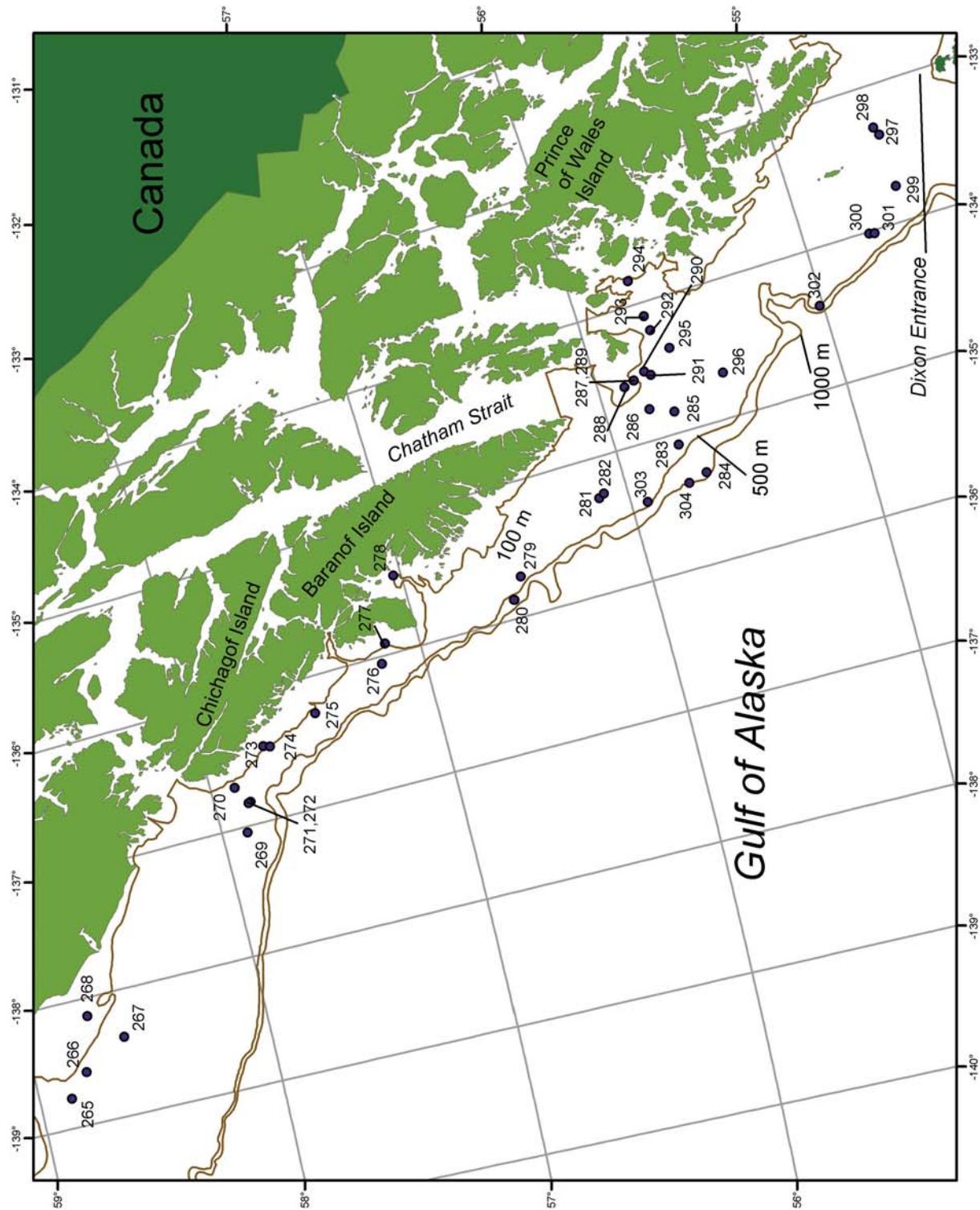


Figure 16.-- Stations surveyed by the chartered trawler FV *Sea Storm* in the vicinity of Southeast Alaska.

Section 3 (continued)

Fishing Log for the FV *Sea Storm*

- Summary listings of species catches by haul
- Haul start/end latitude and longitude in degrees and decimal minutes
- Catch weight (kg) of principal species or grouped taxa
- Total catch weight of all species

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	1	2	3	4	5	6	7
Start date & time	06/01/03 07	06/01/03 11	06/01/03 13	06/01/03 16	06/01/03 19	06/02/03 07	06/02/03 10
Start latitude	N 5255.91	N 5306.44	N 5307.97	N 5313.97	N 5309.57	N 5306.40	N 5314.100
Start longitude	W 16811.81	W 16811.44	W 16806.13	W 16748.64	W 16726.45	W 16700.81	W 16702.26
End latitude	N 5255.47	N 5305.79	N 5307.56	N 5313.98	N 5309.54	N 5306.05	N 5314.83
End longitude	W 16812.81	W 16812.14	W 16807.22	W 16747.33	W 16727.79	W 16701.93	W 16703.49
Bottom depth (m)	128	99	95	72	96	260	106
Duration (minutes)	15.6	16.2	16.2	15.6	16.8	15.6	15.6
Distance fished (km)	1.413	1.457	1.468	1.462	1.517	1.433	1.422
Performance	0	0	0	5.8	0	0	0
Atka mackerel	0	0	20	11	17	1	0
Pacific cod	6	0	0	5	343	0	0
Walleye pollock	42	< 1	3	12	14	9	15
Pacific ocean perch	10	< 1	0	0	0	364	4
Northern rockfish	1	0	128	0	3	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	20	0
Shortspine thornyhead	20	0	0	0	0	28	0
Dusky rockfish	5	1	40	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	10	0
Arrowtooth flounder	7	161	37	16	220	14	52
Pacific halibut	12	30	25	2	6	0	5
Northern rock sole	0	0	1	3	6	0	10
Southern rock sole	4	7	15	16	33	0	12
Flathead sole	0	13	1	0	0	0	0
Rex sole	16	30	1	0	0	8	< 1
Dover sole	0	< 1	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	7	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	0	0	0
Sharks	0	0	0	0	0	0	48
Yellow Irish lord	3	2	0	< 1	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	0	0	0	< 1	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	26	0
Other fish	1	< 1	0	0	0	< 1	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	< 1	< 1	0	0	0	< 1
Magistrate armhook squid	< 1	0	0	0	0	10	< 1
Sponges	< 1	< 1	0	0	0	< 1	0
Starfish	< 1	< 1	0	0	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	< 1	0
Octopus	< 1	0	0	0	0	0	0
Snails	< 1	0	0	0	0	0	0
Other invertebrates	1	< 1	0	< 1	< 1	2	< 1
Total catch (kg)	131	254	273	67	641	492	147

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	8	9	10	11	12	13	14
Start date & time	06/02/03 14	06/02/03 18	06/03/03 07	06/03/03 09	06/03/03 11	06/03/03 14	06/03/03 17
Start latitude	N 5320.47	N 5320.40	N 5325.51	N 5328.85	N 5327.54	N 5335.98	N 5349.55
Start longitude	W 16631.28	W 16601.51	W 16546.93	W 16551.14	W 16611.04	W 16609.62	W 16603.74
End latitude	N 5320.08	N 5320.01	N 5325.09	N 5328.54	N 5327.32	N 5336.73	N 5349.87
End longitude	W 16632.41	W 16602.71	W 16548.11	W 16552.32	W 16612.31	W 16609.72	W 16602.60
Bottom depth (m)	172	522	549	221	150	107	82
Duration (minutes)	15.6	16.2	16.2	15.6	16.2	15.6	15.6
Distance fished (km)	1.469	1.534	1.548	1.448	1.478	1.431	1.411
Performance	0	0	0	0	0	5.8	0
Atka mackerel	0	0	0	0	0	1	2
Pacific cod	5	0	0	0	17	0	13
Walleye pollock	19	0	0	44	4	0	1
Pacific ocean perch	25	0	0	2605	0	1	0
Northern rockfish	4	0	0	< 1	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	2	0	< 1	0
Shortspine thornyhead	< 1	118	109	13	0	0	0
Dusky rockfish	4	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	3	95	173	11	0	0	0
Arrowtooth flounder	12	0	0	7	38	15	32
Pacific halibut	5	0	0	0	0	0	74
Northern rock sole	0	0	0	0	11	< 1	1
Southern rock sole	0	0	0	0	< 1	13	11
Flathead sole	0	0	0	< 1	2	< 1	0
Rex sole	20	0	0	7	14	0	0
Dover sole	0	0	2	< 1	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	< 1	0	0	11
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	6
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	0	0	0
Smelts	0	0	0	0	0	< 1	< 1
Giant grenadier	0	756	964	0	0	0	0
Other fish	0	5	< 1	0	< 1	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	< 1	< 1
Magistrate armhook squid	3	< 1	0	2	0	0	0
Sponges	< 1	0	0	0	< 1	< 1	5
Starfish	0	0	< 1	0	< 1	0	7
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	< 1	0	0	0	0	11
Snails	0	0	< 1	0	0	< 1	< 1
Other invertebrates	9	8	8	< 1	< 1	< 1	34
Total catch (kg)	109	982	1257	2693	87	32	208

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	15	16	17	18	19	20	21
Start date & time	06/04/03 07	06/04/03 09	06/04/03 13	06/04/03 15	06/04/03 17	06/05/03 07	06/05/03 08
Start latitude	N 5350.56	N 5356.47	N 5408.15	N 5414.29	N 5408.12	N 5343.39	N 5346.94
Start longitude	W 16537.66	W 16523.97	W 16517.77	W 16531.27	W 16517.80	W 16441.27	W 16441.79
End latitude	N 5350.03	N 5355.93	N 5408.95	N 5414.86	N 5408.96	N 5343.31	N 5347.29
End longitude	W 16536.77	W 16524.95	W 16517.76	W 16532.27	W 16517.76	W 16442.61	W 16443.03
Bottom depth (m)	83	86	65	51	64	145	111
Duration (minutes)	15.6	16.2	15.6	16.8	16.8	16.2	16.2
Distance fished (km)	1.421	1.495	1.489	1.549	1.576	1.491	1.522
Performance	0	0	-5.1	0	0	0	0
Atka mackerel	0	0	< 1	0	0	< 1	0
Pacific cod	6	17	0	1	7	42	13
Walleye pollock	52	7	0	< 1	0	25	3
Pacific ocean perch	0	0	0	0	0	7	1
Northern rockfish	0	0	0	0	0	1	< 1
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	2	0	0	0	0	2	0
Other rockfish	0	0	0	0	0	< 1	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	69	70	0	13	< 1	42	60
Pacific halibut	6	25	15	55	104	0	20
Northern rock sole	< 1	5	< 1	73	4	0	2
Southern rock sole	50	33	0	6	7	0	< 1
Flathead sole	0	0	0	19	0	0	2
Rex sole	0	0	0	0	0	29	4
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	5	0	0	0
Other flatfish	< 1	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	16	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	1	< 1	0	7	2	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	1	5	8	0	0
Other sculpins	0	0	0	0	< 1	< 1	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	< 1	< 1	0	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	< 1	0	0
Magistrate armhook squid	0	0	0	0	0	< 1	0
Sponges	0	0	< 1	0	2	< 1	< 1
Starfish	0	0	1	< 1	0	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	0
Other invertebrates	0	0	< 1	2	1	3	< 1
Total catch (kg)	186	157	20	202	135	154	107

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	22	23	24	25	26	27	28
Start date & time	06/05/03 10	06/05/03 13	06/05/03 19	06/05/03 20	06/06/03 07	06/06/03 08	06/06/03 11
Start latitude	N 5355.19	N 5346.52	N 5410.17	N 5414.46	N 5417.33	N 5411.90	N 5418.14
Start longitude	W 16422.64	W 16400.02	W 16343.12	W 16338.06	W 16443.14	W 16437.94	W 16445.28
End latitude	N 5354.66	N 5347.10	N 5409.54	N 5414.79	N 5417.33	N 5412.25	N 5418.21
End longitude	W 16423.56	W 16359.10	W 16343.99	W 16339.29	W 16443.14	W 16439.15	W 16443.85
Bottom depth (m)	110	155	80	92		81	79
Duration (minutes)	15.6	16.2	16.2	16.2	1.8	16.2	16.2
Distance fished (km)	1.435	1.503	1.523	1.487		1.485	1.563
Performance	0	5.8	0	0	-5.7	0	5.8
Atka mackerel	0	0	2	< 1	0	29	23
Pacific cod	4	5	0	< 1	0	16	47
Walleye pollock	2	26	< 1	0	0	0	2
Pacific ocean perch	0	1210	0	0	0	0	0
Northern rockfish	0	1	0	0	0	< 1	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	2	0	0	0	0	0
Shortspine thornyhead	0	19	0	0	0	0	0
Dusky rockfish	0	186	0	0	0	0	0
Other rockfish	0	< 1	0	0	0	0	0
Sablefish	0	10	0	0	0	0	0
Arrowtooth flounder	41	5	20	84	0	83	5
Pacific halibut	0	7	16	16	0	96	23
Northern rock sole	0	0	4	4	0	3	0
Southern rock sole	0	0	24	11	0	7	0
Flathead sole	5	< 1	37	11	0	0	0
Rex sole	14	4	< 1	2	0	0	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	0	13	36
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	< 1	0	0	26	38
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	7
Other sculpins	0	< 1	0	0	0	< 1	< 1
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	0	0	14	8
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	< 1	< 1	< 1	0	0	0
Magistrate armhook squid	0	< 1	0	0	0	0	0
Sponges	0	< 1	0	0	0	< 1	3
Starfish	0	0	0	0	0	2	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	0	0	0	0	0	< 1
Other invertebrates	3	< 1	6	1	0	1	1
Total catch (kg)	70	1477	110	130	0	290	195

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	29	30	31	32	33	34	35
Start date & time	06/06/03 13	06/06/03 16	06/06/03 17	06/06/03 20	06/07/03 06	06/07/03 10	06/07/03 12
Start latitude	N 5412.33	N 5422.51	N 5422.71	N 5426.13	N 5425.34	N 5427.63	N 5430.34
Start longitude	W 16403.42	W 16417.62	W 16407.78	W 16356.03	W 16344.26	W 16335.44	W 16322.94
End latitude	N 5412.51	N 5423.21	N 5422.23	N 5426.69	N 5425.50	N 5427.67	N 5429.96
End longitude	W 16404.75	W 16418.14	W 16408.83	W 16356.99	W 16345.53	W 16334.22	W 16324.15
Bottom depth (m)	73	92	104	81	90	109	103
Duration (minutes)	16.2	15.6	16.2	15.6	15.6	15.6	16.2
Distance fished (km)	1.503	1.444	1.465	1.493	1.42	1.33	1.508
Performance	0	0	0	0	0	0	0
Atka mackerel	0	< 1	2	0	2	0	< 1
Pacific cod	0	0	7	3	3	40	10
Walleye pollock	0	100	215	0	98	507	41
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	2	0	0	0	0
Arrowtooth flounder	41	93	104	42	57	95	235
Pacific halibut	21	146	7	22	9	9	27
Northern rock sole	19	96	1	71	8	0	0
Southern rock sole	18	16	3	23	28	3	2
Flathead sole	19	4	51	8	5	4	16
Rex sole	< 1	0	< 1	0	0	9	13
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	< 1	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	28	0	< 1	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	< 1	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	< 1	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	< 1	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	13	10	< 1	< 1	< 1	0	0
Bairdi Tanner crab	0	0	0	0	0	< 1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	< 1	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	< 1	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	0	0	0	0	< 1	0
Starfish	0	0	< 1	< 1	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	< 1	0
Other invertebrates	< 1	0	< 1	< 1	< 1	3	< 1
Total catch (kg)	134	466	393	197	210	673	345

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	36	37	38	39	40	41	42
Start date & time	06/08/03 09	06/08/03 10	06/08/03 13	06/08/03 14	06/09/03 07	06/09/03 11	06/09/03 12
Start latitude	N 5419.04	N 5416.68	N 5414.94	N 5412.21	N 5410.17	N 5407.52	N 5407.47
Start longitude	W 16327.59	W 16325.31	W 16314.97	W 16318.68	W 16249.40	W 16205.58	W 16204.87
End latitude	N 5419.61	N 5417.37	N 5415.25	N 5412.61	N 5410.90	N 5407.56	N 5407.47
End longitude	W 16328.48	W 16324.64	W 16316.39	W 16317.56	W 16249.07	W 16205.48	W 16204.50
Bottom depth (m)	113	88	68	73	72	92	97
Duration (minutes)	15.6	16.2	17.4	16.2	15.6	7.2	5.4
Distance fished (km)	1.457	1.503	1.665	1.454	1.439	0.556	0.431
Performance	0	0	2.4	0	0	-1.12	-1.12
Atka mackerel	2	2	< 1	1	1438	0	0
Pacific cod	22	13	6	11	60	0	5
Walleye pollock	1534	321	0	1	2	0	0
Pacific ocean perch	0	0	0	0	0	0	3
Northern rockfish	0	0	0	0	0	0	2
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	2	0	0	0	0	0	0
Arrowtooth flounder	423	169	11	11	9	< 1	1
Pacific halibut	5	30	60	33	99	6	6
Northern rock sole	0	27	12	11	12	0	1
Southern rock sole	0	19	17	15	14	2	< 1
Flathead sole	16	15	27	24	< 1	0	0
Rex sole	22	19	0	0	0	0	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	2	< 1	0	0	0	0	0
Pacific salmon	3	0	0	0	0	0	0
Skates	0	4	0	0	0	0	0
Sharks	0	49	0	0	0	0	0
Yellow Irish lord	0	< 1	3	3	4	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	< 1	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	1	3	4	7	1	1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	< 1	< 1	0	< 1	< 1
Starfish	< 1	0	< 1	0	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	6	0	0	0	0	0
Snails	0	0	< 1	< 1	0	0	0
Other invertebrates	1	2	3	28	13	3	15
Total catch (kg)	2032	680	144	141	1660	13	37

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	43	44	45	46	47	48	49
Start date & time	06/09/03 13	06/09/03 16	06/09/03 19	06/10/03 07	06/10/03 09	06/10/03 12	06/10/03 13
Start latitude	N 5407.74	N 5405.12	N 5426.64	N 5429.05	N 5445.92	N 5454.61	N 5456.11
Start longitude	W 16203.69	W 16141.62	W 16125.26	W 16243.95	W 16302.93	W 16239.77	W 16238.96
End latitude	N 5407.66	N 5405.23	N 5427.37	N 5428.77	N 5445.16	N 5455.12	N 5457.07
End longitude	W 16202.42	W 16140.35	W 16124.80	W 16242.68	W 16302.66	W 16241.09	W 16239.21
Bottom depth (m)	92	365	85	85	38	25	18
Duration (minutes)	15.6	15.6	15.6	16.2	15.6	18	19.2
Distance fished (km)	1.42	1.445	1.47	1.508	1.469	1.724	1.833
Performance	0	5.1	0	0	0	0	0
Atka mackerel	< 1	0	713	0	0	0	0
Pacific cod	26	0	5	< 1	5	21	0
Walleye pollock	0	0	0	32	< 1	0	0
Pacific ocean perch	272	0	< 1	0	0	0	0
Northern rockfish	292	0	0	0	0	0	0
Shortraker rockfish	0	256	0	0	0	0	0
Rougheye rockfish	0	184	0	0	0	0	0
Shortspine thornyhead	0	166	0	0	0	0	0
Dusky rockfish	25	0	0	0	0	0	0
Other rockfish	7	0	0	0	0	0	0
Sablefish	0	52	0	0	0	0	0
Arrowtooth flounder	9	9	22	93	6	0	0
Pacific halibut	73	0	47	17	85	45	66
Northern rock sole	2	0	0	3	10	24	27
Southern rock sole	18	0	6	4	133	125	16
Flathead sole	2	0	0	50	2	0	0
Rex sole	0	0	0	13	0	0	0
Dover sole	0	17	0	< 1	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	57	39
Pacific salmon	0	0	3	0	0	0	0
Skates	0	0	19	37	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	3	6	33	10
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	1	0	0	< 1
Other sculpins	0	< 1	0	< 1	0	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	44	0	0	0	0	0
Other fish	1	< 1	0	< 1	< 1	0	< 1
Bairdi Tanner crab	0	0	0	< 1	0	0	0
Golden king crab	0	< 1	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	< 1	0	0	0	0
Magistrate armhook squid	0	3	0	0	0	0	0
Sponges	< 1	< 1	< 1	< 1	< 1	0	< 1
Starfish	0	< 1	< 1	0	0	0	0
Stony coral	0	< 1	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	19	0
Snails	< 1	< 1	< 1	0	0	0	< 1
Other invertebrates	16	7	2	< 1	12	< 1	< 1
Total catch (kg)	743	741	818	256	260	325	160

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	50	51	52	53	54	55	56
Start date & time	06/10/03 15	06/11/03 08	06/11/03 10	06/11/03 12	06/11/03 14	06/11/03 16	06/11/03 18
Start latitude	N 5502.57	N 5446.93	N 5448.96	N 5437.37	N 5446.99	N 5454.47	N 5457.99
Start longitude	W 16231.00	W 16116.34	W 16102.45	W 16045.78	W 16034.69	W 16045.77	W 16026.21
End latitude	N 5501.79	N 5447.60	N 5449.09	N 5437.69	N 5447.72	N 5455.02	N 5457.39
End longitude	W 16230.94	W 16115.61	W 16101.09	W 16044.57	W 16035.19	W 16046.76	W 16027.06
Bottom depth (m)	69	88	111	119	112	81	78
Duration (minutes)	15.6	15.6	16.2	15.6	15.6	16.2	15.6
Distance fished (km)	1.452	1.497	1.496	1.461	1.48	1.515	1.473
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	2	0	0	0	0
Pacific cod	17	0	0	4	11	0	0
Walleye pollock	847	0	< 1	0	1	0	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	< 1	0	0	0	1	0	0
Arrowtooth flounder	22	5	314	204	1498	238	7
Pacific halibut	65	26	27	11	23	32	54
Northern rock sole	97	2	< 1	0	0	4	11
Southern rock sole	3	21	< 1	0	0	23	33
Flathead sole	243	4	45	5	21	19	10
Rex sole	0	0	4	25	7	0	0
Dover sole	0	0	0	< 1	0	0	0
Yellowfin sole	72	0	0	0	0	0	0
Other flatfish	16	0	0	0	0	0	< 1
Pacific salmon	0	4	0	0	1	0	0
Skates	0	0	0	0	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	6	0	0	0	0	< 1	3
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	4	0	0	0	0	0	0
Other sculpins	4	0	0	0	0	0	0
Smelts	0	0	0	0	0	0	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	0	< 1	< 1	0	< 1	0
Bairdi Tanner crab	0	0	< 1	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	< 1	0	0	0	< 1	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	0	0	< 1	0
Starfish	< 1	0	< 1	< 1	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	< 1
Other invertebrates	11	< 1	< 1	< 1	2	< 1	8
Total catch (kg)	1409	63	394	250	1566	318	127

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	57	58	59	60	61	62	63
Start date & time	06/12/03 06	06/12/03 10	06/12/03 13	06/12/03 15	06/14/03 06	06/14/03 13	06/14/03 15
Start latitude	N 5533.97	N 5520.47	N 5520.35	N 5514.90	N 5531.18	N 5508.16	N 5508.26
Start longitude	W 16129.74	W 16129.23	W 16124.33	W 16124.27	W 16036.16	W 16023.84	W 16029.06
End latitude	N 5533.22	N 5520.58	N 5520.48	N 5515.22	N 5530.39	N 5507.49	N 5508.96
End longitude	W 16130.07	W 16127.86	W 16125.70	W 16125.51	W 16035.99	W 16024.72	W 16028.54
Bottom depth (m)	32	64	65	42	96	78	50
Duration (minutes)	15.6	15.6	15.6	15.6	16.2	16.8	15.6
Distance fished (km)	1.468	1.481	1.487	1.474	1.497	1.586	1.453
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	47	19	9	33	103	0	17
Walleye pollock	5	0	0	0	2998	0	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	< 1	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	< 1	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	< 1	0	1	0	0	0	0
Arrowtooth flounder	15	101	102	6	677	10	< 1
Pacific halibut	69	38	43	3	48	69	73
Northern rock sole	88	15	22	9	0	23	85
Southern rock sole	0	2	0	14	0	55	173
Flathead sole	22	15	40	35	125	36	0
Rex sole	0	< 1	3	0	< 1	0	0
Dover sole	0	0	0	0	0	0	0
Yellowfin sole	75	463	321	625	85	0	0
Other flatfish	59	26	44	27	< 1	0	3
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	0	0	0	0
Sharks	0	0	0	0	308	0	0
Yellow Irish lord	6	19	5	3	0	< 1	77
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	5	< 1	0	1	14	1	1
Other sculpins	4	1	3	0	0	0	0
Smelts	< 1	0	0	0	< 1	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	4	< 1	< 1	< 1	< 1	2	< 1
Bairdi Tanner crab	0	0	0	0	< 1	< 1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	< 1	0	0	0	< 1	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	1	0	0	2	0	< 1
Starfish	2	0	0	0	5	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	6	0
Snails	0	< 1	< 1	0	0	< 1	0
Other invertebrates	3	39	13	< 1	< 1	< 1	4
Total catch (kg)	406	742	606	758	4368	204	433

