



**Northwest and
Alaska Fisheries
Center**

National Marine
Fisheries Service

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NWAFRC PROCESSED REPORT 88-04

PacFIN Joint Venture
Logbook Data:

1985
Statistical Reports by INPFC Area,
with
Annual Reports
for all Areas Combined,
1983-1987

March 1988

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PACFIN JOINT VENTURE LOGBOOK DATA:
1985 STATISTICAL REPORTS BY INPFC AREA,
WITH ANNUAL REPORTS FOR ALL AREAS
COMBINED, 1983-1987

by

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The Pacific Fisheries Information Network (PacFIN) voluntary joint venture logbook database contains detailed information about U. S. joint venture groundfish fisheries in the Bering Sea and northeastern Pacific Ocean. This information has been submitted voluntarily by participating fishermen with the understanding that all information would be handled in a manner to preserve the confidentiality of the individual data submissions.

Participation by fishermen in this logbook program increased between 1982, the first year of data collection, and 1985. The marked increase from about 8,800 tow records received in 1984 to about 15,700 tow records received in 1985 resulted from the efforts of biologists from the Alaska Department of Fish and Game who personally collected logsheets from catcher boat skippers when they returned to Alaskan ports. In 1986, assistance from ADF&G ceased due to lack of funds, and subsequent data submissions decreased. Submissions from individual catcher boats dropped from 112 in 1985 to 6 in 1987. However, the decline in the number of catcher boats submitting data has not caused a proportionate drop in the number of tow records or in total catch represented in the database since the major portion of the data submitted the last two years came from processor vessels which increased effort and catch over previous levels.

Year of Data	Tow Records	No. of Vessels Submitting Data (No. of Submissions)		Catch(t)
		Catcher Boats	Processors	
1982	723	2 (2)	0	a
1983	3,953	12 (13)	4 (4)	117,901
1984	8,832	30 (47)	3 (7)	225,798
1985	15,719	64 (112)	8 (10)	395,162
1986	6,586	26 (30)	5 (9)	251,781
1987	6,713	6 (6)	5 (9)	280,500

The number of vessels represented in the database is greater than the number submitting data since a single catcher boat usually delivers to several processors and a processor usually receives deliveries from many catcher boats.

^aData from 1982 was submitted by less than three vessels, the minimum number needed to maintain confidentiality, and therefore cannot be given.

The number of vessels represented in the database are as follows:

<u>Year of Data</u>	<u>Catcher Boats</u>	<u>Processors</u>
1982	2	8
1983	16	17
1984	36	70
1985	71	101
1986	39	67
1987	19	52
All years	90	167

Data have been most consistently submitted by processors which have requested in return computer listings and statistics summarizing activities of their vessels and catch during a specific fishing season.

An example of a page from a logbook is given in Figure 1. Space is provided on each logsheet for the recording of the following information: date of tow, tow number (designated by the catcher boat), processor vessel identification, processor vessel delivery number (designated by the processor vessel upon receipt of the trawl codend), the time and location of the start and finish of the net tow, and the time and location of the codend delivery. In addition, the following miscellaneous measurements on fishing conditions are recorded: depth (in fathoms) of bottom and net, temperature (in C) at net, type of net and engine speed (in RPM's). Catch weights (in metric tons) also are recorded: 1) hail weight--the catcher boat estimate of codend weight; 2) catch by categories--the processor vessel's weight breakdown of catch by species or species groups; and, 3) total--the processor vessel's total catch estimate of codend weight.

This report contains a series of data summaries for 1985, organized by the International North Pacific Fisheries Commission (INPFC) statistical areas shown in Figure 2. The 1985 catch total for all areas in the voluntary joint venture logbook database was 395,162 t, or 45 percent of the actual joint venture catch total of 883,567 t as recorded in the PacFIN central database. For all areas in 1985, data were included from 71 catcher boats and 101 processor vessels, which recorded a total of 57,300 hours of trawl effort. Alaskan data accounted for 98.7 percent of the tow records of known area, 73 percent from Bering Sea Area I alone. Fishing was recorded in eight statistical areas: Bering Sea Area I, II, and IV, Shumagin, Chirikof, Kodiak, Vancouver, and Columbia. Less than three vessels, the minimum number of vessels needed to maintain confidentiality, submitted data from the Vancouver area in 1985 and, therefore, data from this area could not be included in this report.

Annual data summaries for all areas combined are given for 1983-1987. The 1982 summary could not be included for reasons of confidentiality, since less than three vessels submitted data.

JOINT VENTURE TRAWL LOG

Vessel Name Bering JV
 Official Number 12345678
 Crew Size 4

Departure May 3 1983
Month Day Year
 Return May 5 1983
Month Day Year
 Gallons of Fuel Used 750

DATE mo/day	T O W N I D	PROCESSING VESSEL (PV) DELIVERY ID NO (ID)	TIME local 24-hr clock	AREA				DEPTH fathoms		TEMP al net °C	NET TYPE	RPM	HAIL WEIGHT mt	CATCH BY CATEGORIES					COMMENTS
				LORAN OR LATITUDE		LORAN OR LONGITUDE		BLOCK NO.	Bottom					Net	Yellowfin sole	Cod	Meal	TOTAL	
				Ch	microseconds	Ch	microseconds												
5/4	1	PV JV MARU	Set 0131	19	33000	19	45500	29	4	3	1750	20	15.3	2.4	2.5	20.2			
		ID 5-4-1	Up 0422	10y	32950	10z	45520												
		Del 0450		32945		45523													
5/4	2	PV JV MARU	Set 0630		32841		45550	33	4	3	1700	25	24.5	3.2	0.2	27.9			
		ID 5-4-2	Up 0850		33002		45600												
		Del 0920		33009		45610													
5/4	3	PV JV MARU	Set 1200		33100		45760	25	5	3	1650	20	14.5	1.4	2.3	18.2			
		ID 5-4-3	Up 1510		33175		45769												
		Del 1530		33180		45780													
5/5	4	PV JV MARU	Set 0007		33300		46250	29	5	3	1650	15	10.6	3.0	1.1	14.7			
		ID 5-5-1	Up 0316		33250		46255												
		Del 0350		33255		46260													
5/5	5	PV JV MARU	Set 0521		33100		46300	28	6	3	1400	3	2.5	0.7	3.2	Engine problems - returned to port			
		ID 5-5-2	Up 0818		33160		46325												
		Del 0840		33155		46300													
		PV	Set																
		ID	Up																
		ID	Del																

Figure 1. - Example of Alaska, Washington, Oregon, and California joint venture logsheet.