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	64	65	66	67	68	69	70
Start date & time	06/14/03 17	06/14/03 20	06/15/03 06	06/15/03 08	06/15/03 12	06/15/03 14	06/15/03 16
Start latitude	N 5511.13	N 5515.65	N 5537.66	N 5535.39	N 5514.67	N 5515.63	N 5500.57
Start longitude	W 16006.16	W 16004.82	W 16000.29	W 15952.49	W 15946.69	W 15942.13	W 15958.88
End latitude	N 5510.59	N 5515.65	N 5537.62	N 5536.17	N 5515.48	N 5515.15	N 5501.43
End longitude	W 16007.24	W 16003.47	W 16001.68	W 15952.42	W 15946.66	W 15943.22	W 15958.51
Bottom depth (m)	51	48	56	142	73	129	42
Duration (minutes)	16.2	15.6	15.6	15.6	16.2	16.2	17.4
Distance fished (km)	1.545	1.448	1.476	1.464	1.523	1.478	1.667
Performance	0	0	0	0	1	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	790	0	0	0	< 1	0	222
Walleye pollock	< 1	0	0	7	0	5	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	< 1	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	2	0	0	0
Arrowtooth flounder	0	0	0	400	5	415	< 1
Pacific halibut	138	49	60	10	11	7	94
Northern rock sole	122	8	< 1	0	< 1	0	67
Southern rock sole	53	65	64	2	11	0	139
Flathead sole	18	0	0	82	0	51	0
Rex sole	0	0	0	15	< 1	< 1	0
Dover sole	0	0	0	0	0	< 1	0
Yellowfin sole	4	0	0	0	0	0	0
Other flatfish	9	0	0	< 1	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	0	11	0	13	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	1	0	0	< 1	21
Bigmouth sculpin	0	0	0	7	0	4	0
Great sculpin	0	0	0	0	0	0	7
Other sculpins	0	0	0	0	< 1	0	0
Smelts	0	0	0	14	0	2	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	< 1	< 1	< 1	0
Bairdi Tanner crab	0	0	0	< 1	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	< 1	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	< 1	< 1	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	0	0	0	0
Starfish	0	0	4	< 1	< 1	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	16
Snails	0	0	< 1	< 1	< 1	< 1	0
Other invertebrates	6	< 1	< 1	< 1	4	< 1	< 1
Total catch (kg)	1141	123	130	550	33	500	567

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	71	72	73	74	75	76	77
Start date & time	06/15/03 20	06/16/03 07	06/16/03 09	06/16/03 11	06/16/03 13	06/16/03 16	06/16/03 18
Start latitude	N 5507.35	N 5418.07	N 5421.04	N 5419.100	N 5426.36	N 5428.81	N 5440.08
Start longitude	W 15928.85	W 16020.89	W 16012.62	W 15955.94	W 15936.41	W 15937.83	W 15929.66
End latitude	N 5508.07	N 5417.99	N 5421.48	N 5419.87	N 5426.15	N 5428.80	N 5440.09
End longitude	W 15928.37	W 16022.22	W 16011.55	W 15957.28	W 15937.69	W 15936.52	W 15930.92
Bottom depth (m)	66	222	160	322	161	131	75
Duration (minutes)	15.6	15.6	15.6	15.6	15.6	15.6	15
Distance fished (km)	1.462	1.477	1.446	1.483	1.45	1.426	1.371
Performance	0	0	0	1	0	0	1
Atka mackerel	0	0	0	< 1	0	< 1	< 1
Pacific cod	2	11	51	0	28	24	1
Walleye pollock	< 1	7	0	2	0	0	25
Pacific ocean perch	0	8	33	1	114	55	0
Northern rockfish	0	0	36	0	19	111	0
Shortraker rockfish	0	0	0	61	4	0	0
Rougheye rockfish	0	4	0	86	0	0	0
Shortspine thornyhead	0	67	< 1	98	< 1	< 1	0
Dusky rockfish	0	0	1	0	11	3	0
Other rockfish	0	3	0	0	0	0	0
Sablefish	0	24	10	119	73	0	0
Arrowtooth flounder	15	15	17	18	261	1274	0
Pacific halibut	2	12	19	39	0	0	26
Northern rock sole	4	0	0	0	0	2	< 1
Southern rock sole	81	0	0	0	0	1	< 1
Flathead sole	19	0	0	0	0	4	0
Rex sole	0	2	4	2	10	< 1	0
Dover sole	0	0	0	12	< 1	0	0
Yellowfin sole	1	0	0	0	0	0	0
Other flatfish	7	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	2	0	0	0	0	0	0
Sharks	0	0	0	0	0	0	3
Yellow Irish lord	2	0	0	0	0	0	1
Bigmouth sculpin	0	0	3	0	0	0	< 1
Great sculpin	< 1	0	0	0	0	0	0
Other sculpins	0	2	< 1	< 1	< 1	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	21	0	114	0	0	0
Other fish	0	< 1	< 1	< 1	< 1	0	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	2	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	< 1	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	7	2	3	0	0	0
Sponges	0	< 1	< 1	< 1	< 1	0	< 1
Starfish	0	0	0	< 1	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	< 1	0	0	7
Snails	0	< 1	0	< 1	0	0	< 1
Other invertebrates	0	3	< 1	4	1	1	6
Total catch (kg)	137	185	178	567	524	1477	72

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	78	79	80	81	82	83	84
Start date & time	06/17/03 06	06/17/03 09	06/17/03 10	06/17/03 14	06/17/03 16	06/17/03 18	06/18/03 06
Start latitude	N 5449.83	N 5444.13	N 5440.17	N 5440.53	N 5440.34	N 5444.84	N 5442.01
Start longitude	W 15903.89	W 15837.23	W 15835.86	W 15817.23	W 15822.44	W 15827.75	W 15825.44
End latitude	N 5449.62	N 5444.89	N 5440.91	N 5440.04	N 5440.87	N 5444.94	N 5442.70
End longitude	W 15905.18	W 15837.60	W 15835.55	W 15818.17	W 15821.49	W 15827.65	W 15825.30
Bottom depth (m)	70	112	113	345	218	173	189
Duration (minutes)	15.6	16.2	15.6	15	15.6	2.4	15.6
Distance fished (km)	1.459	1.511	1.445	1.414	1.442	0.22	1.34
Performance	1	0	0	0	0	-1	1
Atka mackerel	9	5	1	0	0	0	0
Pacific cod	8	3	0	0	0	6	10
Walleye pollock	1	0	0	0	< 1	1	0
Pacific ocean perch	0	30	1998	0	420	54	16
Northern rockfish	0	55	136	0	< 1	5	2
Shortraker rockfish	0	0	0	86	3	0	0
Rougheye rockfish	0	0	0	61	5	< 1	< 1
Shortspine thornyhead	0	0	0	438	31	0	4
Dusky rockfish	0	0	184	0	0	30	2
Other rockfish	0	0	0	0	3	7	< 1
Sablefish	0	0	0	77	4	17	0
Arrowtooth flounder	0	36	8	9	27	17	15
Pacific halibut	74	33	9	0	6	0	42
Northern rock sole	< 1	0	0	0	0	0	0
Southern rock sole	2	0	0	0	0	0	0
Flathead sole	0	< 1	0	0	0	0	0
Rex sole	0	0	0	0	2	3	28
Dover sole	0	0	0	2	< 1	< 1	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	52	0	0	0	0	0	< 1
Sharks	0	0	0	0	0	2	0
Yellow Irish lord	9	< 1	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	1	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	1	0	0	6	< 1	< 1
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	48	0	0	0
Other fish	0	< 1	7	< 1	14	2	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	< 1	0
Sidestripe shrimp	0	0	0	0	0	0	< 1
Scallops	< 1	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	17	< 1	< 1	< 1
Sponges	< 1	0	1	0	< 1	2	< 1
Starfish	< 1	< 1	< 1	< 1	0	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	13	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	0	0	0	0	< 1	< 1
Other invertebrates	4	1	< 1	2	5	4	5
Total catch (kg)	160	165	2,346	738	530	164	127

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	85	86	87	88	89	90	91
Start date & time	06/18/03 08	06/18/03 11	06/18/03 12	06/18/03 13	06/18/03 17	06/18/03 19	06/19/03 07
Start latitude	N 5443.48	N 5442.17	N 5442.38	N 5441.36	N 5442.53	N 5442.95	N 5442.69
Start longitude	W 15817.62	W 15815.97	W 15815.40	W 15814.77	W 15805.30	W 15801.63	W 15800.95
End latitude	N 5443.58	N 5442.33	N 5442.33	N 5441.84	N 5442.76	N 5443.01	N 5442.74
End longitude	W 15816.31	W 15815.49	W 15815.54	W 15813.78	W 15806.47	W 15801.20	W 15800.64
Bottom depth (m)	225	338	320	402	256	222	264
Duration (minutes)	15.6	6.6	1.8	15	15.6	6	3.6
Distance fished (km)	1.43	0.607	0.181	1.416	1.372	0.489	0.353
Performance	1	-5	-2	2	1	-4	-1
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	3	0	0	0	0
Walleye pollock	2	0	0	2	1	0	<1
Pacific ocean perch	113	<1	4	0	7	167	14
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	6	15	3	0	8
Rougheye rockfish	3	0	14	2	49	<1	5
Shortspine thornyhead	11	1	0	212	78	3	13
Dusky rockfish	0	0	0	0	0	5	0
Other rockfish	<1	0	0	0	0	1	0
Sablefish	12	0	8	101	76	0	3
Arrowtooth flounder	23	2	4	0	128	4	14
Pacific halibut	8	0	0	0	9	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	0	0	0	0	0	0	0
Rex sole	5	0	0	1	0	0	0
Dover sole	1	0	0	35	16	0	5
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	<1	0	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	4	0	0	0	7	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	2	<1	<1	<1	<1	<1	<1
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	1041	51	0	0
Other fish	0	0	5	2	<1	1	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	1	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	<1	0	0	0	<1	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	1	0	0	<1	2	0	0
Sponges	<1	0	0	<1	2	0	<1
Starfish	<1	<1	0	<1	<1	0	<1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	<1	0	0	0	0
Octopus	0	0	0	0	0	<1	0
Snails	0	0	0	0	<1	0	<1
Other invertebrates	4	<1	<1	2	1	6	7
Total catch (kg)	190	5	45	1414	433	188	70

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	92	93	94	95	96	97	98
Start date & time	06/19/03 09	06/19/03 12	06/19/03 15	06/19/03 17	06/20/03 06	06/20/03 09	06/20/03 11
Start latitude	N 5449.44	N 5452.37	N 5507.14	N 5509.45	N 5538.30	N 5528.98	N 5526.46
Start longitude	W 15801.75	W 15731.82	W 15713.67	W 15712.52	W 15908.73	W 15850.35	W 15836.86
End latitude	N 5449.97	N 5452.62	N 5507.74	N 5509.90	N 5539.07	N 5529.71	N 5526.62
End longitude	W 15800.77	W 15730.58	W 15712.76	W 15711.45	W 15908.87	W 15850.79	W 15838.20
Bottom depth (m)	114	263	128	122	76	115	172
Duration (minutes)	16.2	15.6	16.2	15.6	15.6	15.6	16.2
Distance fished (km)	1.464	1.443	1.513	1.427	1.454	1.468	1.457
Performance	1	1	0	1	0	0	0
Atka mackerel	0	0	< 1	0	0	7	0
Pacific cod	< 1	0	< 1	0	0	18	0
Walleye pollock	0	2	0	0	0	< 1	34
Pacific ocean perch	12	7	5	< 1	0	2	0
Northern rockfish	479	0	211	0	0	0	0
Shortraker rockfish	0	11	0	0	0	0	0
Rougheye rockfish	< 1	92	1	0	0	0	15
Shortspine thornyhead	3	63	0	0	0	0	0
Dusky rockfish	4	1	646	0	0	0	0
Other rockfish	< 1	< 1	2	0	0	0	0
Sablefish	0	138	0	0	0	0	4
Arrowtooth flounder	7	108	74	110	5	251	94
Pacific halibut	32	11	31	37	81	106	6
Northern rock sole	0	0	0	0	1	0	0
Southern rock sole	2	0	0	0	6	0	0
Flathead sole	0	0	0	0	0	1	80
Rex sole	0	5	15	5	0	34	10
Dover sole	0	5	3	2	0	5	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	3	0	0
Skates	21	0	0	5	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	< 1	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	2	0	0	0	0	0
Smelts	0	0	0	0	0	0	14
Giant grenadier	0	0	0	0	0	0	0
Other fish	42	0	4	< 1	< 1	4	< 1
Bairdi Tanner crab	0	0	0	0	0	0	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	< 1
Sidestripe shrimp	0	< 1	0	0	0	0	< 1
Scallops	< 1	0	0	1	0	< 1	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	< 1	< 1	< 1	0	0	0
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	< 1	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	< 1	< 1	< 1	0
Other invertebrates	13	< 1	1	2	< 1	< 1	< 1
Total catch (kg)	616	446	995	164	97	428	259

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	99	100	101	102	103	104	105
Start date & time	06/20/03 13	06/20/03 15	06/20/03 17	06/20/03 18	06/21/03 06	06/21/03 08	06/21/03 10
Start latitude	N 5528.13	N 5534.02	N 5538.46	N 5540.94	N 5523.21	N 5530.53	N 5538.07
Start longitude	W 15821.38	W 15756.95	W 15751.88	W 15747.11	W 15737.23	W 15737.70	W 15723.29
End latitude	N 5528.91	N 5533.86	N 5539.13	N 5541.68	N 5523.66	N 5531.16	N 5538.68
End longitude	W 15821.27	W 15758.26	W 15751.13	W 15746.56	W 15736.09	W 15736.83	W 15722.34
Bottom depth (m)	142	132	131	135	86	99	99
Duration (minutes)	15.6	15.6	15.6	16.2	16.2	16.2	16.8
Distance fished (km)	1.472	1.431	1.501	1.515	1.501	1.502	1.544
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	< 1	0	0	< 1
Pacific cod	0	0	0	2	26	0	0
Walleye pollock	0	< 1	0	0	< 1	0	< 1
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	14	< 1	0	< 1	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	10	0	0	0	2
Other rockfish	0	0	< 1	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	48	417	139	307	1	10	3
Pacific halibut	5	0	0	0	73	35	76
Northern rock sole	0	0	0	0	< 1	1	2
Southern rock sole	0	0	0	0	8	3	12
Flathead sole	33	22	28	31	0	0	0
Rex sole	6	1	2	1	0	0	0
Dover sole	0	< 1	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	8	0	0
Skates	2	11	0	0	0	0	0
Sharks	0	0	0	0	2	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	< 1	< 1	0	0	0	0
Smelts	21	4	2	< 1	0	0	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	< 1	0	0	< 1	0
Bairdi Tanner crab	0	< 1	< 1	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	< 1	< 1	1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	0	< 1	0	0
Starfish	< 1	< 1	1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	< 1	0	0	0	0
Other invertebrates	< 1	< 1	5	2	< 1	< 1	4
Total catch (kg)	132	457	188	347	119	50	102

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	106	107	108	109	110	111	112
Start date & time	06/21/03 11	06/21/03 13	06/21/03 16	06/21/03 17	06/22/03 06	06/22/03 08	06/22/03 12
Start latitude	N 5540.72	N 5542.51	N 5532.80	N 5532.69	N 5520.51	N 5522.60	N 5511.17
Start longitude	W 15723.40	W 15709.58	W 15647.55	W 15647.29	W 15631.04	W 15628.80	W 15612.96
End latitude	N 5541.32	N 5542.73	N 5533.09	N 5533.45	N 5521.05	N 5523.13	N 5510.93
End longitude	W 15722.52	W 15708.20	W 15647.68	W 15647.73	W 15631.96	W 15629.77	W 15614.20
Bottom depth (m)	98	85	98	101	147	166	523
Duration (minutes)	16.2	16.8	6	16.2	15.6	15.6	15.6
Distance fished (km)	1.479	1.52	0.562	1.508	1.443	1.455	1.412
Performance	0	0	-1	0	0	0	1
Atka mackerel	0	0	0	0	0	1	0
Pacific cod	0	18	0	0	16	7	0
Walleye pollock	0	0	< 1	< 1	0	0	0
Pacific ocean perch	0	0	1	< 1	32	562	0
Northern rockfish	0	0	254	2	< 1	186	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	169
Dusky rockfish	0	0	0	0	0	146	0
Other rockfish	0	0	< 1	0	0	5	0
Sablefish	0	0	0	0	4	14	79
Arrowtooth flounder	116	< 1	< 1	1	159	245	2
Pacific halibut	76	488	9	12	63	22	0
Northern rock sole	0	< 1	0	0	0	0	0
Southern rock sole	7	43	0	9	0	0	0
Flathead sole	< 1	0	0	0	0	0	0
Rex sole	0	0	0	0	40	30	1
Dover sole	0	0	0	0	2	16	34
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	3	0
Skates	0	0	0	0	17	0	< 1
Sharks	124	0	0	0	2	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	0	< 1
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	0	0	0	1511
Other fish	0	< 1	17	< 1	< 1	2	6
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	2	< 1	0	1	< 1	0	0
Magistrate armhook squid	0	0	0	0	0	0	< 1
Sponges	0	< 1	2	< 1	< 1	0	5
Starfish	0	< 1	< 1	< 1	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	< 1	0	< 1	< 1	< 1
Other invertebrates	6	< 1	5	2	4	7	6
Total catch (kg)	330	551	291	29	340	1,247	1,814

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	113	114	115	116	117	118	119
Start date & time	06/22/03 16	06/24/03 08	06/24/03 10	06/24/03 11	06/24/03 15	06/24/03 19	06/25/03 06
Start latitude	N 5539.05	N 5557.37	N 5555.65	N 5554.55	N 5605.56	N 5624.13	N 5641.88
Start longitude	W 15552.78	W 15700.77	W 15652.31	W 15648.44	W 15617.03	W 15641.83	W 15621.55
End latitude	N 5539.55	N 5557.95	N 5554.95	N 5554.27	N 5605.06	N 5624.90	N 5642.65
End longitude	W 15553.86	W 15659.89	W 15652.91	W 15649.71	W 15618.07	W 15641.79	W 15621.55
Bottom depth (m)	163	109	155	158	215	104	191
Duration (minutes)	16.2	15.6	15.6	16.2	15.6	15.6	15.6
Distance fished (km)	1.501	1.455	1.473	1.449	1.445	1.434	1.447
Performance	0	0	0	0	1	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	70	48	2	7	13	2	6
Walleye pollock	0	< 1	1	0	59	0	1
Pacific ocean perch	3	0	< 1	0	1	< 1	0
Northern rockfish	6	0	0	0	0	25	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	1	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	2	< 1	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	11	0	5	1	41	0	6
Arrowtooth flounder	550	401	391	525	91	345	164
Pacific halibut	6	61	34	65	1	85	10
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	2	0	< 1	0	2	0
Flathead sole	5	14	11	7	0	0	22
Rex sole	19	49	42	29	27	3	< 1
Dover sole	2	4	109	42	11	4	1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	2	0	0	0	0	0
Skates	15	2	0	32	8	2	21
Sharks	114	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	6	0	< 1
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	< 1	0	< 1	0	0
Smelts	0	0	< 1	0	32	2	37
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	0	< 1	1	0
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	2
Sidestripe shrimp	0	0	0	0	2	0	1
Scallops	0	< 1	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	0	0	0	2	1	< 1
Starfish	< 1	< 1	0	< 1	< 1	< 1	< 1
Stony coral	< 1	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	4
Snails	0	< 1	0	< 1	< 1	< 1	< 1
Other invertebrates	20	< 1	< 1	< 1	1	3	< 1
Total catch (kg)	823	586	597	712	298	477	277

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	120	121	122	123	124	125	126
Start date & time	06/25/03 09	06/25/03 11	06/25/03 14	06/25/03 15	06/25/03 17	06/26/03 06	06/26/03 08
Start latitude	N 5648.51	N 5642.80	N 5652.72	N 5648.79	N 5645.74	N 5617.50	N 5619.91
Start longitude	W 15611.92	W 15543.51	W 15532.71	W 15527.67	W 15518.64	W 15556.20	W 15555.88
End latitude	N 5648.32	N 5642.43	N 5652.05	N 5648.17	N 5646.37	N 5618.26	N 5620.70
End longitude	W 15613.27	W 15544.76	W 15533.38	W 15528.56	W 15517.81	W 15556.32	W 15555.87
Bottom depth (m)	193	265	274	249	189	190	193
Duration (minutes)	16.2	16.2	15.6	16.2	15.6	15.6	15.6
Distance fished (km)	1.449	1.477	1.462	1.493	1.476	1.442	1.48
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	4	7	3	8	0	6	12
Walleye pollock	6	18	16	19	< 1	3	1
Pacific ocean perch	0	0	0	0	1	0	36
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	1	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	29
Other rockfish	0	0	0	0	0	0	1
Sablefish	10	10	7	15	10	4	< 1
Arrowtooth flounder	79	85	91	157	404	289	492
Pacific halibut	9	10	0	0	7	32	53
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	17	< 1	5	11	28	41	35
Rex sole	< 1	0	11	4	2	15	10
Dover sole	< 1	0	0	0	0	9	3
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	4	0	0	0	0	0	0
Skates	< 1	0	38	7	< 1	0	4
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	< 1	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	0	0
Smelts	78	9	4	13	658	52	73
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	8	< 1	0	0	0
Bairdi Tanner crab	0	0	0	0	< 1	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	1	< 1	< 1	< 1	< 1	0	< 1
Sidestripe shrimp	< 1	< 1	2	< 1	< 1	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	2	9	7	< 1	0	0
Sponges	< 1	0	0	0	0	0	0
Starfish	0	< 1	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	< 1	0	0	0	0	0
Snails	0	0	0	0	0	< 1	< 1
Other invertebrates	2	< 1	< 1	< 1	< 1	< 1	< 1
Total catch (kg)	214	145	194	242	1110	450	752

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	127	128	129	130	131	132	133
Start date & time	06/26/03 10	06/26/03 12	06/26/03 15	06/26/03 16	06/26/03 19	06/27/03 06	06/27/03 09
Start latitude	N 5625.70	N 5632.22	N 5625.58	N 5628.66	N 5622.79	N 5622.40	N 5637.03
Start longitude	W 15544.56	W 15544.30	W 15530.04	W 15522.36	W 15502.53	W 15512.22	W 15505.71
End latitude	N 5626.32	N 5632.89	N 5626.32	N 5629.38	N 5622.97	N 5623.20	N 5637.83
End longitude	W 15543.66	W 15543.45	W 15529.70	W 15521.69	W 15502.56	W 15512.50	W 15505.05
Bottom depth (m)	108	211	63	53	26	35	42
Duration (minutes)	16.2	16.8	15.6	16.8	3	16.8	17.4
Distance fished (km)	1.514	1.554	1.455	1.527	0.321	1.554	1.665
Performance	0	0	0	0	-2	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	143	< 1	7	0	0	3	1
Walleye pollock	0	11	0	0	0	0	< 1
Pacific ocean perch	1	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	3	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	8	0	0	0	0	0
Arrowtooth flounder	1185	436	10	0	0	0	< 1
Pacific halibut	22	9	42	66	0	17	54
Northern rock sole	0	0	18	16	0	0	16
Southern rock sole	0	0	0	8	0	0	6
Flathead sole	121	67	0	0	0	0	0
Rex sole	43	5	0	0	0	0	0
Dover sole	14	0	0	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	40	< 1	0	0	25
Pacific salmon	0	0	10	0	0	< 1	0
Skates	37	11	2	0	0	16	0
Sharks	5	142	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	0	0	0	0	0
Smelts	0	20	< 1	< 1	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	< 1	0	0	0	0	5
Bairdi Tanner crab	0	< 1	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	0	0	0	0	0
Sidestripe shrimp	0	< 1	0	0	0	0	0
Scallops	< 1	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	0	< 1	3	< 1
Starfish	0	< 1	0	0	7	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	0	0	< 1	< 1	< 1
Other invertebrates	5	3	1	3	6	3	5
Total catch (kg)	1,577	717	130	94	14	44	113

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	134	135	136	137	138	139	140
Start date & time	06/27/03 13	06/27/03 14	06/27/03 17	06/27/03 18	06/28/03 16	06/28/03 19	06/29/03 06
Start latitude	N 5644.51	N 5642.56	N 5638.04	N 5642.11	N 5706.22	N 5704.15	N 5600.67
Start longitude	W 15431.47	W 15426.27	W 15421.54	W 15423.05	W 15454.59	W 15507.22	W 15452.48
End latitude	N 5645.12	N 5642.78	N 5637.23	N 5641.84	N 5705.47	N 5704.91	N 5601.17
End longitude	W 15432.56	W 15427.71	W 15422.22	W 15421.58	W 15454.84	W 15506.92	W 15451.46
Bottom depth (m)	34	27	13	28	116	224	159
Duration (minutes)	17.4	16.2	16.8	16.8	15.6	15.6	15.6
Distance fished (km)	1.622	1.546	1.672	1.606	1.451	1.474	1.444
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	4	10	0	156	0	57
Walleye pollock	0	0	0	0	< 1	12	2
Pacific ocean perch	0	0	0	0	7	0	786
Northern rockfish	0	0	0	0	0	0	1
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	2	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	142	0	0
Other rockfish	0	0	0	0	< 1	0	0
Sablefish	0	0	0	0	0	7	90
Arrowtooth flounder	0	0	0	0	3265	246	143
Pacific halibut	92	156	9	50	47	0	0
Northern rock sole	43	114	2	74	0	0	0
Southern rock sole	159	652	2	126	0	0	0
Flathead sole	0	0	0	0	49	43	< 1
Rex sole	0	0	0	0	30	5	32
Dover sole	0	0	0	0	22	0	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	19	669	12	178	0	0	0
Pacific salmon	0	8	0	0	0	0	0
Skates	0	0	6	0	0	0	0
Sharks	0	0	7	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	6	0	0
Other sculpins	0	0	0	< 1	0	0	0
Smelts	0	0	0	< 1	0	86	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	0	< 1	< 1	0
Bairdi Tanner crab	0	0	0	0	0	< 1	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	< 1	< 1
Sidestripe shrimp	0	0	0	0	0	4	< 1
Scallops	< 1	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	< 1	0
Sponges	0	0	< 1	0	0	< 1	0
Starfish	0	< 1	2	< 1	< 1	3	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	0	0	0	< 1	< 1	0
Other invertebrates	< 1	1	3	2	1	< 1	4
Total catch (kg)	313	1606	53	430	3728	410	1117

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	141	142	143	144	145	146	147
Start date & time	06/29/03 11	06/29/03 14	06/29/03 17	06/29/03 19	06/30/03 06	06/30/03 08	06/30/03 10
Start latitude	N 5552.34	N 5555.43	N 5611.51	N 5617.91	N 5606.86	N 5613.51	N 5620.15
Start longitude	W 15408.77	W 15348.65	W 15353.23	W 15358.47	W 15426.86	W 15418.02	W 15417.32
End latitude	N 5551.84	N 5555.15	N 5611.37	N 5617.58	N 5607.66	N 5614.04	N 5620.00
End longitude	W 15409.88	W 15347.42	W 15351.88	W 15357.19	W 15427.18	W 15416.95	W 15418.72
Bottom depth (m)	562	247	189	119	156	129	92
Duration (minutes)	16.2	15.6	15.6	16.2	16.8	16.2	16.2
Distance fished (km)	1.512	1.405	1.44	1.487	1.551	1.51	1.489
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	19	62	179	21	30
Walleye pollock	0	4	15	0	3	0	41
Pacific ocean perch	0	30	2284	< 1	0	< 1	0
Northern rockfish	0	0	11	14	3	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	10	< 1	0	0	0	0
Shortspine thornyhead	36	50	< 1	0	0	0	0
Dusky rockfish	0	0	46	0	0	0	0
Other rockfish	0	< 1	2	0	0	0	0
Sablefish	153	2	11	0	0	0	0
Arrowtooth flounder	0	29	47	461	259	1326	127
Pacific halibut	0	0	5	57	8	31	98
Northern rock sole	0	0	0	0	0	0	117
Southern rock sole	0	0	0	0	0	0	< 1
Flathead sole	0	2	0	0	2	22	162
Rex sole	< 1	6	2	0	40	114	17
Dover sole	29	9	0	0	1	18	6
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	3
Pacific salmon	0	0	0	5	0	0	0
Skates	0	0	0	0	1	24	3
Sharks	0	0	0	0	0	3	7
Yellow Irish lord	0	0	0	0	0	< 1	0
Bigmouth sculpin	0	0	13	0	0	0	0
Great sculpin	0	0	0	0	0	0	1
Other sculpins	0	4	< 1	0	0	0	0
Smelts	0	0	0	< 1	0	0	0
Giant grenadier	316	0	0	0	0	0	0
Other fish	19	0	47	0	< 1	0	< 1
Bairdi Tanner crab	0	0	0	0	< 1	< 1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	< 1	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	2	< 1	0	0	0
Starfish	< 1	< 1	< 1	< 1	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	< 1	0	0	0	0	0	0
Snails	< 1	0	< 1	0	< 1	0	0
Other invertebrates	2	5	5	< 1	3	4	0
Total catch (kg)	556	152	2,508	600	500	1,564	613

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	148	149	150	151	152	153	154
Start date & time	06/30/03 11	06/30/03 14	06/30/03 16	06/30/03 18	07/03/03 07	07/03/03 09	07/03/03 12
Start latitude	N 5622.89	N 5627.74	N 5634.78	N 5624.21	N 5736.010	N 5731.71	N 5720.65
Start longitude	W 15428.09	W 15409.47	W 15346.66	W 15333.89	W 15149.52	W 15143.04	W 15152.98
End latitude	N 5622.83	N 5628.10	N 5633.99	N 5624.48	N 5736.81	N 5732.10	N 5721.40
End longitude	W 15426.57	W 15408.05	W 15346.66	W 15332.51	W 15150.19	W 15144.41	W 15152.17
Bottom depth (m)	39	41	68	77	146	154	68
Duration (minutes)	16.8	17.4	16.2	16.8	16.2	16.8	17.4
Distance fished (km)	1.595	1.632	1.474	1.527	1.511	1.565	1.636
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	547	< 1	4	0	26	101	48
Walleye pollock	0	0	0	0	54	72	< 1
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	6	0	59	< 1	399	195	12
Pacific halibut	41	14	77	55	37	24	5
Northern rock sole	120	8	137	19	0	0	5
Southern rock sole	1	0	22	17	0	0	90
Flathead sole	0	0	0	0	67	48	0
Rex sole	0	0	0	0	74	2	0
Dover sole	0	0	0	0	22	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	192	80	9	< 1	22	5	0
Pacific salmon	0	0	0	0	12	0	0
Skates	51	29	8	46	2	16	0
Sharks	9	0	2	0	0	0	14
Yellow Irish lord	0	0	0	0	0	0	10
Bigmouth sculpin	0	0	0	0	0	4	0
Great sculpin	0	0	19	0	9	0	2
Other sculpins	0	0	0	< 1	< 1	0	0
Smelts	0	< 1	< 1	< 1	0	< 1	2
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bairdi Tanner crab	0	0	0	0	< 1	4	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	< 1	< 1	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	3	0	0	0
Magistrate armhook squid	0	0	0	0	< 1	0	0
Sponges	0	0	0	< 1	0	0	0
Starfish	0	0	3	< 1	< 1	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	2	0
Snails	0	0	0	< 1	0	0	0
Other invertebrates	1	4	2	3	2	1	< 1
Total catch (kg)	967	136	344	144	728	475	188

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	155	156	157	158	159	160	161
Start date & time	07/03/03 14	07/03/03 17	07/04/03 06	07/04/03 11	07/04/03 14	07/04/03 15	07/04/03 17
Start latitude	N 5707.45	N 5706.05	N 5639.60	N 5645.52	N 5656.17	N 5703.64	N 5705.71
Start longitude	W 15208.66	W 15240.49	W 15258.72	W 15146.12	W 15134.90	W 15135.35	W 15149.96
End latitude	N 5707.89	N 5706.85	N 5638.93	N 5644.78	N 5656.91	N 5702.99	N 5705.66
End longitude	W 15207.38	W 15240.59	W 15257.88	W 15146.66	W 15134.98	W 15134.43	W 15148.47
Bottom depth (m)	85	166	79	237	159	126	81
Duration (minutes)	16.8	16.2	16.2	15.6	15	16.8	16.2
Distance fished (km)	1.573	1.492	1.545	1.498	1.398	1.561	1.517
Performance	0	0	0	0	0	0	1.11
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	69	13	2	0	2	10	<1
Walleye pollock	<1	1	0	6	0	0	0
Pacific ocean perch	0	<1	0	144	2	<1	0
Northern rockfish	0	<1	0	2	0	<1	<1
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	<1	0	0	0	0	0
Shortspine thornyhead	0	0	0	19	<1	0	0
Dusky rockfish	0	0	0	6	0	0	0
Other rockfish	0	0	0	<1	0	0	0
Sablefish	0	2	0	369	0	34	0
Arrowtooth flounder	9	2025	<1	29	141	89	2
Pacific halibut	9	37	352	10	56	17	2878
Northern rock sole	18	0	3	0	0	0	2
Southern rock sole	21	<1	13	0	0	1	15
Flathead sole	<1	226	0	<1	<1	<1	0
Rex sole	0	1	0	34	2	1	0
Dover sole	0	3	0	13	0	<1	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	1	0	0	0	0	0	0
Pacific salmon	0	23	0	0	0	0	0
Skates	0	11	0	0	0	0	18
Sharks	8	3	6	0	0	0	0
Yellow Irish lord	1	0	0	0	0	0	<1
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	<1	0	<1	0	0	0
Smelts	18	<1	0	0	0	0	<1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	5	<1	<1	0	0	9
Bairdi Tanner crab	0	26	<1	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	<1	0	0	0	0	0
Sidestripe shrimp	0	<1	0	1	0	0	0
Scallops	0	0	<1	0	0	0	<1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	<1	<1	<1	<1
Starfish	<1	2	<1	<1	<1	<1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	<1	<1	<1	<1	0	<1
Other invertebrates	1	4	2	<1	2	2	88
Total catch (kg)	156	2387	379	635	207	156	3014

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	162	163	164	165	166	167	168
Start date & time	07/05/03 07	07/05/03 08	07/05/03 11	07/05/03 12	07/05/03 13	07/05/03 15	07/06/03 06
Start latitude	N 5711.23	N 5717.100	N 5721.94	N 5722.26	N 5725.44	N 5725.27	N 5720.38
Start longitude	W 15125.89	W 15139.80	W 15136.55	W 15136.04	W 15136.17	W 15130.43	W 15051.75
End latitude	N 5711.77	N 5717.22	N 5721.94	N 5722.90	N 5726.22	N 5725.99	N 5721.05
End longitude	W 15124.79	W 15139.10	W 15136.54	W 15135.15	W 15136.12	W 15131.03	W 15050.89
Bottom depth (m)	110	62	66	67	66	131	118
Duration (minutes)	16.2	17.4	0	16.8	15.6	16.2	16.8
Distance fished (km)	1.529	1.639	0.007	1.526	1.472	1.471	1.548
Performance	0	1.11	-1	0	0	0	0
Atka mackerel	0	0	0	0	0	0	8
Pacific cod	< 1	2	0	< 1	0	300	32
Walleye pollock	0	0	0	0	0	112	0
Pacific ocean perch	< 1	0	0	0	0	0	116
Northern rockfish	0	0	0	0	< 1	0	231
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	27
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	8	0
Arrowtooth flounder	7	< 1	0	0	0	220	51
Pacific halibut	42	618	0	52	67	42	53
Northern rock sole	< 1	6	0	< 1	3	< 1	5
Southern rock sole	13	87	0	7	19	0	49
Flathead sole	0	0	0	0	0	31	0
Rex sole	0	0	0	0	0	44	< 1
Dover sole	0	0	0	0	0	43	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	8	0	0	0
Skates	2	6	0	0	9	0	0
Sharks	3	8	0	4	0	7	0
Yellow Irish lord	0	4	0	0	0	8	< 1
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	6	0	0	0	0	0
Other sculpins	< 1	< 1	0	0	0	0	0
Smelts	0	0	0	< 1	< 1	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	0	0	0	< 1	0
Bairdi Tanner crab	0	0	0	0	0	0	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	5	0	0	0	0	0
Starfish	< 1	6	0	3	< 1	2	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	0	< 1	0	0	0
Other invertebrates	14	79	0	7	49	6	2
Total catch (kg)	83	826	0	83	148	824	577

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	169	170	171	172	173	174	175
Start date & time	07/06/03 08	07/06/03 11	07/06/03 13	07/07/03 06	07/07/03 09	07/07/03 10	07/07/03 12
Start latitude	N 5725.35	N 5722.76	N 5732.44	N 5750.82	N 5739.70	N 5736.58	N 5733.75
Start longitude	W 15036.88	W 15022.78	W 15008.50	W 15016.31	W 15020.80	W 15029.50	W 15033.90
End latitude	N 5724.61	N 5722.94	N 5731.90	N 5751.52	N 5740.49	N 5737.09	N 5734.48
End longitude	W 15037.62	W 15021.37	W 15009.56	W 15017.00	W 15020.59	W 15028.20	W 15033.17
Bottom depth (m)	155	455	333	160	119	106	107
Duration (minutes)	17.4	15.6	16.2	16.2	16.2	18	16.8
Distance fished (km)	1.625	1.48	1.485	1.511	1.507	1.698	1.569
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	27	0	0	42	8	16	45
Walleye pollock	0	0	0	29	0	0	0
Pacific ocean perch	< 1	0	< 1	10	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	3	17	0	0	0	0
Rougheye rockfish	0	0	73	0	0	0	0
Shortspine thornyhead	0	27	30	0	0	0	0
Dusky rockfish	1	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	5	10	122	29	0	0	110
Arrowtooth flounder	52	0	5	341	77	50	321
Pacific halibut	65	0	0	19	141	26	8
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	11	25
Flathead sole	< 1	0	0	13	0	0	0
Rex sole	0	4	3	9	0	0	5
Dover sole	0	14	13	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	26
Skates	0	0	0	< 1	13	< 1	14
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	< 1	0	0	0	0
Smelts	0	0	0	0	0	0	1
Giant grenadier	0	410	253	0	0	0	0
Other fish	0	< 1	0	0	< 1	0	0
Bairdi Tanner crab	0	0	0	< 1	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	< 1	< 1	< 1
Magistrate armhook squid	0	0	6	< 1	0	0	0
Sponges	0	0	< 1	< 1	0	0	0
Starfish	2	< 1	< 1	< 1	< 1	< 1	0
Stony coral	0	0	0	0	< 1	0	0
Soft coral	0	< 1	< 1	< 1	0	0	0
Octopus	0	< 1	< 1	0	0	0	0
Snails	< 1	< 1	< 1	< 1	< 1	0	0
Other invertebrates	2	2	< 1	9	< 1	< 1	3
Total catch (kg)	156	471	526	502	239	104	559

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	176	177	178	179	180	181	182
Start date & time	07/07/03 14	07/07/03 15	07/07/03 17	07/07/03 18	07/08/03 06	07/08/03 10	07/08/03 13
Start latitude	N 5738.36	N 5737.41	N 5733.57	N 5734.73	N 5731.17	N 5728.97	N 5734.04
Start longitude	W 15049.76	W 15056.81	W 15054.17	W 15058.71	W 15050.87	W 15009.85	W 15001.75
End latitude	N 5738.010	N 5737.50	N 5733.74	N 5733.92	N 5730.72	N 5729.54	N 5734.61
End longitude	W 15048.34	W 15055.27	W 15054.21	W 15058.79	W 15049.55	W 15008.78	W 15000.70
Bottom depth (m)	84	80	87	82	90	483	503
Duration (minutes)	16.8	16.8	3	16.8	17.4	16.2	16.2
Distance fished (km)	1.513	1.558	0.312	1.513	1.592	1.527	1.511
Performance	1.11	1.1	-7	1.11	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	2	< 1	0	< 1	0	0	0
Walleye pollock	0	4	0	54	0	0	0
Pacific ocean perch	0	0	0	0	2	0	0
Northern rockfish	0	0	0	0	32	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	1
Shortspine thornyhead	0	0	0	0	0	26	28
Dusky rockfish	0	0	0	0	11	0	0
Other rockfish	0	0	0	0	< 1	0	0
Sablefish	0	0	0	0	0	33	97
Arrowtooth flounder	< 1	< 1	< 1	< 1	0	0	0
Pacific halibut	161	2	14	297	63	17	0
Northern rock sole	< 1	3	< 1	< 1	< 1	0	0
Southern rock sole	2	8	< 1	0	3	0	0
Flathead sole	0	< 1	0	0	0	0	0
Rex sole	0	0	0	0	0	0	1
Dover sole	0	0	0	0	0	8	7
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	24	0	8	24	0	0	0
Skates	12	0	0	0	0	0	0
Sharks	2	0	0	2	0	0	0
Yellow Irish lord	< 1	0	0	< 1	< 1	0	0
Bigmouth sculpin	0	< 1	0	0	< 1	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	0	0
Smelts	< 1	< 1	< 1	< 1	0	0	0
Giant grenadier	0	0	0	0	0	354	246
Other fish	0	0	0	2	1	< 1	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	< 1	0	0	0	< 1	0	0
Magistrate armhook squid	< 1	0	0	0	0	0	0
Sponges	< 1	< 1	0	1	3	< 1	0
Starfish	0	1	2	< 1	< 1	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	< 1	< 1	0	0	0	0	0
Octopus	0	0	0	0	< 1	0	0
Snails	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Other invertebrates	15	20	2	5	9	5	1
Total catch (kg)	221	40	28	385	128	444	382

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	183	184	185	186	187	188	189
Start date & time	07/08/03 15	07/08/03 17	07/08/03 19	07/09/03 06	07/09/03 08	07/09/03 09	07/09/03 11
Start latitude	N 5735.88	N 5734.25	N 5734.13	N 5750.00	N 5751.33	N 5743.09	N 5743.22
Start longitude	W 15010.24	W 15011.12	W 15019.27	W 15054.07	W 15054.18	W 15054.16	W 15109.26
End latitude	N 5735.18	N 5733.86	N 5733.52	N 5749.69	N 5751.29	N 5743.41	N 5742.48
End longitude	W 15011.09	W 15012.38	W 15020.13	W 15054.20	W 15055.74	W 15055.51	W 15108.96
Bottom depth (m)	281	294	183		78	78	71
Duration (minutes)	16.8	15.6	15.6	7.2	16.8	16.8	15.6
Distance fished (km)	1.599	1.476	1.462	0.621	1.567	1.526	1.444
Performance	0	0	0	-1	0	1.1	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	7	3	7	2	16
Walleye pollock	2	1	142	0	0	0	< 1
Pacific ocean perch	25	17	695	0	0	0	0
Northern rockfish	< 1	0	1	0	0	0	0
Shortraker rockfish	55	41	0	0	0	0	0
Rougheye rockfish	15	24	0	0	0	0	0
Shortspine thornyhead	12	20	< 1	0	0	0	0
Dusky rockfish	0	1	2	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	7	11	13	0	0	0	0
Arrowtooth flounder	13	26	125	11	27	16	< 1
Pacific halibut	0	0	0	2	50	56	38
Northern rock sole	0	0	0	3	6	10	24
Southern rock sole	0	0	0	14	35	23	45
Flathead sole	3	< 1	10	0	0	0	0
Rex sole	17	12	18	0	0	0	0
Dover sole	12	4	4	0	0	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	< 1	< 1	0	0	0	0	0
Pacific salmon	0	0	0	0	0	10	2
Skates	< 1	0	0	0	19	10	0
Sharks	0	0	0	0	2	2	27
Yellow Irish lord	0	0	0	< 1	< 1	< 1	0
Bigmouth sculpin	7	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	< 1	0	0
Smelts	0	0	0	0	< 1	< 1	1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	< 1	0	0	0	0	< 1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	< 1	< 1	0	0	0	0	0
Scallops	0	0	0	0	< 1	< 1	0
Magistrate armhook squid	2	2	< 1	< 1	0	0	0
Sponges	0	0	0	< 1	< 1	< 1	< 1
Starfish	0	0	0	< 1	< 1	7	1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	< 1	< 1	0	0	0	0	0
Snails	0	< 1	0	0	< 1	1	< 1
Other invertebrates	< 1	< 1	< 1	9	4	12	4
Total catch (kg)	175	162	1017	43	151	152	160

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	190	191	192	193	194	195	196
Start date & time	07/09/03 13	07/09/03 16	07/09/03 17	07/11/03 06	07/11/03 09	07/11/03 13	07/11/03 15
Start latitude	N 5747.13	N 5741.30	N 5740.97	N 5807.91	N 5802.44	N 5808.57	N 5809.33
Start longitude	W 15138.93	W 15141.50	W 15145.03	W 15208.84	W 15230.29	W 15212.86	W 15155.76
End latitude	N 5746.84	N 5741.33	N 5740.98	N 5808.54	N 5802.77	N 5809.22	N 5810.15
End longitude	W 15137.47	W 15143.00	W 15143.56	W 15209.62	W 15228.100	W 15213.66	W 15155.43
Bottom depth (m)	52	62	63	61	199	180	58
Duration (minutes)	16.8	16.8	16.2	15	15.6	15.6	17.4
Distance fished (km)	1.56	1.522	1.477	1.449	1.462	1.473	1.585
Performance	0	-2.4	0	0	0	0	5.8
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	< 1	< 1	42	22	84	2
Walleye pollock	0	0	0	0	97	149	< 1
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	< 1	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	< 1	0	0	0	0	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0
Arrowtooth flounder	0	0	0	84	495	177	< 1
Pacific halibut	300	186	33	50	27	19	41
Northern rock sole	46	22	23	337	0	0	< 1
Southern rock sole	21	36	43	191	0	< 1	19
Flathead sole	0	0	0	36	171	99	0
Rex sole	0	0	0	0	24	< 1	0
Dover sole	0	0	0	3	1	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	6	0	0	0
Pacific salmon	0	0	1	0	0	0	0
Skates	0	0	0	43	10	0	0
Sharks	841	17	13	0	0	0	3
Yellow Irish lord	0	< 1	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	0	0	< 1	< 1	0
Smelts	< 1	2	< 1	0	28	4	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	9	< 1	0	1	1	9
Bairdi Tanner crab	0	0	0	0	6	< 1	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	16	3	0
Sidestripe shrimp	0	0	0	0	< 1	2	0
Scallops	0	0	0	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	< 1	0	< 1	0	0	0
Starfish	27	2	4	4	< 1	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	< 1	0	< 1	0	0	0
Other invertebrates	8	61	24	3	< 1	< 1	0
Total catch (kg)	1244	338	144	798	901	540	75

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	197	198	199	200	201	202	203
Start date & time	07/11/03 18	07/12/03 06	07/12/03 11	07/12/03 15	07/12/03 16	07/12/03 18	07/13/03 06
Start latitude	N 5802.89	N 5752.94	N 5752.48	N 5755.79	N 5753.89	N 5807.21	N 5759.98
Start longitude	W 15226.80	W 15245.56	W 15219.42	W 15152.86	W 15150.98	W 15144.98	W 15101.07
End latitude	N 5802.90	N 5753.47	N 5752.02	N 5755.08	N 5753.14	N 5806.79	N 5800.71
End longitude	W 15228.18	W 15244.65	W 15220.55	W 15153.32	W 15150.63	W 15146.26	W 15100.75
Bottom depth (m)	198	121	195	73	69	94	85
Duration (minutes)	15	15	15	15.6	15.6	16.2	15.6
Distance fished (km)	1.37	1.414	1.43	1.436	1.471	1.5	1.42
Performance	0	0	1.11	0	0	0	-5.8
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	58	49	31	3	0	4	3
Walleye pollock	62	132	31	0	0	0	< 1
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	< 1	0	3	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	1	0	0	0	< 1	0
Other rockfish	0	0	0	0	0	0	0
Sablefish	0	3	0	0	0	0	0
Arrowtooth flounder	831	103	865	88	160	217	85
Pacific halibut	59	6	13	51	133	15	8
Northern rock sole	0	0	0	7	56	12	0
Southern rock sole	< 1	< 1	1	24	109	20	6
Flathead sole	123	7	310	25	6	52	0
Rex sole	16	8	10	0	0	27	0
Dover sole	0	7	< 1	1	0	22	< 1
Yellowfin sole	0	< 1	0	0	0	0	0
Other flatfish	0	0	0	10	34	5	0
Pacific salmon	3	< 1	0	5	0	0	5
Skates	0	3	8	23	0	0	0
Sharks	108	0	37	0	2	0	0
Yellow Irish lord	0	30	2	0	0	0	0
Bigmouth sculpin	0	0	< 1	0	0	7	0
Great sculpin	0	2	0	0	0	0	0
Other sculpins	< 1	0	< 1	0	0	0	0
Smelts	48	< 1	< 1	< 1	< 1	< 1	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	9	< 1	0	0	0	0
Bairdi Tanner crab	3	< 1	4	< 1	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	8	< 1	15	0	0	0	0
Sidestripe shrimp	1	0	1	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	1	0	0	0	0	0
Starfish	0	5	4	< 1	0	0	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	10	0	0	0	0	0
Snails	0	8	0	0	0	0	0
Other invertebrates	< 1	14	< 1	0	0	< 1	< 1
Total catch (kg)	1322	401	1338	238	500	383	108

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	204	205	206	207	208	209	210
Start date & time	07/13/03 08	07/13/03 11	07/13/03 16	07/14/03 06	07/14/03 08	07/14/03 10	07/14/03 13
Start latitude	N 5803.57	N 5801.35	N 5809.93	N 5810.62	N 5810.29	N 5820.40	N 5823.92
Start longitude	W 15046.27	W 15059.09	W 15049.01	W 14854.32	W 14857.38	W 14914.86	W 14940.07
End latitude	N 5802.82	N 5800.60	N 5810.24	N 5810.08	N 5809.76	N 5819.91	N 5823.42
End longitude	W 15046.62	W 15059.11	W 15050.37	W 14854.14	W 14856.43	W 14913.73	W 14938.93
Bottom depth (m)	147	92	112	128	123	155	157
Duration (minutes)	15.6	15.6	16.2	13.8	15.6	15.6	15.6
Distance fished (km)	1.46	1.422	1.481	1.121	1.397	1.445	1.47
Performance	0	0	0	-1.12	1.11	1.11	0
Atka mackerel	6	1	2	2	3	2	1
Pacific cod	135	0	888	5	0	41	33
Walleye pollock	926	0	0	0	0	1	6
Pacific ocean perch	232	5	0	< 1	< 1	1	0
Northern rockfish	0	0	0	0	3	2	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	< 1	< 1
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	13	0	0
Other rockfish	< 1	0	0	23	12	< 1	0
Sablefish	37	2	19	0	0	4	7
Arrowtooth flounder	340	8632	8730	5	< 1	1037	593
Pacific halibut	34	1020	110	45	44	34	34
Northern rock sole	0	< 1	0	0	0	0	0
Southern rock sole	0	< 1	12	0	0	0	0
Flathead sole	66	0	54	0	0	26	11
Rex sole	36	0	0	0	0	10	34
Dover sole	54	0	2	0	0	8	69
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	6	0	0	0	0
Pacific salmon	3	0	3	0	0	9	0
Skates	18	0	0	0	29	0	0
Sharks	2	0	26	0	0	0	1
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	< 1	0	0
Smelts	< 1	0	< 1	0	0	< 1	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	0	0	11	8	< 1	0
Bairdi Tanner crab	< 1	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	0	0	0	2	< 1	0	0
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	0
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	0	< 1	< 1	< 1	< 1	< 1
Other invertebrates	2	< 1	< 1	4	3	< 1	< 1
Total catch (kg)	1892	9662	9853	97	117	1176	791

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	211	212	213	214	215	216	217
Start date & time	07/14/03 14	07/14/03 17	07/15/03 06	07/15/03 10	07/15/03 12	07/15/03 13	07/15/03 16
Start latitude	N 5824.07	N 5837.31	N 5845.40	N 5854.84	N 5847.69	N 5838.41	N 5837.010
Start longitude	W 14945.49	W 14937.55	W 14933.89	W 14900.100	W 14903.12	W 14900.38	W 14840.69
End latitude	N 5823.61	N 5837.36	N 5845.15	N 5855.46	N 5847.12	N 5838.55	N 5836.67
End longitude	W 14944.29	W 14936.06	W 14935.32	W 14900.11	W 14902.08	W 14901.83	W 14839.43
Bottom depth (m)	144	131	194	259	227	130	151
Duration (minutes)	15.6	15.6	15.6	15	15.6	15.6	15.6
Distance fished (km)	1.482	1.464	1.475	1.455	1.487	1.45	1.479
Performance	0	0	0	0	0	0	0
Atka mackerel	0	< 1	0	0	0	1	0
Pacific cod	54	3	0	0	0	8	2
Walleye pollock	4	0	3	12	19	0	2
Pacific ocean perch	0	997	246	6	22	1690	< 1
Northern rockfish	0	17	< 1	0	0	119	0
Shortraker rockfish	0	0	10	0	0	0	0
Rougheye rockfish	0	0	6	4	4	0	0
Shortspine thornyhead	0	0	21	56	35	0	0
Dusky rockfish	0	15	3	0	0	202	0
Other rockfish	0	0	1	0	0	2	< 1
Sablefish	0	5	88	74	95	0	0
Arrowtooth flounder	2309	40	134	33	33	49	21
Pacific halibut	30	19	0	21	0	0	32
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	17	14	16	0	0	0	0
Rex sole	33	38	< 1	< 1	< 1	14	< 1
Dover sole	63	49	3	0	3	0	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	< 1	0	0	0	0
Pacific salmon	0	0	0	0	0	5	0
Skates	31	11	12	7	0	0	< 1
Sharks	0	0	2	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	11	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	< 1	0	0	0	0
Smelts	< 1	< 1	17	9	10	< 1	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	30	0	1	< 1	2	19	5
Bairdi Tanner crab	< 1	0	< 1	< 1	< 1	0	0
Golden king crab	0	0	0	0	0	0	2
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	< 1	< 1	< 1	0	0
Sidestripe shrimp	0	0	3	< 1	1	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	< 1	< 1	0	0	0
Sponges	0	< 1	0	0	0	0	< 1
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	< 1	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	< 1
Other invertebrates	< 1	< 1	12	5	5	< 1	6
Total catch (kg)	556	152	2508	600	500	1564	613

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	148	149	150	151	152	153	154
Start date & time	06/30/03 11	06/30/03 14	06/30/03 16	06/30/03 18	07/03/03 07	07/03/03 09	07/03/03 12
Start latitude	N 5622.89	N 5627.74	N 5634.78	N 5624.21	N 5736.010	N 5731.71	N 5720.65
Start longitude	W 15428.09	W 15409.47	W 15346.66	W 15333.89	W 15149.52	W 15143.04	W 15152.98
End latitude	N 5622.83	N 5628.10	N 5633.99	N 5624.48	N 5736.81	N 5732.10	N 5721.40
End longitude	W 15426.57	W 15408.05	W 15346.66	W 15332.51	W 15150.19	W 15144.41	W 15152.17
Bottom depth (m)	39	41	68	77	146	154	68
Duration (minutes)	16.8	17.4	16.2	16.8	16.2	16.8	17.4
Distance fished (km)	1.595	1.632	1.474	1.527	1.511	1.565	1.636
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	2	0	1	1	0
Pacific cod	0	0	0	0	4	0	0
Walleye pollock	0	7	40	3	0	9	14
Pacific ocean perch	4	471	11	18	< 1	19	2
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	60	3	0	0	0	0	0
Rougheye rockfish	227	8	11	0	0	0	6
Shortspine thornyhead	79	69	23	7	0	< 1	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	< 1	0	0
Sablefish	13	154	60	4	11	4	7
Arrowtooth flounder	48	39	93	131	354	142	192
Pacific halibut	0	0	14	0	7	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	0	< 1	< 1	10	0	60	4
Rex sole	3	16	1	< 1	12	2	2
Dover sole	74	56	< 1	0	0	14	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	< 1	0	0	0	0	0
Pacific salmon	0	0	0	0	4	0	0
Skates	2	< 1	12	0	0	3	11
Sharks	0	0	2	13	136	1	4
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	5	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	0	< 1	0	< 1	< 1
Smelts	0	1	14	295	3	30	15
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	< 1	< 1	9	< 1	2
Bairdi Tanner crab	0	0	0	0	0	< 1	< 1
Golden king crab	< 1	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	< 1	1	< 1	1	3
Sidestripe shrimp	0	1	3	< 1	0	2	1
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	< 1	0	< 1	< 1	0	0	0
Sponges	< 1	< 1	0	2	1	2	< 1
Starfish	3	< 1	< 1	< 1	< 1	< 1	1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	< 1
Octopus	< 1	0	0	0	0	0	0
Snails	2	0	0	< 1	0	< 1	0
Other invertebrates	23	3	5	1	6	4	5
Total catch (kg)	540	832	291	487	551	303	273

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	225	226	227	228	229	230	231
Start date & time	07/17/03 08	07/17/03 10	07/17/03 13	07/17/03 16	07/18/03 06	07/18/03 08	07/18/03 10
Start latitude	N 5943.51	N 5942.87	N 5950.42	N 5943.84	N 5943.93	N 5950.26	N 5951.96
Start longitude	W 14856.44	W 14911.12	W 14931.87	W 14940.52	W 14820.53	W 14821.11	W 14831.76
End latitude	N 5942.78	N 5943.51	N 5949.62	N 5943.27	N 5944.56	N 5949.48	N 5951.19
End longitude	W 14856.87	W 14912.01	W 14931.95	W 14939.47	W 14819.59	W 14821.29	W 14831.99
Bottom depth (m)	184	246	161	298	170	128	133
Duration (minutes)	15.6	15.6	16.2	15.6	16.2	15.6	15.6
Distance fished (km)	1.441	1.48	1.496	1.477	1.506	1.483	1.471
Performance	0	0	0	0	0	0	0
Atka mackerel	6	0	< 1	< 1	8	6	14
Pacific cod	0	0	0	6	2	0	0
Walleye pollock	23	13	9	26	11	< 1	2
Pacific ocean perch	< 1	0	2	0	< 1	< 1	< 1
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	10	0	0	0	0	0
Rougheye rockfish	16	22	8	8	1	< 1	22
Shortspine thornyhead	2	14	0	< 1	< 1	0	0
Dusky rockfish	0	0	0	0	1	0	0
Other rockfish	0	0	0	0	0	< 1	0
Sablefish	6	65	2	79	9	0	1
Arrowtooth flounder	95	98	60	98	250	29	135
Pacific halibut	15	0	0	0	9	0	17
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	19	0	102	66	7	2	8
Rex sole	4	< 1	19	17	2	< 1	< 1
Dover sole	3	< 1	15	< 1	2	10	21
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	< 1	0	0	0	0	0	0
Pacific salmon	0	0	0	0	0	0	3
Skates	16	26	< 1	64	33	0	34
Sharks	4	3	11	0	4	3	4
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	< 1	10	6	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	< 1	3	< 1	< 1	< 1	< 1
Smelts	18	7	13	17	33	34	165
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	4	4	< 1	4	2	2
Bairdi Tanner crab	< 1	< 1	2	2	0	< 1	< 1
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	2	2	2	2	3	1	4
Sidestripe shrimp	2	2	4	5	3	2	< 1
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	6	< 1	33	2	< 1	0
Sponges	< 1	< 1	< 1	0	< 1	0	0
Starfish	< 1	3	< 1	1	< 1	2	2
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	< 1	0	0	0	0	0
Snails	0	< 1	0	0	0	0	0
Other invertebrates	4	13	3	11	4	< 1	2
Total catch (kg)	239	299	268	436	389	93	438

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	232	233	234	235	236	237	238
Start date & time	07/19/03 07	07/19/03 10	07/19/03 11	07/19/03 14	07/19/03 16	07/22/03 11	07/22/03 11
Start latitude	N 5946.04	N 5958.40	N 6000.12	N 6001.60	N 6007.39	N 5942.44	N 5942.46
Start longitude	W 14724.01	W 14707.90	W 14718.55	W 14712.36	W 14707.85	W 14636.61	W 14637.33
End latitude	N 5945.89	N 5957.48	N 5959.27	N 6002.31	N 6008.03	N 5942.44	N 5942.44
End longitude	W 14725.51	W 14707.81	W 14718.67	W 14713.01	W 14706.93	W 14636.60	W 14636.66
Bottom depth (m)	92	203	34	190	216		81
Duration (minutes)	16.2	18.6	17.4	15.6	15.6	0.6	7.8
Distance fished (km)	1.458	1.717	1.609	1.472	1.495	0.01	0.654
Performance	0	6.31	0	0	6	-1	-2.4
Atka mackerel	3	0	0	0	0	0	0
Pacific cod	< 1	4	0	2	0	0	0
Walleye pollock	25	14	< 1	16	18	0	0
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	6	0	0	0
Shortspine thornyhead	0	3	0	1	0	0	0
Dusky rockfish	0	0	0	0	0	0	< 1
Other rockfish	0	0	0	0	0	0	3
Sablefish	0	13	0	7	7	0	0
Arrowtooth flounder	21	195	0	76	44	0	0
Pacific halibut	3	0	38	0	0	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	2
Flathead sole	0	32	0	26	43	0	0
Rex sole	1	4	0	4	24	0	0
Dover sole	0	60	0	61	75	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	10	< 1	< 1	0	0
Pacific salmon	2	0	0	0	3	0	0
Skates	0	23	143	22	7	0	0
Sharks	4	6	385	22	13	0	3
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	< 1	0	< 1	< 1	0	0
Smelts	< 1	3	< 1	8	4	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	< 1	< 1	0	< 1	< 1	0	< 1
Bairdi Tanner crab	0	< 1	0	0	< 1	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	< 1	0	3	< 1	0	0
Sidestripe shrimp	0	< 1	0	6	12	0	0
Scallops	0	0	0	0	0	0	< 1
Magistrate armhook squid	0	2	0	2	1	0	0
Sponges	< 1	0	0	0	0	0	0
Starfish	2	< 1	< 1	< 1	< 1	0	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	0
Other invertebrates	2	4	< 1	< 1	5	0	7
Total catch (kg)	63	364	577	264	258	0	16

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	239	240	241	242	243	244	245
Start date & time	07/22/03 14	07/22/03 16	07/22/03 19	07/23/03 06	07/23/03 08	07/23/03 10	07/23/03 12
Start latitude	N 5940.54	N 5943.99	N 5945.32	N 6008.78	N 6007.54	N 5958.75	N 6004.97
Start longitude	W 14647.56	W 14649.57	W 14610.94	W 14538.74	W 14537.60	W 14518.53	W 14502.17
End latitude	N 5941.20	N 5943.23	N 5945.30	N 6009.37	N 6008.29	N 5959.33	N 6005.12
End longitude	W 14648.35	W 14649.39	W 14612.45	W 14537.78	W 14537.68	W 14519.49	W 14503.65
Bottom depth (m)	95	94	80	120	123	118	96
Duration (minutes)	15.6	15.6	15	15.6	15	15	15
Distance fished (km)	1.462	1.445	1.423	1.434	1.403	1.421	1.429
Performance	0	0	0	0	0	0	0
Atka mackerel	< 1	2	0	< 1	0	< 1	0
Pacific cod	0	0	2	0	0	0	0
Walleye pollock	< 1	1	< 1	12	5	< 1	< 1
Pacific ocean perch	0	0	0	0	0	0	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	< 1	2	7	5
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	0	0	< 1	0
Sablefish	0	0	0	4	7	0	0
Arrowtooth flounder	73	111	4	180	212	58	11
Pacific halibut	4	2	24	5	6	12	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	11	0	0	0	0
Flathead sole	6	5	0	57	45	16	< 1
Rex sole	< 1	< 1	< 1	11	11	16	0
Dover sole	2	< 1	< 1	16	25	10	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	0	0
Pacific salmon	< 1	6	4	0	0	0	0
Skates	0	0	0	7	19	0	0
Sharks	11	3	22	14	24	9	35
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	< 1	< 1	0
Smelts	0	0	0	31	33	9	16
Giant grenadier	0	0	0	0	0	0	0
Other fish	0	< 1	3	108	1	< 1	6
Bairdi Tanner crab	< 1	< 1	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	8	5	2	1
Sidestripe shrimp	0	0	0	< 1	< 1	< 1	0
Scallops	0	0	< 1	< 1	0	< 1	< 1
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	< 1	< 1	0	0	0	0
Starfish	0	0	2	2	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	< 1	< 1	0	0	< 1
Other invertebrates	5	2	6	1	< 1	2	< 1
Total catch (kg)	105	133	79	458	396	145	75

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	246	247	248	249	250	251	252
Start date & time	07/23/03 18	07/24/03 07	07/24/03 08	07/24/03 10	07/24/03 13	07/24/03 18	07/25/03 06
Start latitude	N 5947.54	N 5935.16	N 5935.14	N 5934.82	N 5936.73	N 5930.87	N 5937.36
Start longitude	W 14350.27	W 14424.41	W 14424.43	W 14422.74	W 14411.86	W 14321.11	W 14311.15
End latitude	N 5946.79	N 5935.20	N 5934.43	N 5935.41	N 5936.58	N 5931.010	N 5937.66
End longitude	W 14350.17	W 14424.40	W 14424.100	W 14421.79	W 14413.31	W 14322.51	W 14309.77
Bottom depth (m)	128	218	235	406	475	553	254
Duration (minutes)	15	0.6	15	15.6	15	15	15.6
Distance fished (km)	1.419	0	1.446	1.451	1.418	1.408	1.437
Performance	0	-5.23	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	0	0	0	0
Walleye pollock	5	0	14	< 1	0	0	0
Pacific ocean perch	0	0	1537	< 1	0	0	41
Northern rockfish	0	0	< 1	0	0	0	0
Shortraker rockfish	0	0	0	320	0	9	0
Rougheye rockfish	0	0	< 1	4	4	0	3
Shortspine thornyhead	0	0	28	82	107	54	26
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	< 1	0	6	0	0	0	4
Sablefish	2	0	< 1	35	49	264	4
Arrowtooth flounder	75	0	10	53	56	12	18
Pacific halibut	0	0	114	40	0	0	45
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	< 1	0	0	0	0	0	0
Rex sole	< 1	0	< 1	0	< 1	< 1	< 1
Dover sole	0	0	6	2	25	39	6
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	0	0	0	0	2	< 1
Pacific salmon	0	0	0	0	0	0	0
Skates	58	0	23	0	< 1	0	5
Sharks	18	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	< 1	0	0	0	< 1
Smelts	8	0	< 1	0	0	0	2
Giant grenadier	0	0	0	4	70	1874	0
Other fish	28	0	< 1	2	3	3	< 1
Bairdi Tanner crab	< 1	0	< 1	0	< 1	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	< 1	0	0	0	0	0	0
Sidestripe shrimp	0	0	3	0	0	0	< 1
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	3	3	3	< 1	0
Sponges	0	0	< 1	< 1	< 1	< 1	< 1
Starfish	< 1	0	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	< 1	0
Snails	0	0	0	< 1	< 1	< 1	0
Other invertebrates	2	0	2	4	11	3	2
Total catch (kg)	197	0	1750	550	331	2263	157

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	253	254	255	256	257	258	259
Start date & time	07/25/03 08	07/25/03 10	07/25/03 11	07/25/03 14	07/25/03 17	07/26/03 06	07/26/03 08
Start latitude	N 5937.84	N 5942.33	N 5943.08	N 5936.05	N 5939.15	N 5919.32	N 5913.36
Start longitude	W 14306.18	W 14255.78	W 14246.57	W 14245.62	W 14205.36	W 14154.82	W 14144.66
End latitude	N 5937.79	N 5942.31	N 5942.82	N 5936.18	N 5938.52	N 5919.93	N 5913.94
End longitude	W 14304.69	W 14254.29	W 14247.98	W 14244.16	W 14204.55	W 14155.68	W 14145.55
Bottom depth (m)	241	202	216	566	183	204	210
Duration (minutes)	15	15.6	15	15	15	15	15
Distance fished (km)	1.422	1.418	1.44	1.423	1.431	1.419	1.403
Performance	0	0	0	0	0	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	0	0	36	0
Walleye pollock	5	4	2	< 1	2	19	7
Pacific ocean perch	3	< 1	12	0	2	18	< 1
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	< 1	< 1	2	0	3	0	0
Shortspine thornyhead	16	4	3	46	32	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	< 1	0	0	0	0	3	< 1
Sablefish	0	0	0	221	0	54	22
Arrowtooth flounder	4	8	5	2	86	12	10
Pacific halibut	0	0	0	0	0	101	97
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	0	0	0	0	< 1	0	0
Rex sole	< 1	< 1	0	15	< 1	9	2
Dover sole	2	7	0	37	141	8	3
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	< 1	< 1	< 1	0	0	3	< 1
Pacific salmon	0	0	0	0	0	0	0
Skates	0	0	3	0	19	48	50
Sharks	0	0	0	0	1	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	< 1	< 1
Smelts	3	6	18	1	27	< 1	0
Giant grenadier	0	0	0	171	0	0	0
Other fish	< 1	< 1	< 1	8	< 1	5	9
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	1	2	1	0	< 1	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	< 1	0	0	< 1	0	0	0
Sponges	0	< 1	0	0	0	< 1	0
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	< 1	< 1	0
Snails	< 1	0	0	< 1	0	< 1	0
Other invertebrates	4	2	2	5	2	2	2
Total catch (kg)	41	36	49	509	318	319	204

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	260	261	262	263	264	265	266
Start date & time	07/26/03 11	07/26/03 16	07/27/03 06	07/27/03 08	07/27/03 12	07/28/03 06	07/28/03 08
Start latitude	N 5911.80	N 5914.94	N 5906.09	N 5909.44	N 5937.86	N 5852.04	N 5846.100
Start longitude	W 14140.22	W 14052.010	W 14012.88	W 14026.59	W 14021.11	W 13845.61	W 13834.69
End latitude	N 5912.22	N 5915.02	N 5906.62	N 5910.13	N 5938.07	N 5851.35	N 5847.31
End longitude	W 14141.41	W 14053.51	W 14013.85	W 14025.100	W 14022.51	W 13846.19	W 13836.02
Bottom depth (m)	210	158	129	140	71	133	121
Duration (minutes)	15	15	15.6	15.6	15.6	15.6	15.6
Distance fished (km)	1.402	1.371	1.4	1.433	1.401	1.439	1.43
Performance	0	0	1.11	1.11	0	0	0
Atka mackerel	0	0	0	0	0	< 1	0
Pacific cod	1	0	0	0	1	0	0
Walleye pollock	0	0	1	< 1	7	0	< 1
Pacific ocean perch	11	< 1	< 1	0	0	0	< 1
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	< 1	0	0	0	0	0	0
Dusky rockfish	0	0	53	0	0	0	0
Other rockfish	3	< 1	< 1	0	0	0	< 1
Sablefish	2	1	0	0	13	0	0
Arrowtooth flounder	19	35	15	82	100	< 1	27
Pacific halibut	79	83	0	16	10	556	40
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	< 1	5	0
Flathead sole	0	0	0	0	13	< 1	0
Rex sole	13	8	2	< 1	25	0	0
Dover sole	3	< 1	< 1	< 1	38	0	< 1
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	3	< 1	0	< 1	63	2	< 1
Pacific salmon	0	0	0	0	0	0	0
Skates	22	9	0	0	37	0	0
Sharks	0	2	0	0	79	6	1
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	< 1	0	0
Smelts	0	4	0	11	< 1	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	35	5	3	5	3	218	18
Bairdi Tanner crab	0	< 1	0	< 1	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	< 1	< 1	0	0	0	< 1
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	0	0	< 1	0	0	0
Other invertebrates	3	< 1	< 1	2	3	< 1	< 1
Total catch (kg)	194	150	76	118	394	788	90

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	267	268	269	270	271	272	273
Start date & time	07/28/03 10	07/28/03 13	07/29/03 06	07/29/03 09	07/29/03 11	07/29/03 12	07/29/03 15
Start latitude	N 5835.81	N 5843.55	N 5753.71	N 5754.02	N 5751.08	N 5751.67	N 5744.42
Start longitude	W 13822.34	W 13808.56	W 13702.71	W 13640.78	W 13649.010	W 13649.45	W 13625.49
End latitude	N 5836.32	N 5844.29	N 5754.28	N 5753.95	N 5751.01	N 5751.46	N 5744.94
End longitude	W 13823.42	W 13808.48	W 13701.78	W 13640.57	W 13649.06	W 13649.37	W 13626.48
Bottom depth (m)	124	98	436	116	170	175	88
Duration (minutes)	15	15.6	15	8.4	8.4	4.8	15
Distance fished (km)	1.439	1.387	1.435	0.686	0.662	0.404	1.4
Performance	0	0	0	-1.12	-1.12	-1.12	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	0	< 1	0	0	0
Walleye pollock	4	7	0	< 1	2	< 1	0
Pacific ocean perch	0	0	0	< 1	5	16	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	12	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	57	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	0	1	9	7	0
Sablefish	< 1	0	133	0	0	0	0
Arrowtooth flounder	13	4	8	3	4	29	0
Pacific halibut	837	0	0	0	0	84	15
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	16
Flathead sole	0	3	0	0	0	0	0
Rex sole	2	< 1	1	0	< 1	3	0
Dover sole	< 1	0	33	0	< 1	0	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	< 1	0	0	0	0	< 1	5
Pacific salmon	0	< 1	0	0	0	0	0
Skates	0	10	0	0	0	0	0
Sharks	2	18	0	2	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	0	0	0
Smelts	< 1	1	0	0	0	0	0
Giant grenadier	0	0	21	0	0	0	0
Other fish	32	8	2	5	< 1	< 1	26
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	< 1	0	< 1	0	0
Sponges	0	0	0	0	0	< 1	< 1
Starfish	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	0
Other invertebrates	< 1	< 1	18	< 1	3	< 1	< 1
Total catch (kg)	893	53	286	14	24	140	62

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	274	275	276	277	278	279	280
Start date & time	07/29/03 16	07/29/03 19	07/30/03 06	07/30/03 08	07/30/03 12	07/30/03 18	07/31/03 10
Start latitude	N 5742.87	N 5729.84	N 5710.51	N 5708.45	N 5701.82	N 5631.45	N 5634.53
Start longitude	W 13626.45	W 13616.99	W 13603.22	W 13554.64	W 13525.57	W 13541.96	W 13551.31
End latitude	N 5743.53	N 5729.18	N 5710.42	N 5709.18	N 5701.66	N 5630.76	N 5634.89
End longitude	W 13627.09	W 13616.36	W 13601.83	W 13554.72	W 13524.28	W 13541.44	W 13552.12
Bottom depth (m)	107	125	162	85	86	221	514
Duration (minutes)	15	15	15.6	15	15	15	12
Distance fished (km)	1.426	1.408	1.43	1.383	1.36	1.414	1.091
Performance	0	0	0	0	0	0	-1.12
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	< 1	29	0	< 1	0	0
Walleye pollock	0	< 1	2	0	137	14	0
Pacific ocean perch	0	0	< 1	0	< 1	256	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	36
Rougheye rockfish	0	0	0	0	0	0	5
Shortspine thornyhead	0	0	0	0	0	35	46
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	0	0	4	12	< 1	99	0
Sablefish	0	0	17	0	< 1	0	64
Arrowtooth flounder	< 1	35	896	15	130	36	< 1
Pacific halibut	39	60	2	21	7	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	23	10	< 1	77	2	0	0
Flathead sole	0	0	0	0	21	0	0
Rex sole	< 1	2	20	1	77	1	< 1
Dover sole	0	0	2	< 1	6	5	4
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	3	0	2	39	18	< 1	1
Pacific salmon	0	5	0	0	0	0	0
Skates	0	0	0	143	0	0	0
Sharks	20	21	4	0	3	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	< 1	< 1	0
Smelts	0	0	0	0	< 1	0	0
Giant grenadier	0	0	0	0	0	0	126
Other fish	0	34	9	35	51	17	1
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	0	0	< 1	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	3	0
Sponges	0	0	< 1	0	0	< 1	3
Starfish	0	< 1	0	< 1	6	0	< 1
Stony coral	0	0	0	0	0	0	16
Soft coral	0	0	0	0	0	0	< 1
Octopus	0	0	0	0	0	< 1	1
Snails	0	0	0	0	0	0	< 1
Other invertebrates	< 1	6	2	7	5	4	8
Total catch (kg)	86	175	989	351	465	472	314

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	281	282	283	284	285	286	287
Start date & time	07/31/03 15	07/31/03 18	08/01/03 07	08/01/03 10	08/01/03 13	08/01/03 16	08/01/03 18
Start latitude	N 5607.29	N 5605.82	N 5544.50	N 5539.73	N 5543.18	N 5549.03	N 5550.73
Start longitude	W 13517.80	W 13516.38	W 13504.86	W 13520.03	W 13450.23	W 13446.14	W 13431.88
End latitude	N 5606.60	N 5605.49	N 5543.80	N 5540.31	N 5543.31	N 5549.76	N 5551.26
End longitude	W 13518.44	W 13517.59	W 13504.35	W 13520.86	W 13448.90	W 13445.89	W 13430.92
Bottom depth (m)	327	334	207	660	211	195	96
Duration (minutes)	15.6	15	15	15	15.6	15.6	15.6
Distance fished (km)	1.466	1.416	1.428	1.412	1.428	1.414	1.386
Performance	0	0	5	1.11	0	0	-6
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	0	0	13	0	0	72	3
Walleye pollock	0	0	< 1	0	23	77	111
Pacific ocean perch	47	11	< 1	0	58	79	0
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	10	7	0	0	0	0	0
Shortspine thornyhead	36	46	0	17	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	< 1	< 1	3	0	1	0	0
Sablefish	13	7	3	38	8	11	0
Arrowtooth flounder	144	106	12	0	61	51	< 1
Pacific halibut	4	0	72	0	0	0	97
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	46
Flathead sole	0	0	0	0	< 1	0	0
Rex sole	10	9	3	0	25	11	< 1
Dover sole	50	63	< 1	4	10	< 1	0
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	1	0	2	0	3	3	2
Pacific salmon	0	1	0	0	0	< 1	12
Skates	0	0	0	0	0	0	0
Sharks	0	0	0	0	2	0	2
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	< 1	0	< 1	0	0	0	0
Smelts	0	0	0	0	0	0	0
Giant grenadier	0	0	0	4	0	0	0
Other fish	6	28	10	33	6	5	62
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	< 1	< 1	0	0	0	0	0
Scallops	0	0	0	0	0	0	< 1
Magistrate armhook squid	7	6	< 1	0	0	0	0
Sponges	< 1	< 1	5	< 1	0	0	0
Starfish	< 1	< 1	< 1	< 1	0	0	2
Stony coral	0	0	0	< 1	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	< 1	< 1	0	0	0	0	0
Other invertebrates	12	4	< 1	1	2	7	3
Total catch (kg)	342	290	127	99	200	318	340

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	288	289	290	291	292	293	294
Start date & time	08/02/03 06	08/02/03 08	08/02/03 09	08/02/03 10	08/02/03 12	08/02/03 15	08/02/03 17
Start latitude	N 5553.37	N 5550.71	N 5547.55	N 5546.27	N 5543.11	N 5543.61	N 5544.84
Start longitude	W 13433.56	W 13431.90	W 13429.41	W 13431.75	W 13412.76	W 13406.05	W 13349.20
End latitude	N 5554.12	N 5551.28	N 5548.13	N 5546.82	N 5543.010	N 5542.86	N 5545.51
End longitude	W 13433.67	W 13431.03	W 13430.28	W 13432.68	W 13414.10	W 13406.07	W 13348.61
Bottom depth (m)	92	95	137	166	152	164	186
Duration (minutes)	15	15	15	15.6	15.6	15	15.6
Distance fished (km)	1.423	1.421	1.423	1.436	1.419	1.403	1.44
Performance	0	0	0	0	0	0	1.11
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	< 1	2	7	0	9	64	12
Walleye pollock	< 1	< 1	7	6	56	25	40
Pacific ocean perch	0	0	0	0	50	11	22
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	0	0	0	0	0
Rougheye rockfish	0	0	0	0	0	0	0
Shortspine thornyhead	0	0	0	0	0	0	0
Dusky rockfish	0	0	0	0	0	0	0
Other rockfish	13	0	0	< 1	< 1	< 1	20
Sablefish	0	0	8	< 1	8	4	16
Arrowtooth flounder	< 1	< 1	107	67	214	126	248
Pacific halibut	2	49	0	16	13	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	2	39	0	0	0	0	0
Flathead sole	0	0	0	< 1	0	0	8
Rex sole	0	< 1	33	3	63	46	20
Dover sole	0	0	5	1	5	7	116
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	0	1	< 1	< 1	11	6	14
Pacific salmon	0	0	< 1	0	0	0	0
Skates	0	0	0	0	0	0	1
Sharks	0	0	1	4	0	1	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	< 1	0	0	0
Smelts	0	0	0	< 1	0	0	< 1
Giant grenadier	0	0	0	0	0	0	0
Other fish	280	52	7	4	17	28	13
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	0	0	0	< 1	0	0	< 1
Scallops	< 1	< 1	0	0	0	0	0
Magistrate armhook squid	0	0	0	0	0	0	0
Sponges	< 1	0	0	0	< 1	4	0
Starfish	0	< 1	0	0	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	0	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	0	0	0	0	0
Other invertebrates	< 1	1	6	3	2	8	5
Total catch (kg)	298	145	183	107	448	332	535

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	295	296	297	298	299	300	301
Start date & time	08/03/03 06	08/03/03 09	08/04/03 07	08/04/03 08	08/04/03 11	08/04/03 15	08/04/03 17
Start latitude	N 5539.80	N 5528.82	N 5434.80	N 5433.88	N 5433.84	N 5443.73	N 5442.41
Start longitude	W 13422.74	W 13439.93	W 13317.87	W 13321.43	W 13344.62	W 13400.74	W 13401.27
End latitude	N 5539.80	N 5529.48	N 5434.52	N 5433.78	N 5433.86	N 5444.50	N 5443.16
End longitude	W 13421.38	W 13439.22	W 13317.02	W 13320.11	W 13345.91	W 13400.67	W 13401.26
Bottom depth (m)	210	202	338	344	246	208	217
Duration (minutes)	15.6	15.6	12	15.6	15.6	15.6	15.6
Distance fished (km)	1.444	1.454	1.086	1.449	1.409	1.439	1.415
Performance	1.11	0	-1.12	0	1.11	0	0
Atka mackerel	0	0	0	0	0	0	0
Pacific cod	14	3	0	0	0	2	18
Walleye pollock	11	2	0	0	< 1	1	3
Pacific ocean perch	42	239	3	0	1910	8	96
Northern rockfish	0	0	0	0	0	0	0
Shortraker rockfish	0	0	18	0	0	0	0
Rougheye rockfish	0	0	28	0	0	0	0
Shortspine thornyhead	0	0	40	24	10	5	6
Dusky rockfish	0	0	0	0	41	1	1
Other rockfish	40	2	5	6	5202	130	172
Sablefish	8	1	23	8	4	4	7
Arrowtooth flounder	88	22	10	1	7	7	20
Pacific halibut	0	1	0	0	0	0	0
Northern rock sole	0	0	0	0	0	0	0
Southern rock sole	0	0	0	0	0	0	0
Flathead sole	< 1	0	0	0	0	0	0
Rex sole	7	6	9	< 1	2	4	2
Dover sole	14	1	13	1	8	4	3
Yellowfin sole	0	0	0	0	0	0	0
Other flatfish	< 1	< 1	0	0	< 1	< 1	< 1
Pacific salmon	0	0	0	0	3	0	3
Skates	0	0	1	2	0	0	0
Sharks	0	0	0	0	0	0	0
Yellow Irish lord	0	0	0	0	0	0	0
Bigmouth sculpin	0	0	0	0	0	0	0
Great sculpin	0	0	0	0	0	0	0
Other sculpins	0	0	0	0	< 1	1	< 1
Smelts	4	0	0	< 1	0	0	0
Giant grenadier	0	0	0	0	0	0	0
Other fish	3	4	6	5	< 1	< 1	8
Bairdi Tanner crab	0	0	0	0	0	0	0
Golden king crab	0	0	0	0	0	0	0
Red king crab	0	0	0	0	0	0	0
Northern shrimp	0	0	0	0	0	0	0
Sidestripe shrimp	< 1	0	0	< 1	0	0	0
Scallops	0	0	0	0	0	0	0
Magistrate armhook squid	< 1	0	3	0	0	0	0
Sponges	0	0	5	< 1	< 1	11	5
Starfish	0	0	< 1	< 1	< 1	< 1	< 1
Stony coral	0	0	0	0	0	0	0
Soft coral	0	0	9	0	0	0	0
Octopus	0	0	0	0	0	0	0
Snails	0	0	< 1	0	< 1	< 1	0
Other invertebrates	3	< 1	< 1	2	< 1	3	5
Total catch (kg)	233	282	174	50	7191	183	352

Fishing Log: FV *Sea Storm*, Cruise 2003-01.

Haul number	302	303	304
Start date & time	08/05/03 12	08/06/03 06	08/06/03 09
Start latitude	N 5500.86	N 5555.89	N 5544.63
Start longitude	W 13424.33	W 13525.43	W 13522.46
End latitude	N 5500.19	N 5555.29	N 5544.92
End longitude	W 13423.80	W 13524.58	W 13521.21
Bottom depth (m)	321	374	667
Duration (minutes)	15	15.6	15.6
Distance fished (km)	1.401	1.462	1.433
Performance	-2.1	0	1.11
Atka mackerel	0	0	0
Pacific cod	0	0	0
Walleye pollock	0	0	0
Pacific ocean perch	10	76	0
Northern rockfish	0	0	0
Shortraker rockfish	346	14	0
Rougheye rockfish	48	256	2
Shortspine thornyhead	48	58	16
Dusky rockfish	0	0	0
Other rockfish	6	< 1	0
Sablefish	0	0	70
Arrowtooth flounder	5	438	0
Pacific halibut	0	0	0
Northern rock sole	0	0	0
Southern rock sole	0	0	0
Flathead sole	0	0	0
Rex sole	< 1	5	< 1
Dover sole	4	18	4
Yellowfin sole	0	0	0
Other flatfish	0	0	< 1
Pacific salmon	0	0	0
Skates	0	0	0
Sharks	0	0	0
Yellow Irish lord	0	0	0
Bigmouth sculpin	0	0	0
Great sculpin	0	0	0
Other sculpins	< 1	0	0
Smelts	0	0	0
Giant grenadier	0	0	24
Other fish	1	19	32
Bairdi Tanner crab	0	0	0
Golden king crab	0	0	0
Red king crab	0	0	0
Northern shrimp	0	0	0
Sidestripe shrimp	0	0	0
Scallops	0	0	0
Magistrate armhook squid	< 1	2	0
Sponges	14	< 1	< 1
Starfish	< 1	< 1	< 1
Stony coral	0	0	0
Soft coral	0	0	0
Octopus	2	0	0
Snails	< 1	< 1	< 1
Other invertebrates	< 1	< 1	2
Total catch (kg)	486	887	153

Section 4

Ranked Catch Per Unit Effort by Species or Species Group

- Vessel codes (147 = Gladiator, 134 = Northwest Explorer and 143 = Sea Storm)

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight		Bottom depth		CPUE (kg/ha)	Individual weight		Bottom depth	
		(kg)	Vessel	Haul	(m)		(kg)	Vessel	Haul	(m)
Atka mackerel	659	0.82	143	40	72	99	0.86	147	75	80
	325	0.95	134	72	82	96	0.87	134	76	101
	318	0.73	134	29	82	46	0.97	147	239	164
	316	0.95	143	45	85	40	0.87	134	69	130
	197	0.91	134	74	83	38	0.90	134	70	82
	105	0.87	147	39	73					
Pacific cod	2,079	0.49	134	60	36	39	2.97	143	153	154
	903	2.22	134	215	135	38	1.78	134	3	121
	519	2.81	147	48	66	38	2.92	147	38	81
	458	2.55	134	102	82	37	2.59	147	198	148
	425	2.23	134	128	43	36	4.02	134	120	154
	381	1.88	143	206	112	34	0.83	147	78	97
	368	2.14	143	64	51	33	3.07	147	200	132
	242	2.45	143	148	39	33	1.62	134	283	153
	233	2.29	147	49	54	31	1.20	134	39	102
	224	2.75	134	176	156	31	1.61	143	286	195
	178	2.34	134	99	84	31	1.96	134	164	139
	164	2.13	147	166	107	30	2.07	143	113	163
	163	1.91	134	212	137	30	1.52	147	42	72
	160	2.53	134	184	133	30	1.10	143	155	85
	151	1.93	143	5	96	30	1.47	134	211	143
	137	3.14	147	223	122	29	3.63	143	197	198
	131	3.16	143	167	131	29	2.12	134	46	78
	111	0.89	134	189	99	29	2.00	143	293	164
	98	1.82	147	124	108	29	2.06	143	144	119
	98	1.36	147	227	142	28	1.18	143	40	72
	93	2.37	143	70	42	28	1.32	147	173	151
	82	2.18	147	205	156	27	2.26	147	236	115
	79	0.50	147	133	63	26	2.86	147	203	159
	77	1.66	134	131	99	25	1.77	134	51	97
	76	1.24	134	168	97	25	2.54	147	235	195
	73	3.18	134	54	69	25	2.32	143	73	160
	72	1.46	143	145	156	25	2.05	134	205	176
	70	1.31	134	47	71	25	2.68	147	172	175
	66	2.68	134	183	167	24	2.71	147	147	93
	66	2.05	143	138	116	24	1.99	147	58	54
	65	3.48	134	1	134	24	1.89	143	140	159
	62	1.62	147	69	150	23	2.24	143	211	144
	61	1.15	134	145	93	23	2.05	134	117	196
	58	1.91	143	127	108	22	1.62	143	198	121
	58	0.88	134	167	94	22	1.48	147	272	192
	55	2.28	143	204	147	22	0.87	143	57	32
	50	1.69	147	286	207	22	2.97	134	100	82
	50	1.00	134	62	62	22	1.34	134	138	149
	45	1.72	147	238	199	21	0.73	143	28	79
	45	2.52	143	61	96	21	1.38	143	154	68
	43	2.97	134	199	121	20	2.65	147	148	87
	42	1.65	147	47	62	20	1.73	143	114	109
	41	2.03	147	43	118	20	2.15	134	2	151
	40	2.10	134	29	82	20	3.89	147	18	158
	39	3.34	143	195	180					

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Walleye	1,297	0.72	143	61	96	63	0.65	143	185	183
pollock	658	0.65	147	47	62	62	0.94	134	268	281
	643	0.76	143	36	113	61	0.97	143	198	121
	506	0.65	134	61	84	55	0.95	147	44	67
	486	0.70	134	90	85	54	0.06	143	287	96
	482	0.88	134	32	94	52	0.95	147	147	93
	434	0.78	134	36	80	50	0.84	147	40	98
	419	1.46	147	146	62	49	1.38	147	204	126
	414	1.20	147	151	66	49	1.49	143	167	131
	392	0.74	143	50	69	48	1.15	134	143	136
	380	1.24	143	204	147	48	0.71	134	183	167
	353	1.11	134	120	154	47	0.71	134	12	108
	350	0.56	134	200	131	46	0.71	143	30	92
	350	0.61	134	63	104	45	0.79	143	33	90
	330	0.84	134	41	111	44	0.53	147	32	102
	308	0.67	147	199	142	43	0.81	147	34	98
	307	0.57	147	148	87	43	0.82	147	14	91
	299	1.90	134	196	94	42	0.57	143	194	199
	295	1.07	147	200	132	42	0.76	134	34	67
	283	0.47	134	85	55	41	0.06	134	116	87
	249	0.59	147	198	148	39	0.57	147	273	175
	244	0.50	134	84	59	38	0.77	147	102	195
	236	0.85	143	34	109	38	0.32	134	111	215
	202	0.79	147	35	111	38	0.87	134	267	279
	200	0.87	134	54	69	36	1.07	134	31	100
	194	0.83	147	128	118	36	0.20	134	278	133
	179	0.65	134	37	107	35	0.32	147	251	118
	176	0.54	134	64	104	33	0.51	143	286	195
	161	1.02	134	176	156	32	0.64	147	214	232
	139	0.80	143	37	88	31	0.63	143	197	198
	136	0.86	147	31	103	30	0.94	147	138	197
	129	0.74	134	59	161	30	0.94	134	11	123
	123	0.87	147	137	190	29	0.96	147	15	108
	122	1.04	134	52	41	28	0.54	147	282	147
	121	0.88	134	22	144	28	0.56	143	153	154
	119	0.93	134	53	78	26	0.86	134	33	101
	110	0.60	147	139	252	26	0.65	147	157	232
	107	0.86	147	18	158	25	1.71	147	153	109
	101	0.86	147	150	67	24	0.74	134	48	145
	100	0.67	147	33	102	24	0.91	147	23	175
	95	1.08	134	47	71	24	1.07	143	15	83
	94	0.76	147	179	53	24	0.87	147	3	120
	90	0.98	134	51	97	24	0.42	134	160	183
	90	0.86	143	31	104	23	1.49	143	152	146
	87	1.55	147	131	133	23	0.08	143	179	82
	87	2.11	134	197	132	23	0.77	147	22	175
	86	0.95	134	19	148	23	0.40	143	292	152
	85	1.36	134	199	121	23	0.68	143	117	215
	80	1.09	147	136	165	22	0.61	147	6	120
	77	0.52	147	172	175	22	0.62	147	167	198
	70	0.66	143	195	180	22	0.81	134	273	255
	68	0.85	134	9	86	20	0.07	147	285	136
	64	0.09	143	278	86	20	0.76	134	10	100

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Pacific ocean perch	1,128	0.61	143	11	221	89	0.67	134	132	271
	1,123	0.92	143	143	189	86	0.83	147	271	338
	970	0.44	143	80	113	70	0.48	134	275	223
	903	0.79	134	157	171	68	0.64	147	268	220
	795	0.89	143	299	246	62	0.29	147	3	120
	757	0.74	134	108	167	61	0.77	147	270	191
	728	0.83	143	216	130	58	0.67	143	158	237
	663	0.80	134	205	176	57	0.33	134	253	209
	625	0.69	143	248	235	57	0.63	147	226	159
	538	0.61	143	23	155	56	0.69	134	117	196
	516	0.86	147	287	214	55	0.59	134	17	209
	503	0.77	134	164	139	54	0.41	134	92	179
	488	0.70	134	109	167	52	0.44	134	4	166
	415	0.66	134	134	257	51	0.66	143	75	161
	411	0.49	134	172	146	50	0.22	134	271	203
	404	0.82	143	212	131	49	0.65	134	250	321
	392	0.66	147	69	150	49	0.43	143	168	118
	337	0.82	134	288	250	48	0.65	143	85	225
	336	0.74	143	140	159	45	0.43	143	301	217
	308	0.75	143	185	183	45	0.83	147	224	161
	302	0.67	134	153	195	45	0.43	147	12	108
	289	0.52	147	60	110	43	0.53	134	256	262
	257	0.70	143	111	166	43	0.37	134	232	194
	249	0.64	143	90	222	41	0.51	134	273	255
	233	0.29	134	1	134	38	0.65	134	119	249
	229	0.67	134	289	221	36	0.11	147	72	81
	202	0.71	134	158	198	36	0.75	134	201	245
	189	0.67	143	82	218	34	0.30	134	255	194
	182	0.77	143	219	236	34	0.25	143	286	195
	157	0.57	134	118	195	34	0.68	134	206	170
	153	0.60	143	6	260	33	0.84	143	303	374
	149	0.64	143	83	173	32	0.72	134	264	263
	144	0.70	134	159	195	31	0.63	147	18	158
	133	0.30	147	272	192	27	0.64	143	76	131
	133	0.84	134	160	183	26	0.61	147	213	218
	131	0.80	134	142	165	26	0.72	143	91	264
	128	0.61	134	249	299	25	0.80	147	225	170
	127	0.40	143	43	92	24	0.20	143	285	211
	124	0.46	134	281	211	24	0.59	147	9	116
	120	0.15	134	283	153	23	0.09	143	272	175
	114	0.47	134	272	264	22	0.32	147	124	108
	108	0.64	143	279	221	21	0.79	134	98	188
	105	0.75	134	120	154	21	0.70	147	233	160
	101	0.76	143	213	194	21	0.11	143	292	152
	97	0.41	143	296	202	20	0.58	147	278	300
	95	0.89	143	204	147	20	0.82	143	281	327
Northern rockfish	1,058	0.91	147	144	82	105	0.96	147	3	120
	279	0.82	143	108	98	104	0.97	134	141	116
	226	0.92	147	60	110	96	0.91	143	168	118
	213	0.73	143	92	114	92	1.04	143	94	128
	139	0.71	134	1	134	85	1.07	143	111	166
	136	0.83	143	43	92	84	0.88	134	103	96

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Northern rockfish	73	0.94	134	70	82	46	0.58	134	152	83
	66	0.77	143	80	113	26	0.82	143	79	112
	58	0.65	143	3	95	20	0.64	147	69	150
	53	0.89	143	76	131	20	0.62	134	109	167
	51	0.82	143	216	130	20	0.86	134	169	130
Shortraker rockfish	169	4.03	134	163	358	21	3.08	143	183	281
	163	1.62	134	5	326	21	2.52	147	66	327
	129	4.51	143	249	406	20	3.02	143	87	320
	110	2.67	143	44	365	20	2.07	134	107	333
	77	1.25	134	6	337	19	2.04	147	67	353
	73	2.94	134	154	296	18	5.15	134	237	283
	68	4.16	134	243	431	18	4.02	143	280	514
	60	4.08	134	161	399	17	2.71	143	184	294
	48	1.30	134	14	357	14	3.83	143	91	264
	40	3.21	134	162	360	13	1.51	134	7	346
	39	5.09	147	249	284	13	3.05	134	97	336
	35	2.38	143	81	345	13	0.45	134	170	542
	28	6.64	147	271	338	12	3.33	134	247	333
	25	2.51	143	218	380	11	9.86	134	249	299
	24	2.95	134	173	282	11	2.36	134	79	381
	24	2.34	143	74	322	10	17.86	143	297	338
Rougheye rockfish	110	1.58	143	303	374	16	2.14	143	297	338
	102	1.45	134	97	336	14	1.56	134	285	385
	93	1.15	143	218	380	12	1.25	147	123	277
	91	1.02	134	5	326	11	1.75	134	173	282
	79	1.32	143	44	365	10	1.28	134	112	249
	49	1.57	134	163	358	10	1.74	143	184	294
	48	1.30	143	87	320	9	1.32	143	91	264
	46	2.19	134	265	323	9	0.35	143	231	133
	39	1.05	143	93	263	9	1.05	134	23	173
	39	1.37	134	161	399	9	0.54	147	226	159
	34	1.39	143	74	322	9	1.52	147	16	272
	30	1.33	147	20	291	9	1.00	134	268	281
	29	1.46	143	171	333	8	0.81	143	226	246
	27	0.97	147	271	338	8	1.55	143	6	260
	25	1.63	147	276	391	8	1.34	134	132	271
	25	1.56	143	81	345	7	0.43	143	225	184
	25	1.38	134	6	337	7	1.49	134	107	333
	24	1.49	134	113	248	6	1.26	143	183	281
	22	1.63	143	89	256	6	1.47	134	185	376
	21	1.61	134	14	357	6	1.33	134	237	283
	18	1.26	147	67	353	6	0.28	134	57	243
	17	1.45	147	66	327	6	0.55	143	99	142
	17	1.53	147	11	316	6	0.35	143	98	172
	16	0.79	134	154	296	6	0.70	134	220	284
Shortspine thornyhead	276	0.18	134	170	542	69	0.37	143	112	523
	181	0.45	143	81	345	53	0.42	134	5	326
	91	0.46	143	88	402	53	0.33	134	79	381
	73	0.17	134	57	243	52	0.40	134	221	298
	71	0.37	143	44	365	47	0.46	147	276	391

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Shortspine	47	0.37	134	220	284	23	0.33	147	68	438
thornyhead	47	0.41	134	219	287	23	0.39	143	269	436
	45	0.35	143	9	522	23	0.29	134	202	250
	44	0.30	134	173	282	22	0.38	147	215	219
	43	0.20	143	250	475	22	0.17	143	251	553
	43	0.33	143	10	549	21	0.22	134	14	357
	40	0.41	134	276	601	21	0.30	147	67	353
	39	0.44	134	237	283	21	0.25	147	216	208
	39	0.26	143	74	322	21	0.26	134	132	271
	38	0.24	134	171	530	21	0.20	143	142	247
	37	0.20	147	61	271	21	0.23	134	264	263
	36	0.30	134	161	399	20	0.22	147	66	327
	35	0.22	143	89	256	20	0.40	147	217	238
	34	0.14	134	154	296	19	0.26	134	247	333
	33	0.20	147	271	338	19	0.37	147	265	440
	33	0.21	147	20	291	19	0.27	143	282	334
	33	0.22	143	249	406	18	0.18	134	249	299
	32	0.14	143	218	380	18	0.32	147	263	273
	29	0.27	143	72	222	18	0.26	134	119	249
	28	0.14	134	250	321	18	0.30	143	256	566
	28	0.83	134	6	337	17	0.46	147	275	485
	28	0.42	134	106	414	17	1.03	134	112	249
	28	0.24	134	201	245	17	0.35	147	214	232
	27	0.13	147	268	220	17	0.24	134	134	257
	27	0.21	143	219	236	17	0.27	134	107	333
	27	0.25	143	93	263	17	0.19	147	11	316
	27	0.24	134	162	360	16	0.27	134	55	557
	25	0.22	143	303	374	16	0.46	134	204	290
	25	0.21	134	139	232	15	0.19	134	248	290
	24	0.27	134	243	431	15	0.13	143	279	221
	24	0.28	134	242	666	15	0.30	143	215	227
	24	0.31	143	214	259	15	0.24	143	281	327
	23	0.23	134	185	376	15	0.35	134	203	239
	23	0.27	143	91	264	14	0.29	143	82	218
	23	0.17	143	280	514	14	0.32	143	141	562
	23	0.33	143	297	338					
Light	1,106	0.90	147	144	82	81	1.29	143	83	173
dusky	422	1.56	134	253	209	75	1.73	134	218	135
rockfish	282	1.90	143	94	128	67	1.52	143	111	166
	126	1.44	147	60	110	60	1.12	143	138	116
	89	1.29	143	80	113	22	1.30	143	262	129
	87	1.62	143	216	130	22	1.75	143	143	189
	83	1.62	143	23	155	21	1.37	134	1	134
Other	2,166	1.81	143	299	246	67	1.97	134	288	250
rockfish	194	1.09	147	287	214	63	0.47	147	60	110
	170	0.49	134	253	209	60	0.58	147	286	207
	150	0.46	134	281	211	55	0.32	143	300	208
	107	0.45	147	270	191	42	0.24	147	144	82
	88	1.81	134	289	221	42	0.39	143	279	221
	81	0.39	143	301	217	37	0.90	134	283	153
	68	0.85	134	260	234	33	1.55	134	270	197

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul	Vessel	Haul
Other rockfish	29	1.27	134	282	192	24	0.61	134	226	143
	25	1.55	134	263	164	20	1.99	147	284	161
	24	1.55	134	46	78					
Sablefish	737	4.11	134	170	542	42	3.52	134	221	298
	604	1.53	134	212	137	41	3.79	134	55	557
	273	2.96	134	161	399	40	3.13	134	185	376
	220	2.92	134	242	666	39	2.18	134	205	176
	166	3.48	134	114	250	38	1.38	143	140	159
	162	3.01	134	162	360	37	3.22	143	182	503
	151	3.42	134	163	358	37	3.99	134	133	571
	150	2.51	143	158	237	36	3.66	143	9	522
	137	1.98	147	224	161	36	2.85	143	213	194
	115	3.05	134	173	282	35	3.17	147	176	184
	109	3.04	143	251	553	34	3.03	143	89	256
	101	2.53	134	119	249	33	3.47	134	186	448
	98	2.55	134	134	257	33	3.98	143	280	514
	88	3.25	143	256	566	33	1.43	143	228	298
	87	3.80	134	111	215	33	2.68	134	97	336
	86	2.84	134	154	296	33	1.28	143	75	161
	76	3.27	147	263	273	32	4.64	143	112	523
	75	3.06	134	106	414	32	3.35	143	81	345
	73	2.34	134	132	271	32	3.08	143	214	259
	73	3.53	134	171	530	31	3.27	134	219	287
	69	4.02	143	10	549	29	2.51	147	233	160
	60	3.05	147	265	440	29	2.02	147	203	159
	59	2.61	143	219	236	29	2.98	134	265	323
	59	2.64	143	93	263	28	2.81	143	304	667
	58	4.13	143	141	562	27	2.05	143	87	320
	57	2.39	147	213	218	27	2.13	147	231	134
	55	2.96	143	269	436	27	2.71	147	67	353
	52	1.85	134	153	195	27	1.95	143	220	230
	50	1.14	134	211	143	25	2.96	147	276	391
	49	1.39	134	92	179	25	2.09	143	226	246
	48	2.97	143	171	333	23	2.29	147	205	156
	48	2.77	143	74	322	23	3.45	134	264	263
	47	1.26	143	175	107	22	2.13	147	62	401
	45	3.59	134	56	649	22	3.04	143	44	365
	45	1.84	143	83	173	22	1.25	147	18	158
	45	2.67	147	66	327	22	2.02	147	168	169
	44	3.75	134	220	284	22	1.28	143	258	204
	44	2.45	134	276	601	21	2.51	134	79	381
	44	0.94	134	164	139	21	1.70	134	160	183
	43	2.64	147	275	485	21	1.47	147	171	76
	43	3.37	143	88	402	20	1.67	147	230	137
	43	2.45	134	139	232	20	2.34	143	250	475
	42	2.57	143	215	227	20	2.13	134	203	239
Arrowtooth flounder	6,639	1.60	147	223	122	1,926	1.35	147	231	134
	5,992	1.25	134	212	137	1,720	0.73	134	198	149
	4,142	1.52	143	205	92	1,467	2.14	147	176	184
	3,742	1.34	143	206	112	1,386	1.23	143	138	116
	2,089	1.23	147	124	108	1,311	1.04	147	152	104

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Arrowtooth	982	1.03	143	211	144	218	0.59	143	144	119
flounder	850	1.07	143	156	166	217	0.94	134	199	121
	799	0.63	147	171	76	214	0.71	143	116	158
	729	1.40	147	169	176	213	1.78	143	194	199
	694	0.66	147	205	156	212	0.79	134	184	133
	679	0.94	147	153	109	212	1.00	147	113	158
	643	1.18	134	189	99	208	0.42	147	50	92
	637	0.81	143	54	112	204	0.86	134	183	167
	623	1.80	134	200	131	201	0.93	147	159	212
	613	0.72	143	76	131	195	0.85	134	77	135
	594	0.69	134	211	143	194	1.06	143	126	193
	560	0.80	134	278	133	194	0.41	134	224	135
	554	1.52	134	283	153	193	0.96	147	196	91
	546	1.19	143	146	129	192	0.57	134	179	133
	495	1.01	147	135	161	189	1.17	143	303	374
	484	2.08	147	131	133	188	0.84	134	92	179
	477	0.78	143	127	108	180	2.96	147	276	391
	469	0.66	143	209	155	179	0.65	134	90	85
	467	0.74	134	225	143	178	1.66	134	111	215
	465	1.42	147	232	135	177	0.51	143	69	129
	455	1.13	147	21	91	177	0.46	143	36	113
	439	0.45	134	68	142	176	0.86	134	108	167
	420	0.57	147	141	68	176	1.37	143	124	189
	416	2.12	143	197	198	175	0.64	147	284	161
	410	0.78	134	76	101	174	0.47	143	100	132
	392	0.72	134	197	132	173	0.56	143	67	142
	384	0.64	134	131	99	171	0.45	134	223	165
	382	1.10	143	276	162	171	0.93	147	157	232
	382	0.61	134	227	166	170	1.96	143	152	146
	376	0.46	134	191	141	168	0.47	143	114	109
	370	1.49	143	199	195	161	0.57	134	143	136
	349	1.35	134	265	323	160	1.07	143	128	211
	340	0.88	134	165	80	157	0.71	143	115	155
	336	0.53	134	215	135	157	0.80	147	166	107
	334	0.76	134	96	157	154	0.71	134	172	146
	331	0.72	134	109	167	153	0.86	147	211	92
	323	1.15	134	169	130	152	1.48	147	238	199
	315	0.91	147	81	123	152	0.91	134	138	149
	302	1.44	134	259	152	151	0.49	134	167	94
	299	0.65	134	142	165	150	0.45	134	69	130
	293	1.64	143	61	96	147	1.35	147	235	195
	289	0.83	147	224	161	147	0.53	143	172	160
	278	0.54	147	53	148	146	0.70	147	137	190
	266	0.67	147	80	92	146	0.72	147	82	98
	265	0.76	147	86	175	145	0.48	134	145	93
	257	1.28	143	210	157	145	0.32	143	222	134
	254	0.97	147	136	165	142	0.71	147	115	155
	250	0.96	134	59	161	142	0.50	147	230	137
	237	0.95	143	113	163	142	0.72	134	164	139
	235	0.47	134	180	120	141	0.40	143	118	104
	228	1.35	134	238	133	141	0.47	147	77	100
	226	0.37	134	192	102	141	0.47	147	65	128
	218	2.86	147	126	202	140	0.42	147	125	91

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Arrowtooth	139	0.50	143	204	147	93	0.28	147	78	97
flounder	137	1.76	134	35	65	92	1.19	147	156	244
	137	0.49	143	175	107	91	0.73	134	67	122
	136	0.74	147	138	197	90	0.46	143	53	119
	135	0.33	147	122	82	90	0.41	143	292	152
	133	0.38	147	87	119	90	0.89	147	165	185
	132	3.37	134	134	257	87	0.45	147	69	150
	131	0.40	147	84	130	86	0.59	134	80	189
	130	0.52	134	149	91	86	0.57	147	212	172
	129	0.38	147	85	89	83	2.02	143	195	180
	129	0.57	143	52	111	82	0.26	147	112	90
	128	0.45	147	51	119	81	0.65	147	9	116
	128	2.11	147	175	206	80	0.62	134	231	176
	127	0.78	147	114	167	78	0.29	134	41	111
	126	1.24	147	202	151	78	0.79	143	242	120
	126	0.69	134	205	176	77	1.35	147	117	193
	125	0.57	134	222	156	77	0.84	134	115	216
	124	0.75	147	139	252	76	0.44	147	103	177
	124	1.05	147	173	151	76	0.90	143	224	196
	123	0.75	134	120	154	75	1.73	143	153	154
	122	0.95	143	125	190	74	1.17	147	239	164
	121	0.41	147	100	167	74	0.69	134	110	210
	120	0.36	143	102	135	74	0.72	134	203	239
	120	1.22	134	176	156	73	0.36	147	92	101
	118	0.45	134	91	63	73	0.44	143	37	88
	117	1.15	147	160	235	73	1.28	134	284	116
	117	0.48	143	75	161	73	0.84	143	119	191
	116	0.47	134	86	89	72	1.10	147	127	249
	116	0.64	134	177	152	72	0.64	134	61	84
	114	0.52	147	280	198	71	1.74	143	201	69
	112	0.58	147	19	117	71	0.87	143	110	147
	112	1.10	143	111	166	70	0.61	147	259	132
	112	0.77	134	264	263	70	0.60	134	93	174
	110	0.42	143	97	115	70	0.40	143	2	99
	109	0.73	147	204	126	69	0.89	147	213	218
	108	0.60	143	294	186	69	1.19	147	158	230
	106	0.85	147	164	194	69	1.22	147	203	159
	105	0.36	143	55	81	69	0.45	143	159	159
	104	0.80	143	145	156	68	2.03	143	233	203
	103	1.07	147	167	198	67	0.47	147	260	162
	103	1.33	143	139	224	66	0.53	134	45	98
	102	0.33	134	235	122	65	0.70	147	194	134
	102	0.40	134	168	97	64	0.45	147	234	133
	101	0.48	134	206	170	64	0.52	134	26	81
	99	0.66	147	225	170	64	0.30	147	48	66
	99	0.82	143	229	170	63	0.07	134	257	179
	97	0.59	143	5	96	63	1.61	147	172	175
	96	1.23	134	48	145	62	1.37	143	123	249
	96	0.34	143	35	103	62	0.42	147	55	145
	96	1.08	143	167	131	62	0.38	147	99	119
	96	0.60	134	178	147	61	0.44	134	94	117
	95	0.52	143	202	94	61	1.25	147	250	251
	94	0.82	143	243	123	61	1.06	147	61	271

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Arrowtooth	61	1.17	143	278	86	43	0.24	147	44	67
flounder	61	0.90	143	140	159	43	0.85	143	30	92
	60	0.32	134	62	62	42	0.66	147	148	87
	59	0.69	147	116	183	42	0.66	143	200	73
	59	0.48	134	137	93	42	0.50	143	272	175
	58	0.45	147	73	155	41	0.66	143	203	85
	57	1.66	143	89	256	41	0.31	143	46	85
	57	0.56	147	102	195	41	0.58	147	215	219
	57	0.27	143	221	182	41	1.85	143	228	298
	57	0.24	143	293	164	41	0.88	143	220	230
	57	0.53	147	40	98	41	1.28	147	199	142
	56	0.57	147	147	93	41	1.00	134	204	290
	56	1.36	143	185	183	40	0.35	134	150	90
	56	0.98	143	147	92	40	0.29	147	192	70
	55	0.37	143	101	131	40	0.46	143	25	92
	55	0.40	143	231	133	40	1.01	147	174	165
	55	0.44	143	223	180	39	0.52	143	193	61
	55	0.35	143	213	194	39	0.50	134	51	97
	54	0.28	134	234	113	39	0.17	134	37	107
	52	0.26	143	106	98	39	0.66	143	160	126
	51	0.40	134	141	116	39	0.52	147	216	208
	51	0.62	134	64	104	38	0.51	143	98	172
	50	1.57	147	236	115	38	0.34	143	295	210
	50	0.48	147	227	142	38	0.43	143	225	184
	50	0.30	134	66	103	38	0.17	134	230	111
	49	0.56	147	120	180	38	1.50	134	221	298
	49	0.35	143	95	122	37	0.19	147	129	46
	49	0.51	147	241	106	37	0.19	147	108	79
	49	0.52	134	82	89	37	0.96	143	226	246
	49	0.26	143	240	94	37	0.73	143	27	81
	48	0.43	147	266	152	37	0.31	147	31	103
	48	0.59	147	242	107	37	0.50	147	25	81
	47	0.49	147	151	66	37	1.38	143	122	274
	47	0.41	143	198	121	36	0.25	147	47	62
	46	1.11	143	83	173	36	0.59	134	74	83
	46	0.32	147	229	162	36	0.89	143	117	215
	46	0.72	147	217	238	35	0.89	143	120	193
	46	0.25	143	290	137	35	0.23	147	32	102
	46	1.53	143	93	263	35	0.18	134	88	84
	45	0.75	147	233	160	35	0.93	134	104	94
	45	0.21	143	59	65	35	0.79	143	257	183
	45	0.18	143	58	64	34	0.30	134	187	89
	45	0.58	134	95	180	34	1.28	143	121	265
	45	0.40	147	14	91	34	0.83	134	34	67
	45	0.64	134	190	95	34	0.61	143	263	140
	44	0.73	147	121	188	33	0.62	147	261	89
	44	0.61	134	36	80	33	0.58	134	232	194
	44	1.04	143	282	334	32	0.33	143	94	128
	44	0.23	143	34	109	32	0.33	143	15	83
	44	0.43	143	31	104	32	0.14	134	282	192
	44	0.64	147	200	132	32	0.20	143	246	128
	44	0.39	143	264	71	31	0.25	147	98	93
	43	0.25	147	83	88	31	0.53	143	173	119

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Arrowtooth	31	1.81	143	235	190	25	0.34	134	10	100
flounder	31	0.67	134	113	248	25	0.25	143	227	161
	31	0.27	147	33	102	25	0.31	147	34	98
	31	0.49	143	16	86	25	0.34	143	285	211
	31	0.18	143	239	95	25	0.30	147	185	55
	31	0.25	134	65	85	25	0.44	134	63	104
	30	0.30	134	233	196	24	1.36	134	4	166
	30	0.84	147	118	188	24	0.35	134	117	196
	30	1.21	147	263	273	24	0.70	147	36	112
	30	0.42	147	258	122	24	0.31	143	7	106
	30	1.61	134	132	271	24	0.38	134	210	141
	30	0.58	134	263	164	24	0.42	134	217	139
	29	1.27	147	123	277	23	0.24	134	42	94
	29	0.92	134	114	250	23	1.23	143	143	189
	29	0.58	147	38	81	22	0.83	134	250	321
	29	0.46	147	13	87	22	1.59	143	250	475
	28	0.48	147	226	159	22	0.34	143	168	118
	28	0.35	147	35	111	22	0.25	134	105	100
	28	1.77	134	220	284	22	0.24	143	286	195
	28	1.32	147	155	247	22	0.26	134	157	171
	27	0.19	143	291	166	22	0.39	134	279	141
	27	0.62	143	150	68	22	1.89	134	162	360
	26		147	45	48	21	0.93	134	112	249
	26	0.19	147	273	175	21	0.45	134	140	132
	26	0.38	134	40	109	21	0.64	147	119	192
	26	0.69	147	254	168	21	0.27	147	75	80
	26	0.20	134	25	97	21	0.84	147	8	96
	26	1.18	134	18	124	21	0.37	134	229	118
	26	1.58	134	119	249	21	0.51	143	169	155
	26	0.15	143	33	90	21	1.82	143	249	406
	26	0.41	143	21	111	21	0.41	143	216	130
	26	0.86	134	286	288	20	0.33	134	251	182
	26	0.16	134	228	200	20	1.24	147	268	220
	26	0.39	134	209	144	20	0.38	143	99	142
	26	0.57	143	244	118	20	0.67	147	66	327
	26	0.48	134	201	245	20	0.64	143	29	73
	26	0.93	134	268	281	20	0.94	147	30	69
	25	1.38	143	91	264	20	0.49	143	174	106
Pacific	1301	4.12	143	161	81	147	3.57	134	188	79
halibut	1018	7.43	147	223	122	144	3.56	143	157	79
	489	4.81	143	205	92	138	2.57	134	104	94
	415	1.50	147	58	54	131	3.01	134	135	53
	414	1.53	134	147	78	130	2.03	143	190	52
	358	4.73	143	267	124	128	15.62	143	179	82
	307	5.01	147	222	77	127	1.92	134	99	84
	245	4.68	143	163	62	123	42.01	143	272	175
	239	5.85	143	265	133	120	6.27	134	257	179
	211	3.24	147	220	73	107	1.79	134	126	53
	210	4.66	134	214	122	99	2.53	134	101	82
	208	2.33	143	107	85	95	3.58	147	210	73
	189	3.23	134	148	86	85	8.21	147	285	136
	161	2.18	134	102	82	84	8.55	134	116	87

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Pacific halibut	83	6.65	143	191	62	41	4.87	143	259	210
	82	1.73	147	207	84	41	5.03	143	258	204
	81	2.65	134	100	82	41	1.20	134	166	72
	81	1.04	134	83	70	40	1.16	143	134	34
	75	2.95	143	135	27	40	2.00	147	240	104
	74	4.13	134	190	95	40	2.70	147	75	80
	74	2.77	134	181	47	40	9.97	147	44	67
	73	1.74	147	257	70	40	2.02	147	163	35
	70	4.34	134	213	119	39	2.23	143	70	42
	68	2.87	147	93	75	39	0.73	143	47	38
	68	3.33	143	30	92	38	1.00	147	132	53
	68	11.48	143	176	84	38	1.19	134	129	48
	66	2.70	134	29	82	38	2.14	134	136	81
	66	3.78	134	130	55	37	4.15	134	4	166
	65	5.17	134	209	144	37	3.75	147	219	79
	64	0.94	143	64	51	37	2.77	134	121	72
	62	4.77	147	236	115	37	14.74	134	183	167
	62	7.55	134	88	84	36	4.32	147	187	67
	59	1.77	143	201	69	36	1.35	143	96	76
	58	1.64	134	34	67	35	6.05	143	118	104
	57	4.14	143	173	119	35	7.45	147	218	90
	57	2.68	134	87	75	35	0.98	147	30	69
	55	5.75	134	150	90	35	20.83	143	261	158
	55	1.41	134	128	43	35	1.58	143	150	68
	55	12.51	134	207	188	34	2.63	134	252	208
	53	22.86	134	237	283	34	1.26	143	63	50
	51	5.07	134	149	91	34	1.64	147	46	50
	51	2.28	134	28	66	34	2.53	134	127	41
	49	4.81	147	13	87	34	2.15	143	43	92
	49	1.64	147	162	28	34	1.86	143	14	82
	47	2.44	143	206	112	34	41.52	134	289	221
	47	7.47	134	92	179	34	4.45	143	106	98
	47	13.85	143	287	96	33	1.84	147	70	72
	47	8.17	143	248	235	33	6.88	147	205	156
	46	10.56	143	97	115	33	4.07	134	277	93
	46	6.21	143	40	72	32	4.00	143	105	99
	46	6.73	134	210	141	32	3.89	143	78	70
	45	9.10	134	122	86	32	4.34	143	57	32
	45	3.76	147	221	75	32	9.42	147	212	172
	45	2.36	147	209	71	32	8.76	143	260	210
	45	6.15	134	72	82	31	2.33	147	109	48
	45	8.51	134	176	156	31	1.85	147	59	65
	44	1.51	147	74	41	31	2.77	134	38	76
	43	11.39	147	144	82	31	1.46	147	49	54
	43	5.86	134	52	41	31	14.46	143	283	207
	43	0.88	143	27	81	31	6.19	134	259	152
	43	10.92	143	147	92	30	3.86	134	146	86
	42	12.33	147	66	327	30	4.97	134	193	84
	42	7.37	134	111	215	30	1.46	143	130	53
	42	18.03	134	226	143	30	4.03	143	103	86
	42	6.48	134	61	84	30	1.02	147	79	44
	41	3.26	134	35	65	30	4.98	143	50	69
	41	2.04	143	19	64	30	2.24	143	166	66

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Pacific halibut	29	5.95	147	255	115	24	0.69	143	65	48
	29	1.22	134	85	55	24	3.38	143	56	78
	29	3.50	143	178	87	24	3.86	147	63	119
	29	2.45	143	62	78	24	3.16	143	200	73
	28	12.67	147	131	133	24	2.33	147	34	98
	28	2.56	134	144	77	24	9.42	147	176	184
	28	5.70	134	76	101	24	0.92	147	161	42
	28	8.97	143	110	147	24	3.89	143	151	77
	28	4.86	134	73	75	23	15.04	143	207	128
	28	2.52	134	174	68	23	1.85	143	193	61
	28	9.75	134	152	83	23	0.74	143	137	28
	28	7.44	147	173	151	23	3.03	143	133	42
	28	8.98	134	64	104	23	2.79	147	143	58
	27	2.03	147	140	64	23	16.35	143	289	95
	27	5.95	143	116	158	23	1.64	143	165	67
	27	8.45	147	231	134	23	1.12	147	177	28
	27	4.62	134	21	99	22	12.99	134	253	209
	27	2.39	143	66	56	22	12.97	134	200	131
	27	1.47	143	49	18	22	2.31	147	122	82
	27	8.17	147	64	108	22	1.15	134	50	43
	27	1.68	147	56	52	22	1.74	134	31	100
	27	3.26	147	48	66	22	2.78	134	20	87
	27	3.73	143	275	125	22	6.57	143	168	118
	27	8.06	143	159	159	22	6.55	134	167	94
	27	11.32	143	144	119	22	0.47	147	178	22
	26	15.82	143	180	90	21	13.33	143	126	193
	26	12.28	134	80	189	21	3.65	143	45	85
	26	3.35	134	60	36	21	2.57	147	142	56
	26	5.12	143	114	109	21	6.83	134	70	82
	26	8.59	134	57	243	21	9.63	143	61	96
	26	3.67	147	192	70	21	2.43	147	154	72
	26	5.38	147	188	73	20	0.94	147	57	49
	26	8.83	147	3	120	20	1.71	143	187	78
	26	7.08	134	62	62	20	1.64	134	54	69
	26	8.16	143	169	155	20	6.05	134	15	98
	26	6.24	134	218	135	20	2.15	147	190	42
	25	9.18	147	147	93	20	1.67	134	123	46
	25	1.85	147	129	46	20	1.56	147	41	28
	25	3.50	143	188	78	20	1.37	147	27	70
	25	2.22	143	38	68	20	1.67	143	129	63
	25	1.56	147	21	91	20	5.25	134	212	137
	25	1.96	143	18	51	20	1.38	147	184	43
	25	5.61	134	175	78	20	4.28	143	138	116
	24	0.84	134	30	75					
Northern rock sole	221	0.25	134	54	69	61	0.38	143	150	68
	155		143	193	61	58	0.34	147	41	28
	119	0.50	134	52	41	57	0.78	143	64	51
	109	0.59	147	49	54	55	0.99	143	135	27
	79	0.53	147	162	28	53	0.23	134	50	43
	71	0.60	134	135	53	53	0.36	143	148	39
	66	0.26	134	35	65	51	0.64	143	147	92
	65	0.39	147	58	54	45	0.33	143	50	69

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Northern rock sole	44	0.32	143	30	92	22	0.58	134	128	43
	43	0.29	134	36	80	22	0.43	134	181	47
	42	0.54	147	7	47	22	0.57	134	165	80
	41	0.59	143	57	32	20	1.10	143	190	52
	40	0.44	134	166	72	20	0.51	134	53	78
	39	0.73	143	63	50	19	0.51	143	134	34
	39	0.28	147	46	50	19	0.30	147	56	52
	38	0.46	134	174	68	19	0.20	147	32	102
	34	0.60	143	137	28	18	1.28	134	123	46
	33	0.50	143	18	51	17	0.31	147	57	49
	32	0.34	143	32	81	17	0.48	147	59	65
	32	0.40	134	74	83	17	0.28	147	34	98
	29	0.57	134	175	78	16	0.25	147	105	30
	28	0.20	147	74	41	16	0.23	147	142	56
	28	0.65	143	70	42	16	0.42	147	38	81
	25	0.48	143	201	69	15	0.18	134	85	55
	25	0.33	134	124	73	13	0.35	134	8	145
	24	0.26	134	34	67	12	0.79	147	125	91
	24	0.36	147	163	35	12	0.44	147	79	44
	23	0.72	134	131	99	12	0.33	143	37	88
	22	0.24	147	45	48	12	0.41	147	37	92
Southern rock sole	314	1.00	143	135	27	31	0.64	147	110	45
	103	1.11	134	102	82	31	0.55	134	182	78
	101	0.78	147	49	54	30	0.41	147	132	53
	88		143	193	61	29	0.46	134	13	82
	80	1.19	143	63	50	29	0.78	143	66	56
	69	0.91	143	134	34	29	0.46	147	28	71
	62	0.62	143	47	38	29	0.68	134	174	68
	60	0.67	147	45	48	28	1.00	147	93	75
	58	0.86	143	137	28	28	0.81	147	209	71
	58	0.85	143	70	42	27	0.71	147	78	97
	55	0.49	134	34	67	27	0.68	134	12	108
	53	0.57	134	145	93	26	0.24	147	85	89
	53	0.70	143	48	25	26	1.15	134	181	47
	53	0.96	147	58	54	26	0.79	134	175	78
	52	0.53	134	50	43	25	0.49	143	64	51
	49	0.73	143	201	69	25	0.47	147	29	72
	49	0.48	147	74	41	25	1.26	134	100	82
	49	0.88	147	7	47	25	0.53	134	88	84
	45	0.39	134	195	77	24	0.74	134	193	84
	45	0.56	147	46	50	24	0.51	143	62	78
	44	0.71	147	129	46	24	0.40	147	48	66
	39	0.50	147	47	62	24	0.69	147	142	56
	38	0.51	143	71	66	23	0.67	147	133	63
	38	0.92	134	101	82	23	1.13	143	287	96
	38	0.48	143	154	68	23	1.07	134	99	84
	36	1.04	143	277	85	23	0.70	143	15	83
	36	0.54	134	87	75	23	0.70	147	161	42
	34	0.49	143	163	62	22	0.48	134	81	95
	33	0.78	147	140	64	21	0.62	147	111	45
	33	0.45	147	134	61	21	0.62	143	189	71
	32	0.63	143	65	48	21	0.61	134	194	89

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Southern rock sole	21	0.70	134	135	53	19	0.50	147	14	91
	21	0.53	134	83	70	19	0.62	147	8	96
	21	0.50	134	82	89	18	0.99	147	79	44
	21	0.28	134	166	72	18	1.01	134	25	97
	21	0.53	134	165	80	17	0.43	147	89	93
	20	0.31	134	146	86	17	0.59	134	44	81
	20	0.51	134	16	80	17	0.66	147	95	82
	20	0.84	143	168	118	17	1.14	134	126	53
	19	0.61	143	192	63	17	0.47	134	91	63
	19	0.42	134	85	55	16	0.83	143	191	62
	19	1.11	143	107	85	16	0.27	147	112	90
	19	0.55	147	122	82	16	0.91	147	75	80
	19	0.61	147	76	77	16	0.82	147	50	92
	19	1.12	143	289	95					
Flathead sole	509	0.68	147	172	175	53	0.23	134	59	161
	385	0.46	134	199	121	53	0.28	147	154	72
	264	0.50	134	200	131	52	0.21	147	148	87
	256	0.34	147	43	118	50	0.27	134	183	167
	218	0.39	147	131	133	49	0.41	147	152	104
	209	0.53	147	198	148	49	0.46	143	127	108
	150	0.31	147	86	175	48	0.27	147	48	66
	148	0.85	147	59	65	47	0.32	147	82	98
	145	0.32	147	44	67	47	0.34	147	36	112
	144	0.60	134	51	97	46	0.58	143	195	180
	136	0.28	147	42	72	46	0.16	134	63	104
	133	0.49	143	199	195	45	0.26	147	80	92
	127	0.56	147	142	56	42	0.35	147	103	177
	118	0.51	147	143	58	41	0.21	147	151	66
	117	0.37	147	199	142	41	0.30	143	227	161
	113	0.39	147	136	165	40	0.30	147	40	98
	113	0.21	143	50	69	38	0.39	147	102	195
	108	0.17	134	196	94	38	0.32	134	198	149
	105	0.28	134	197	132	38	0.24	134	65	85
	95	0.55	143	156	166	37	0.29	147	53	148
	88	0.23	134	61	84	37	0.24	147	202	151
	86	0.45	134	66	103	37	0.37	134	88	84
	80	0.41	147	166	107	37	0.27	147	165	185
	79	0.29	134	143	136	36	0.26	143	67	142
	79	0.28	134	62	62	35	0.27	147	164	194
	75	0.57	134	211	143	33	0.37	147	153	109
	74	0.44	143	194	199	32	0.36	134	238	133
	71	0.47	143	147	92	32	0.22	143	98	172
	68	0.37	147	114	167	32	0.18	134	67	122
	67	0.20	147	200	132	31	0.30	134	91	63
	65	0.55	134	52	41	31	0.21	147	168	169
	63	0.22	147	128	118	30	0.29	134	180	120
	63	0.23	134	64	104	29	0.31	147	135	161
	62	0.39	143	197	198	29	0.88	147	27	70
	61	0.23	134	184	133	29	0.26	134	176	156
	61	0.19	134	90	85	28	0.39	147	45	48
	54	0.39	147	147	93	28	0.27	147	81	123
	54	0.24	143	61	96	28	0.40	143	152	146

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Flathead sole	28	0.53	143	228	298	23	0.36	143	202	94
	27	0.37	147	120	180	23	0.20	147	55	145
	27	0.35	147	101	180	23	0.28	134	48	145
	27	0.36	147	47	62	23	0.18	143	223	180
	27	0.41	143	204	147	22	0.17	134	40	109
	27	0.22	134	191	141	22	0.20	143	69	129
	27	0.21	134	177	152	22	0.24	143	46	85
	26		147	138	197	22	0.26	143	31	104
	26	0.39	147	203	159	21	0.25	147	104	124
	25	0.32	143	128	211	21	0.19	147	242	107
	25	0.22	143	242	120	21	0.43	147	167	198
	25	0.26	134	178	147	21	0.38	147	155	247
	25	0.67	134	165	80	21	0.34	143	138	116
	24	0.45	147	139	252	20	0.16	147	150	67
	24	0.34	147	113	158	20	0.17	134	41	111
	24	0.17	147	146	62	20	0.19	147	163	35
	24	0.67	134	206	170	20	0.25	143	243	123
	23	0.87	143	206	112					
Rex sole	66	0.36	134	114	250	17	0.33	143	127	108
	52	0.25	134	265	323	17	0.63	143	115	155
	47	0.48	143	146	129	17	0.30	134	227	166
	45	0.20	134	263	164	17	0.44	134	176	156
	42	0.30	134	94	117	16	0.51	143	145	156
	41	0.37	134	120	154	15	0.51	147	131	133
	36	0.24	143	278	86	15	0.51	143	210	157
	32	0.53	134	184	133	15	0.20	147	273	175
	32	0.69	143	152	146	15	0.25	143	97	115
	31	0.40	134	80	189	15	0.34	147	192	70
	30	0.33	134	180	120	15	0.53	143	204	147
	28	0.37	134	95	180	15	0.45	147	204	126
	28	0.30	147	16	272	15	0.70	147	203	159
	28	0.51	134	142	165	15	0.42	147	202	151
	28	0.29	134	221	298	15	0.37	143	212	131
	27	0.21	143	292	152	14	0.53	143	211	144
	26	0.28	147	261	89	14	0.16	143	290	137
	23	0.30	134	92	179	14	0.40	134	215	135
	22	0.23	134	238	133	14	0.34	143	158	237
	21	0.45	143	114	109	14	0.41	143	111	166
	21	0.18	147	284	161	14	0.41	143	140	159
	21	0.21	143	293	164	14	0.19	134	273	255
	21	0.35	147	205	156	13	0.25	147	276	391
	20	0.32	147	137	190	13	0.52	143	84	189
	20	0.46	134	117	196	13	0.25	143	2	99
	20	0.40	147	169	176	13	0.35	134	79	381
	20	0.47	134	69	130	13	0.19	134	282	192
	19	0.26	147	17	256	13	0.26	143	138	116
	19	0.39	134	77	135	13	0.25	134	267	279
	19	0.35	143	167	131	12	0.26	143	202	94
	18	0.27	134	197	132	12	0.46	143	116	158
	18	0.41	143	110	147	12	0.47	147	69	150
	18	0.30	147	92	101	12	0.42	134	119	249
	18	0.34	147	53	148	12	0.37	143	20	145

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Rex sole	12	0.33	134	107	333	7	0.49	134	40	109
	12	0.23	134	220	284	7	0.52	143	94	128
	12	0.11	134	279	141	7	0.33	143	67	142
	12	0.33	134	202	250	7	0.25	147	166	107
	12	0.16	134	272	264	7	0.21	143	228	298
	12	0.28	134	264	263	7	0.45	143	1	128
	11	0.46	134	17	209	7	0.15	143	244	118
	11	0.28	143	53	119	7	0.70	143	147	92
	11	0.38	147	61	271	7	0.29	134	268	281
	11	0.11	143	236	216	7	0.38	134	172	146
	11	0.55	134	115	216	6	0.57	147	73	155
	11	0.43	134	110	210	6	0.30	143	125	190
	11	0.17	143	285	211	6	0.18	147	277	291
	11	0.10	143	264	71	6	0.51	134	42	94
	11	0.42	143	117	215	6	0.24	147	249	284
	11	0.47	134	168	97	6	0.17	147	243	42
	11	0.42	134	164	139	6	0.42	147	230	137
	10	0.35	143	194	199	6	0.38	143	46	85
	10	0.40	134	140	132	6	0.28	147	51	119
	10	0.21	134	59	161	6	0.22	143	219	236
	10	0.30	147	124	108	6	0.44	134	134	257
	10	0.65	134	41	111	6	0.25	143	22	110
	10	0.29	134	132	271	6	0.54	143	12	150
	9	0.69	134	200	131	6	0.49	134	118	195
	9	0.21	134	248	290	6	0.19	134	219	287
	9	0.46	134	112	249	6	0.51	134	211	143
	9	0.18	143	294	186	6	0.40	134	205	176
	9	0.37	134	19	148	6	0.24	143	256	566
	9	0.23	147	135	161	6	0.32	143	216	130
	9	0.40	143	36	113	6	0.22	134	201	245
	9	0.27	143	276	162	6	0.19	134	278	133
	9	0.27	134	93	174	5	0.26	147	152	104
	9	0.21	134	286	288	5	0.45	147	239	164
	9	0.56	134	141	116	5	0.19	147	286	207
	9	0.19	134	283	153	5	0.09	147	269	211
	9	0.29	134	170	542	5	0.43	134	48	145
	8	0.29	143	197	198	5	0.37	147	86	175
	8	0.42	143	185	183	5	0.26	147	81	123
	8	0.33	134	252	208	5	0.24	143	297	338
	8	0.34	143	113	163	5	0.26	143	184	294
	8	0.09	147	283	199	5	0.31	143	222	134
	8	0.09	147	282	147	5	0.30	143	35	103
	8	0.40	134	39	102	5	0.38	134	113	248
	8	0.40	143	83	173	5	0.72	147	19	117
	8	0.10	143	227	161	5	0.17	143	286	195
	8	0.47	143	37	88	5	0.30	134	96	157
	8	0.37	134	111	215	5	0.31	134	223	165
	8	0.45	147	35	111	5	0.59	134	206	170
	8	0.62	143	8	172	5	0.19	134	280	208
	8	0.15	134	284	116	5	0.23	143	260	210
	7	0.26	143	183	281	5	0.14	143	243	123
	7	0.20	147	278	300	5	0.13	143	242	120
	7	0.59	134	43	88	5	0.49	134	169	130

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Rex sole	4	0.41	147	139	252	4	0.23	143	282	334
	4	0.45	143	209	155	4	0.51	147	227	142
	4	0.28	143	199	195	4	0.92	147	225	170
	4	0.37	143	198	121	4	0.53	143	34	109
	4	0.29	147	238	199	4	0.31	147	20	291
	4	0.20	134	237	283	4	0.86	147	175	206
	4	0.20	134	236	117	4	0.19	143	281	327
	4	0.28	143	126	193	4	0.15	143	272	175
	4	0.18	147	123	277	4	0.52	134	138	149
	4	0.11	147	285	136	4	0.53	143	172	160
	4	0.23	147	266	152	4	0.43	134	207	188
	4	0.15	143	98	172	4	0.36	147	173	151
	4	0.23	147	251	118	4	0.28	143	258	204
	4	0.09	147	245	50	4	0.53	143	75	161
	4	0.44	147	229	162	4	0.21	143	122	274
Dover sole	152	0.73	134	170	542	19	0.75	134	265	323
	91	0.78	134	238	133	18	1.01	134	114	250
	89	1.00	147	276	391	17	0.88	134	200	131
	59	0.72	147	261	89	17	0.87	143	116	158
	58	0.86	143	257	183	17	0.38	147	278	300
	51	0.71	134	171	530	17	0.19	143	264	71
	50	0.54	143	294	186	17	1.07	134	232	194
	45	0.90	134	220	284	16	0.98	147	131	133
	44	1.19	143	115	155	16	1.21	134	224	135
	44	0.89	147	265	440	16	0.69	143	251	553
	43	0.90	134	221	298	16	1.16	134	162	360
	40	0.85	134	161	399	15	0.80	134	184	133
	38	0.78	134	133	571	15	1.00	147	275	485
	34	1.11	147	250	251	15	1.14	147	263	273
	33	0.97	143	236	216	15	0.97	143	88	402
	31	0.76	143	218	380	15	1.32	147	175	206
	30	1.15	143	210	157	15	0.74	143	256	566
	27	1.10	143	211	144	14	0.61	147	137	190
	26	0.54	143	282	334	14	0.59	147	271	338
	25	0.91	143	235	190	14	0.75	143	112	523
	25	0.67	147	205	156	14	1.45	147	202	151
	24	0.99	134	285	385	14	0.78	143	269	436
	23	0.82	134	247	333	13	0.83	134	256	262
	22	1.01	134	237	283	13	1.34	147	203	159
	22	1.18	143	204	147	12	0.50	134	197	132
	22	1.22	143	219	236	12	0.69	134	94	117
	22	0.45	134	264	263	11	0.48	147	280	198
	21	1.01	134	56	649	11	0.89	134	107	333
	21	1.27	143	233	203	11	0.53	143	243	123
	21	0.51	143	281	327	11	0.73	143	141	562
	21	0.95	134	276	601	10	0.30	143	202	94
	20	0.64	134	248	290	10	0.22	147	282	147
	20	0.88	143	212	131	10	0.79	143	250	475
	19	0.47	134	234	113	10	0.70	143	152	146
	19	1.12	147	249	284	9	0.38	147	277	291
	19	0.96	147	66	327	9	1.29	143	91	264
	19	0.67	143	167	131	9	0.79	147	244	82

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul	Vessel	Haul
Dover sole	9	0.85	147	229	162	8	0.61	143	297	338
	9	0.77	143	231	133	8	1.20	147	61	271
	9	0.98	147	67	353	8	0.68	147	169	176
	9	1.64	147	225	170	8	1.89	147	204	126
	9	0.63	143	138	116	8	1.25	134	173	282
	8	0.90	134	250	321	8	0.85	134	219	287
	8	0.63	143	303	374	8	0.86	134	267	279
Yellowfin sole	325	0.39	134	62	62	40	0.17	147	183	30
	288	0.49	143	60	42	37	0.82	143	61	96
	265	0.45	147	42	72	37	0.74	134	64	104
	264	0.33	147	41	28	35	0.26	143	57	32
	207	0.35	143	58	64	33	0.40	143	50	69
	143	0.30	143	59	65	30	0.38	147	105	30
	83	0.19	147	149	23	30	0.41	147	48	66
	65		147	45	48	29	0.12	147	180	34
	63	0.77	134	52	41	29	0.47	134	63	104
	60	0.61	147	43	118	27	0.24	147	163	35
	47	0.42	134	61	84	24	0.52	147	150	67
	44	0.41	147	47	62	18	0.47	134	91	63
	43	0.46	147	44	67	18	0.57	134	196	94
Other flatfish	322	2.93	143	135	27	29	1.08	147	188	73
	303	0.58	147	192	70	28	1.08	143	57	32
	121	1.79	147	42	72	28	0.94	147	41	28
	119	1.44	147	178	22	28	0.35	143	264	71
	112	2.28	134	52	41	28	0.66	147	177	28
	92	1.78	147	162	28	27	0.85	147	193	73
	85	1.34	143	148	39	27	1.10	147	181	32
	81	2.25	143	137	28	26	0.54	147	152	104
	71	0.99	147	129	46	25	1.42	134	61	84
	70	0.71	147	243	42	25	0.43	134	278	133
	68	0.45	147	185	55	24	1.51	143	48	25
	67	0.46	147	163	35	23	0.82	147	45	48
	43	1.02	147	189	76	23	0.61	147	245	50
	42	0.49	147	56	52	20	0.57	143	59	65
	42	0.38	147	47	62	20	0.44	134	175	78
	36	0.27	147	184	43	19	0.42	147	153	109
	36	1.75	143	149	41	19	1.10	147	132	53
	34	0.59	147	186	66	19	0.47	143	129	63
	33	0.38	147	187	67	18	1.75	134	53	78
	32	2.18	134	35	65	18	0.43	143	277	85
	30	0.26	147	183	30	17	0.34	147	257	70
	30	0.34	147	180	34	17	0.40	134	62	62
Salmon	44	3.07	134	168	97	16	3.97	143	178	87
	41	2.13	147	262	118	16	3.42	134	206	170
	38	3.10	134	198	149	14	3.33	134	148	86
	24	2.89	134	165	80	13	3.22	134	179	133
	23	2.46	134	166	72	12	3.29	134	149	91
	18	2.89	134	191	141	11	2.59	143	175	107
	18	3.02	134	167	94	10	5.90	143	179	82
	18	3.16	134	180	120	10	3.04	143	176	84

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Salmon	10	3.83	143	156	166	4	2.84	134	27	80
	10	2.94	134	183	167	4	3.94	147	230	137
	8	3.50	134	199	121	3	3.05	147	129	46
	7	1.89	147	144	82	3	5.46	143	203	85
	7	1.61	147	197	126	3	3.14	134	197	132
	7	3.36	147	187	67	3	2.61	134	194	89
	7	2.79	147	173	151	3	3.97	134	188	79
	6	2.13	147	132	53	3	3.75	134	184	133
	6	4.79	134	144	77	3	3.89	143	103	86
	6	5.94	143	287	96	3	2.49	147	258	122
	6	3.02	134	100	82	3	3.65	147	207	84
	6	4.81	134	214	122	3	5.98	147	192	70
	5	2.94	147	134	61	3	2.72	143	200	73
	5	10.28	143	188	78	3	5.71	134	116	87
	5	2.40	134	189	99	3	3.40	147	30	69
	5	2.89	143	152	146	3	2.58	147	206	90
	5	5.31	134	104	94	3	2.72	147	203	159
	5	2.61	134	136	81	3	2.07	147	196	91
	5	3.27	143	129	63	3	3.84	143	165	67
	5	6.71	134	213	119	3	8.32	134	218	135
	5	4.34	147	170	55	3	5.68	147	180	34
	5	2.86	134	177	152	3	3.05	147	171	76
	4	4.47	134	254	162	3	6.42	143	240	94
	4	4.60	143	209	155	3	3.76	134	61	84
	4	3.13	134	146	86	3	3.90	134	178	147
	4	7.98	143	135	27					
Skate unident.	68	38.23	147	7	47	23	48.32	134	136	81
	67	6.79	143	277	85	23	25.52	143	148	39
	63	14.27	143	234	34	22	25.22	147	192	70
	61	13.20	147	180	34	21	15.05	147	82	98
	60	24.38	134	128	43	21	7.10	143	259	210
	59	17.15	134	126	53	20	21.56	143	193	61
	54	24.27	147	185	55	20	8.53	147	243	42
	46	6.54	147	139	252	20	6.88	143	258	204
	44	19.61	147	56	52	20	22.81	143	151	77
	36	6.02	147	152	104	19	5.02	147	126	202
	32	8.88	147	167	198	19	42.00	134	51	97
	30	13.55	134	3	121	19	23.46	147	24	99
	30	10.79	147	172	175	18	44.00	147	151	66
	29	30.80	134	84	59	18	43.95	134	123	46
	29	7.80	147	181	32	17	13.00	147	115	155
	27	9.19	143	228	298	17	6.08	147	251	118
	25	17.37	134	135	53	17	13.16	147	200	132
	25	11.57	143	246	128	16	36.54	143	46	85
	24	17.20	147	147	93	16	36.10	143	28	79
	24	17.83	134	199	121	16	7.44	143	264	71
	24	8.01	134	252	208	15	5.43	147	131	133
	24	17.75	147	179	53	15	12.20	143	127	108
	24	50.80	134	91	63	15	12.48	147	113	158
	24	13.18	134	209	144	15	17.94	134	52	41
	23	18.17	134	235	122	15	15.83	134	4	166
	23	52.00	143	78	70	15	9.02	147	160	235

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul	Vessel	Haul
Skate	15	7.53	143	122	274	9	7.54	134	227	166
unident.	14	10.86	147	121	188	9	5.62	134	222	156
	14	11.39	143	231	133	9	13.16	134	219	287
	14	8.56	147	176	184	9	11.22	147	164	194
	14	15.20	134	181	47	9	7.37	143	260	210
	13	14.76	147	141	68	9	7.63	143	248	235
	13	32.28	143	116	158	9	6.38	143	243	123
	13	10.93	147	124	108	9	7.03	143	119	191
	13	15.56	143	211	144	8	10.18	147	140	64
	13	16.33	134	19	148	8	17.08	147	57	49
	13	8.42	147	54	78	8	18.76	143	187	78
	13	8.18	143	229	170	8	18.26	134	188	79
	13	27.44	134	130	55	8	7.19	134	238	133
	13	27.54	143	32	81	8	18.60	134	80	189
	13	14.61	143	149	41	8	9.38	147	142	56
	12	3.58	147	153	109	8	3.89	143	233	203
	12	13.43	147	133	63	8	8.81	134	103	96
	12	14.52	143	208	123	8	16.52	147	28	71
	12	27.06	147	110	45	8	6.74	147	23	175
	12	13.69	147	236	115	8	17.69	147	196	91
	12	13.33	147	75	80	8	17.75	143	161	81
	12	7.20	147	166	107	8	11.03	134	214	122
	12	14.66	147	209	71	8	4.38	147	156	244
	12	8.90	147	162	28	8	9.40	143	257	183
	11	25.92	147	80	92	7	4.17	147	136	165
	11	4.35	147	212	172	7	5.59	134	112	249
	11	11.40	143	200	73	7	16.21	143	132	35
	11	8.79	134	211	143	7	2.20	143	113	163
	10	11.78	134	145	93	7	16.58	143	110	147
	10	6.16	147	276	391	7	14.33	147	248	120
	10	12.00	147	256	109	7	2.58	143	204	147
	10	22.58	147	245	50	7	14.30	147	30	69
	10	11.32	134	13	82	7	15.64	143	18	51
	10	5.20	143	226	246	7	14.62	147	199	142
	10	7.40	147	155	247	7	3.94	134	221	298
	10	11.65	134	178	147	7	18.54	134	173	282
	10	11.89	143	146	129	7	16.41	147	163	35
	9	10.51	134	236	117	6	5.28	147	213	218
	9	2.69	147	117	193	6	4.18	134	237	283
	9	19.78	147	108	79	6	3.17	147	282	147
	9	20.20	134	47	71	6	14.22	134	53	78
	9	20.08	134	45	98	6	12.99	143	69	129
	9	6.84	143	92	114	6	3.61	147	217	238
	9	9.32	134	27	80	6	14.97	147	146	62
	9	10.54	147	104	124	6	13.74	147	210	73
	9	9.65	147	65	128	6	8.05	143	225	184
	9	19.32	143	45	85	6	12.86	143	27	81
	9	7.40	147	216	208	6	8.37	134	114	250
	9	5.49	143	235	190	6	13.05	147	33	102
	9	3.65	134	113	248	6	6.28	147	203	159
	9	8.41	147	13	87	6	11.98	147	195	121
	9	9.32	147	3	120	6	6.78	134	93	174
	9	11.92	134	218	135	6	7.07	143	175	107

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul	Vessel	Haul
Skate	6	11.91	147	178	22	5	2.35	143	213	194
unident.	6	4.90	134	177	152	5	11.30	143	212	131
	6	4.92	134	276	601	5	12.90	134	183	167
	5	14.15	134	257	179	5	10.06	134	164	139
	5	12.59	147	134	61	4	1.70	147	137	190
	5	6.03	147	127	249	4	9.49	147	73	155
	5	11.04	147	109	48	4	9.83	143	194	199
	5	6.11	134	245	156	4	9.66	143	188	78
	5	5.76	134	234	113	4	10.79	134	146	86
	5	11.53	134	94	117	4	10.46	134	197	132
	5	11.74	147	120	180	4	8.55	147	261	89
	5	11.28	143	100	132	4	3.73	134	239	31
	5	12.15	147	249	284	4	3.74	143	128	211
	5	11.65	147	233	160	4	10.66	134	59	161
	5	3.91	147	230	137	4	8.00	134	58	50
	5	13.30	143	173	119	4	8.31	147	105	30
	5	11.35	143	67	142	4	8.51	147	125	91
	5	12.19	147	50	92	4	9.93	147	86	175
	5	5.80	147	224	161	4	7.92	147	63	119
	5	6.19	147	135	161	4	4.83	147	53	148
	5	2.45	143	220	230	4	8.81	147	228	165
	5	3.22	134	115	216	4	10.86	143	224	196
	5	3.90	134	110	210	4	8.71	147	25	81
	5	12.34	147	27	70	4	1.99	147	175	206
	5	10.66	147	211	92	4	10.49	147	128	118
	5	10.38	143	268	98	4	8.33	147	183	30
	5	10.64	143	14	82	4	9.95	134	132	271
	5	11.30	134	174	68	4	9.34	143	166	66
	5	11.92	143	176	84	4	2.13	143	156	166
	5	6.54	134	226	143	4	5.02	134	224	135
	5	3.79	134	223	165	4	8.88	143	261	158
	5	11.72	134	208	141	4	8.33	143	150	68
	5	4.45	147	184	43	4	9.70	134	273	255
	5	6.26	147	168	169	4	10.55	134	169	130
	5	3.65	147	157	232					
Shark	364	2.57	143	190	52	51	122.00	147	126	202
unident.	269	601.00	134	53	78	49	114.00	143	113	163
	195	221.00	134	199	121	48	2.64	147	210	73
	171	2.62	143	234	34	47	118.00	147	127	249
	138	2.84	147	182	19	47	100.00	147	155	247
	133	154.00	143	61	96	41	3.04	147	181	32
	131	152.00	147	123	277	39	104.00	147	158	230
	124	244.00	147	13	87	36	2.38	147	209	71
	80	46.88	147	166	107	35	1.75	143	264	71
	76	2.38	147	260	162	31	84.00	147	204	126
	64	71.98	147	137	190	25	28.50	134	66	103
	56	1.92	143	222	134	25	2.94	134	181	47
	56	136.00	134	180	120	24	2.45	134	238	133
	55	25.81	134	200	131	24	25.58	147	199	142
	55	124.00	143	106	98	23	3.24	147	183	30
	54	108.00	143	197	198	22	52.00	134	103	96
	52	142.00	143	128	211	22	48.00	143	7	106

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Shark	21	2.78	134	239	31	21	3.59	134	174	68
unident.	21	49.00	143	37	88					
Yellow	36	0.83	143	63	50	5	0.50	134	62	62
Irish	31	0.79	147	21	91	4	0.34	134	145	93
Lord	30	0.49	147	43	118	4	0.26	143	78	70
	22	0.81	134	49	23	4	0.74	143	49	18
	21	0.81	134	174	68	4	0.48	147	166	107
	16	0.76	134	29	82	4	0.43	143	154	68
	16	0.49	143	28	79	3	1.03	143	57	32
	14	0.61	143	198	121	3	0.71	143	50	69
	14	0.80	143	48	25	3	0.90	143	47	38
	13	0.74	147	105	30	3	0.57	147	40	98
	13	0.57	147	75	80	3	0.79	143	18	51
	11	0.35	134	8	145	3	0.52	143	14	82
	11	0.68	143	27	81	3	0.49	143	167	131
	9	0.63	134	52	41	3	0.52	134	65	85
	9	0.50	134	50	43	2	0.63	134	184	133
	9	0.96	143	70	42	2	0.43	134	54	69
	9	0.69	143	58	64	2	0.59	134	53	78
	9	0.60	147	46	50	2	0.68	143	60	42
	7	0.46	134	30	75	2	0.66	143	59	65
	7	0.56	134	88	84	2	0.74	134	10	100
	6	0.76	134	28	66	2	0.72	143	40	72
	6	0.58	147	39	73	2	0.45	147	13	87
	6	0.57	147	25	81	2	0.28	143	163	62
	6	0.84	134	72	82	2	0.60	147	170	55
	5	1.05	134	60	36	2	0.60	147	161	42
	5	0.39	147	125	91	2	0.57	134	61	84
	5	0.39	134	3	121					
Bigmouth	9	10.32	134	92	179	3	7.24	147	172	175
sculpin	8	8.73	134	3	121	3	1.91	134	176	156
	8	7.11	147	175	206	2	3.62	143	85	225
	7	4.06	147	153	109	2	1.80	143	69	129
	7	7.72	134	140	132	2	1.23	147	66	327
	6	6.32	143	143	189	2	3.80	147	224	161
	5	5.44	147	73	155	2	5.51	143	227	161
	5	5.30	143	215	227	2	5.03	143	223	180
	4	8.76	147	232	135	2	4.03	134	118	195
	4	9.92	143	226	246	2	4.26	134	139	232
	4	10.24	134	223	165	2	3.52	134	157	171
	4	10.14	134	205	176	2	6.38	134	221	298
	4	8.65	147	157	232	2	2.11	134	196	94
	3	6.83	143	202	94	2	4.48	143	153	154
	3	7.41	143	183	281	2	3.81	147	155	247
	3	6.71	134	98	188	2	3.89	134	61	84
	3	6.58	143	89	256	2	5.89	143	117	215
	3	3.29	143	67	142	2	5.58	134	265	323
	3	7.06	134	117	196	1	3.23	147	115	155
	3	7.13	134	160	183	1	1.18	134	51	97
	3	8.02	134	220	284	1	1.31	143	82	218
	3	6.90	134	206	170	1	1.21	147	100	167

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul	Vessel	Haul
Bigmouth sculpin	1	0.53	147	60	110	1	4.74	147	167	198
	1	3.71	134	114	250	1	1.69	134	63	104
	1	1.01	147	200	132	1	0.96	134	178	147
	1	1.14	134	90	85	1	2.07	134	169	130
	1	2.80	143	73	160					
Great sculpin	14	4.26	147	43	118	2	1.47	147	80	92
	10	3.81	134	174	68	2	1.13	143	57	32
	9	2.75	143	150	68	2	1.77	143	50	69
	8	2.06	147	148	87	2	2.68	147	75	80
	8	2.49	147	129	46	2	1.31	147	142	56
	8	2.11	134	197	132	2	2.44	143	18	51
	7	1.76	134	143	136	2	5.18	134	88	84
	7	2.45	134	29	82	2	2.08	134	74	83
	6	3.42	147	109	48	2	4.18	147	161	42
	6	2.02	134	52	41	2	2.44	134	63	104
	6	1.14	134	50	43	2	2.06	134	179	133
	6	4.76	147	78	97	2	1.87	143	138	116
	6	3.47	143	61	96	1	0.81	147	153	109
	5	2.68	134	199	121	1	0.77	147	147	93
	5	3.91	147	44	67	1	2.11	143	198	121
	5	5.60	147	199	142	1	1.41	134	145	93
	5	5.63	134	64	104	1	2.36	134	200	131
	5	4.05	134	61	84	1	2.02	147	110	45
	5	3.90	134	181	47	1	1.07	147	108	79
	4	2.20	147	141	68	1	1.18	134	35	65
	4	1.45	134	28	66	1	1.03	147	106	37
	4	4.13	147	47	62	1	1.14	143	63	50
	4	4.68	143	152	146	1	1.37	143	62	78
	4	1.56	147	21	91	1	1.22	143	60	42
	4	4.82	134	177	152	1	1.39	143	46	85
	3	2.77	147	152	104	1	2.28	147	70	72
	3	3.96	147	111	45	1	1.45	147	46	50
	3	3.15	147	105	30	1	2.59	147	166	107
	3	3.36	143	70	42	1	1.11	147	192	70
	3	3.39	147	48	66	1	0.60	143	17	65
	3	3.70	143	28	79	1	1.16	147	143	58
	3	0.94	143	19	64	1	1.34	134	62	62
	3	1.17	147	198	148	1	2.48	143	154	68
	3	1.33	134	89	87	1	1.37	147	186	66
	3	1.99	134	196	94	1	0.80	147	163	35
	3	3.20	143	163	62	1	1.26	134	66	103
	2	1.80	147	149	23	1	3.04	134	183	167
	2	1.24	134	53	78	1	1.20	143	147	92
	2	4.78	134	49	23	1	2.69	134	176	156
Other sculpins	10	0.83	147	150	67	3	0.95	147	185	55
	7	1.59	147	148	87	2	0.85	143	59	65
	6	0.05	134	170	542	2	0.59	143	57	32
	5	1.40	134	196	94	2	1.41	143	50	69
	3	0.11	143	82	218	2	0.81	147	44	67
	3	0.05	134	6	337	2	0.83	147	42	72
	3	0.46	147	41	28	2	0.05	134	173	282

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Other	2	1.32	147	163	35	1	0.09	143	72	222
sculpins	2	0.06	143	142	247	1	1.42	143	58	64
	1	0.06	147	153	109	1	0.05	134	5	326
	1	0.09	147	152	104	1	0.09	134	3	121
	1	0.06	134	154	296	1	0.05	134	2	151
	1	0.49	134	199	121	1	0.07	134	1	134
	1	0.06	134	57	243	1	0.09	143	227	161
	1	0.08	147	282	147	1	0.15	147	128	118
	1	0.07	147	268	220	1	0.06	134	139	232
	1	0.17	134	51	97	1	0.06	134	281	211
	1	0.05	143	87	320	1	0.64	147	184	43
	1	0.08	143	85	225	1	0.73	134	64	104
	1	0.13	143	83	173	1	0.08	134	178	147
	1	0.08	143	79	112	1	0.06	143	93	263
Smelts	290	0.02	134	192	102	26	0.04	147	260	162
	287	0.03	143	124	189	26	0.04	134	115	216
	165	0.04	147	165	185	24	0.03	143	197	198
	143	0.05	147	137	190	23	0.03	147	121	188
	143	0.05	147	164	194	23	0.04	134	201	245
	128	0.03	143	221	182	22	0.04	143	125	190
	79	0.04	147	157	232	22	0.05	147	135	161
	75	0.04	147	225	170	20	0.04	147	242	107
	67	0.03	143	231	133	19	0.04	147	116	183
	40	0.01	147	170	55	17	0.03	147	259	132
	38	0.03	147	280	198	17	0.03	147	215	219
	36	0.03	143	139	224	17	0.05	147	214	232
	35	0.04	143	120	193	17	0.04	134	231	176
	34	0.03	147	120	180	16	0.03	143	119	191
	29	0.03	143	126	193	16	0.05	134	272	264
	28	0.04	134	204	290	15	0.03	147	226	159
	27	0.04	147	136	165	15	0.04	147	217	238
	27	0.02	134	59	161	15	0.03	143	243	123
Giant grenadier	1168	2.99	134	106	414	160	3.12	134	79	381
	878	3.01	134	5	326	155	1.89	134	242	666
	796	2.51	147	68	438	150	2.90	143	181	483
	773	2.47	143	251	553	150	3.09	134	243	431
	733	3.19	134	14	357	125	3.53	134	133	571
	669	3.42	134	163	358	125	3.60	134	162	360
	614	2.73	143	112	523	121	3.64	134	185	376
	544	3.64	134	170	542	120	2.41	143	141	562
	446	3.51	134	97	336	99	4.29	143	171	333
	445	3.11	143	88	402	98	3.12	134	55	557
	397	3.71	147	11	316	95	3.20	143	182	503
	384	2.71	143	10	549	87	2.57	134	171	530
	354	2.95	147	67	353	85	3.36	147	66	327
	287	3.00	143	9	522	68	2.19	143	256	566
	234	3.21	134	6	337	67	3.91	147	17	256
	229	3.24	134	7	346	64	2.62	143	280	514
	228	2.81	134	56	649	61	3.79	134	132	271
	197	2.83	134	186	448	47	4.34	134	161	399
	173	2.69	143	170	455	46	3.73	134	57	243

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Giant grenadier	46	3.37	143	74	322	25	3.45	147	20	291
	33	3.44	147	62	401	23	3.93	143	89	256
	28	2.50	143	250	475	20	4.00	143	81	345
	26	2.90	147	265	440					
Other fish	132	0.77	143	288	92	13	0.23	143	293	164
	102	0.13	147	282	147	13	0.08	143	284	660
	94	4.28	143	265	133	13	0.17	134	269	113
	77	0.04	134	170	542	12	0.99	147	139	252
	71	0.60	147	283	199	12	3.10	147	264	154
	59	0.61	134	266	85	12	0.60	143	282	334
	47	0.09	143	242	120	12	7.57	147	223	122
	43	1.24	147	278	300	12	2.56	143	273	88
	42	0.25	147	269	211	12	0.14	143	246	128
	37	1.18	134	288	250	12	0.61	134	278	133
	34	0.77	147	274	90	12	0.59	134	262	98
	30	0.46	143	287	96	11	1.08	147	144	82
	29	0.07	147	245	50	10	1.01	147	60	110
	28	0.46	147	281	105	10	0.15	147	200	132
	28	0.20	147	251	118	10	0.43	134	284	116
	28	0.04	147	243	42	10	0.27	134	268	281
	25	0.07	147	252	59	10	0.53	134	267	279
	25	0.45	143	289	95	9	5.78	147	222	77
	25	1.27	134	261	117	9	0.12	134	56	649
	24	0.90	147	258	122	9	0.30	147	259	132
	24	0.25	143	278	86	9	0.36	134	279	141
	23	4.71	143	143	189	8	0.41	134	257	179
	23	0.24	134	277	93	8	19.08	134	131	99
	22	0.11	134	175	78	8	0.70	147	267	101
	21	0.08	134	276	601	8	16.42	134	28	66
	19	2.49	143	108	98	8	3.53	143	266	121
	19	2.80	143	92	114	8	1.14	143	303	374
	17	1.09	147	285	136	8	6.59	147	209	71
	17	0.30	143	87	320	8	6.24	143	216	130
	17	0.93	143	277	85	7	7.96	134	189	99
	16	3.14	143	275	125	7	1.28	147	261	89
	15	0.28	147	147	93	7	0.15	134	239	31
	15	0.37	134	285	385	7	3.49	143	279	221
	15	5.40	134	226	143	7	0.30	134	52	41
	14	0.14	134	55	557	7	0.10	147	257	70
	14	3.51	143	267	124	7	0.30	143	292	152
	14	2.57	134	216	123	7	5.68	134	210	141
	14	2.66	143	260	210	7	8.52	134	225	143
	13	0.08	143	304	667	7	0.14	143	141	562
	13	14.85	143	211	144					
Bairdi tanner crab	152	0.59	147	152	104	10	0.27	134	52	41
	113	0.37	147	153	109	10	0.51	134	63	104
	16	0.65	147	147	93	9	0.32	134	51	97
	15	0.35	134	143	136	8	0.26	147	128	118
	11	0.44	143	156	166					

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight		Bottom depth		CPUE (kg/ha)	Individual weight		Bottom depth	
		Vessel	Haul	(m)			Vessel	Haul	(m)	
Golden king crab	2	1.40	147	66	327	1	0.39	134	5	326
	1	1.49	143	89	256	1	2.08	143	217	151
	1	3.32	134	7	346	1	0.82	143	74	322
Red king crab	39	2.60	147	147	93	0	0.10	147	175	206
	3	3.52	147	44	67	0	0.10	147	186	66
	2	5.45	147	179	53	0	0.22	147	185	55
	1	2.27	134	221	298					
Northern shrimp	17	0.01	147	251	118	2	0.00	147	165	185
	11	0.00	147	136	165	2	0.01	143	243	123
	11	0.01	147	269	211	1	0.01	134	254	162
	7	0.01	143	194	199	1	0.00	147	73	155
	6	0.01	143	199	195	1	0.01	134	234	113
	5	0.01	147	200	132	1	0.01	134	233	196
	4	0.01	143	197	198	1	0.01	147	283	199
	4	0.01	143	242	120	1	0.01	147	280	198
	3	0.00	147	103	177	1	0.01	147	256	109
	3	0.00	147	102	195	1	0.01	147	254	168
	3	0.00	147	199	142	1	0.00	147	252	59
	3	0.00	147	172	175	1	0.00	143	221	182
	2	0.00	147	139	252	1	0.00	147	166	107
	2	0.00	147	138	197	1	0.01	143	235	190
	2	0.00	147	131	133	1	0.00	143	230	128
	2	0.01	134	199	121	1	0.00	143	229	170
	2	0.01	147	260	162	1	0.00	143	228	298
	2	0.00	147	101	180	1	0.00	143	227	161
	2	0.00	147	86	175	1	0.01	143	226	246
	2	0.00	147	246	95	1	0.00	143	225	184
	2	0.01	147	244	82	1	0.00	143	224	196
	2	0.01	147	242	107	1	0.00	147	198	148
	2	0.01	143	195	180	1	0.00	134	231	176
	2	0.00	143	231	133	1	0.01	147	167	198
	2	0.00	147	216	208	1	0.01	147	164	194
	2	0.00	147	212	172	1	0.01	143	245	96
	2	0.01	147	128	118	1	0.01	143	244	118
	2	0.01	134	232	194	1	0.00	143	119	191
	2	0.00	147	168	169					
Sidestripe shrimp	9	0.01	147	251	118	1	0.01	143	199	195
	9	0.01	147	157	232	1	0.01	143	197	198
	5	0.01	143	236	216	1	0.01	147	213	218
	3	0.01	147	139	252	1	0.01	147	123	277
	3	0.02	147	282	147	1	0.01	147	283	199
	3	0.01	147	269	211	1	0.01	147	260	162
	2	0.02	147	216	208	1	0.02	147	242	107
	2	0.02	143	235	190	1	0.01	143	195	180
	2	0.01	143	228	298	1	0.02	147	217	238
	2	0.02	143	227	161	1	0.01	147	215	219
	2	0.02	147	164	194	1	0.01	147	212	172
	2	0.01	143	139	224	1	0.01	147	160	235
	1	0.01	147	138	197	1	0.02	143	230	128
	1	0.02	147	136	165	1	0.02	143	229	170

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul	Vessel	Haul
Sidestripe shrimp	1	0.01	143	226	246	1	0.01	147	165	185
	1	0.01	143	225	184	1	0.01	147	159	212
	1	0.01	143	224	196	1	0.01	147	156	244
	1	0.01	143	223	180	1	0.02	143	254	202
	1	0.02	143	220	230	1	0.02	143	248	235
	1	0.01	134	113	248	1	0.01	143	213	194
	1	0.01	134	110	210	1	0.01	143	122	274
	1	0.01	147	158	230	1	0.01	143	117	215
	1	0.01	143	158	237	1	0.02	134	267	279
	1	0.02	134	204	290					
Scallop unident.	13	0.35	147	153	109	1	0.04	134	31	100
	7	0.37	147	146	62	1	0.02	147	90	91
	5	0.35	147	152	104	1	0.03	134	10	100
	2	0.02	134	102	82	1	0.01	134	103	96
	1	0.34	147	151	66	1	0.02	134	101	82
	1	0.31	147	147	93	1	0.01	134	100	82
	1	0.03	134	146	86	1	0.44	134	90	85
	1	0.08	143	109	101	1	0.05	147	13	87
	1	0.03	143	105	99	1	0.01	134	104	94
	1	0.24	134	41	111	1	0.03	143	106	98
	1	0.22	134	40	109	1	0.03	143	151	77
	1	0.01	143	95	122					
Magistrate armhook squid	14		143	228	298	1	0.14	134	256	262
	13	0.73	147	275	485	1	0.85	147	139	252
	10	0.20	147	17	256	1	0.19	143	183	281
	7	0.15	143	81	345	1	0.26	134	248	290
	7	0.23	134	285	385	1	0.07	134	243	431
	6	0.26	134	57	243	1	0.42	134	237	283
	6	0.54	134	265	323	1	0.10	134	80	189
	5	0.56	147	277	291	1	0.19	143	121	265
	5	0.10	147	11	316	1	0.10	147	276	391
	5	0.03	134	170	542	1	0.47	147	268	220
	4	0.08	143	6	260	1	0.29	143	279	221
	4	0.32	143	122	274	1	0.20	143	89	256
	3	0.26	143	123	249	1	0.27	143	85	225
	3	0.19	147	123	277	1	0.10	143	83	173
	3	0.58	147	279	298	1	0.12	147	250	251
	3	0.21	143	72	222	1	0.32	143	250	475
	3	0.24	143	282	334	1	0.35	143	303	374
	3	0.25	147	66	327	1	0.34	134	24	177
	3	0.16	147	160	235	1	0.39	134	22	144
	3	0.20	134	106	414	1	0.15	134	19	148
	3	0.51	147	20	291	1	0.19	134	6	337
	3	0.07	143	281	327	1	0.37	134	4	166
	3	0.19	147	16	272	1	0.63	147	68	438
	3	0.08	143	171	333	1	0.74	143	44	365
	2	0.54	147	278	300	1	0.07	143	184	294
	2	0.38	147	269	211	1	0.70	143	235	190
	2	0.41	143	297	338	1	1.06	143	233	203
	2	0.37	143	226	246	1	0.30	143	229	170
	2	0.19	134	97	336	1	0.08	134	113	248

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Magistrate armhook squid	1	0.19	134	107	333	1	0.31	147	156	244
	1	0.17	147	18	158	1	0.23	143	249	406
	1	0.51	143	11	221	1	0.42	143	248	235
	1	0.65	143	8	172	1	0.29	143	74	322
	1	0.31	134	79	381	1	0.45	134	276	601
	1	0.18	143	73	160	1	0.62	134	272	264
	1	0.01	134	204	290	1	0.09	134	162	360
Sponge	803		134	1	134	42		134	8	145
	100		134	6	337	32	0.26	147	3	120
	90		134	29	82	20	8.05	134	9	86
	82		134	2	151					
Starfish	65	1.39	134	135	53	5	0.71	134	131	99
	65	1.80	134	130	55	5	0.60	143	178	87
	16	0.84	143	131	26	5	0.67	147	54	78
	13	2.65	147	147	93	5	0.54	147	41	28
	13	0.20	134	64	104	5	0.54	147	208	63
	12	0.44	143	190	52	5	0.69	134	91	63
	9	0.14	147	42	72	4	0.31	134	144	77
	7	0.01	134	59	161	4	0.01	134	41	111
	5	1.54	134	143	136	4	0.96	134	137	93
Stony coral unident.	15		134	1	134	3	0.07	147	2	113
	8		143	280	514	2		134	15	98
	3	0.03	147	3	120					
Soft coral	102		134	285	385	9		134	15	98
	35		143	83	173	9		134	286	288
	10		134	253	209	6	8.01	134	216	123
Octopus	13	7.50	147	70	72	3	3.53	143	77	75
	8	9.52	143	48	25	3	5.85	143	62	78
	7	7.59	134	50	43	3	6.47	147	25	81
	7	16.40	143	70	42	3	6.28	134	88	84
	6	12.45	134	51	97	2	3.85	147	46	50
	6	12.29	147	78	97	2	5.59	143	37	88
	6	14.19	134	93	174	2	5.26	134	77	135
	5	4.91	143	198	121	2	3.86	143	119	191
	5	11.01	147	122	82	1	2.18	147	147	93
	5	13.06	147	117	193	1	0.88	134	242	666
	5	10.59	147	47	62	1	3.08	134	44	81
	5	10.57	147	197	126	1	1.34	143	280	514
	5	10.93	143	14	82	1	0.77	134	14	357
	5	11.88	134	68	142	1	0.52	147	62	401
	4	8.92	134	52	41	1	3.21	147	6	120
	4	7.76	147	201	59	1	2.09	143	153	154
	3	7.74	134	153	195	1	0.45	143	90	222
Snail	21	0.09	147	153	109	2	0.05	147	46	50
	7	0.09	147	152	104	2	0.03	147	211	92
	4	0.08	147	147	93	2	0.05	143	131	26
	4	0.04	143	198	121					

Principal Species CPUE and average individual weight by vessel, haul, and depth during the 2003 Gulf of Alaska survey.

Species	CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)		CPUE (kg/ha)	Individual weight (kg)		Bottom depth (m)	
		Vessel	Haul				Vessel	Haul		
Other	129	0.09	147	147	93	12	0.42	147	171	76
invertebrate	80	0.06	147	153	109	11	0.25	143	192	63
	67	0.07	134	29	82	10	0.22	143	186	
	51	6.13	134	174	68	10	0.15	134	112	249
	40	0.60	143	161	81	10	0.03	147	283	199
	39	0.02	134	116	87	10	0.28	147	154	72
	35	0.41	134	46	78	9	1.27	143	113	163
	31	0.18	143	163	62	9	0.19	134	50	43
	29	0.72	147	109	48	9	0.20	134	23	173
	28	0.03	134	127	41	9	0.02	147	62	401
	27	0.23	143	191	62	9	0.02	143	218	380
	24	0.24	147	111	45	9	0.20	147	128	118
	24	0.60	147	105	30	9	1.04	143	90	222
	22	0.16	147	67	353	8	0.03	134	122	86
	22	0.13	147	175	206	8	0.48	147	282	147
	22	0.48	143	166	66	8	0.01	147	276	391
	19	0.14	134	60	36	8	0.39	134	47	71
	18	0.27	143	58	64	8	0.36	147	49	54
	18	0.21	147	46	50	8	0.06	147	217	238
	18	0.71	134	89	87	8	0.02	134	130	55
	17	0.07	147	152	104	8	0.43	143	43	92
	17	0.15	147	133	63	8	0.17	134	107	333
	17	0.60	147	170	55	8	0.01	147	41	28
	17	0.12	134	61	84	8	0.05	143	269	436
	16	0.19	143	14	82	8	0.43	134	71	79
	15	0.10	134	52	41	8	0.14	143	177	80
	14	0.19	143	131	26	7	0.58	147	149	23
	14	0.03	134	170	542	7	0.03	143	198	121
	13	0.72	147	134	61	7	0.25	134	193	84
	13	0.50	143	39	73	7	0.96	147	268	220
	12	0.24	147	108	79	7	0.15	134	15	98
	12	0.02	147	265	440	7	0.05	147	208	63
	12	0.19	143	91	264	7	0.76	134	87	75
	12	0.23	143	83	173	7	0.13	143	176	84
	12	0.13	134	62	62	7	0.15	143	238	81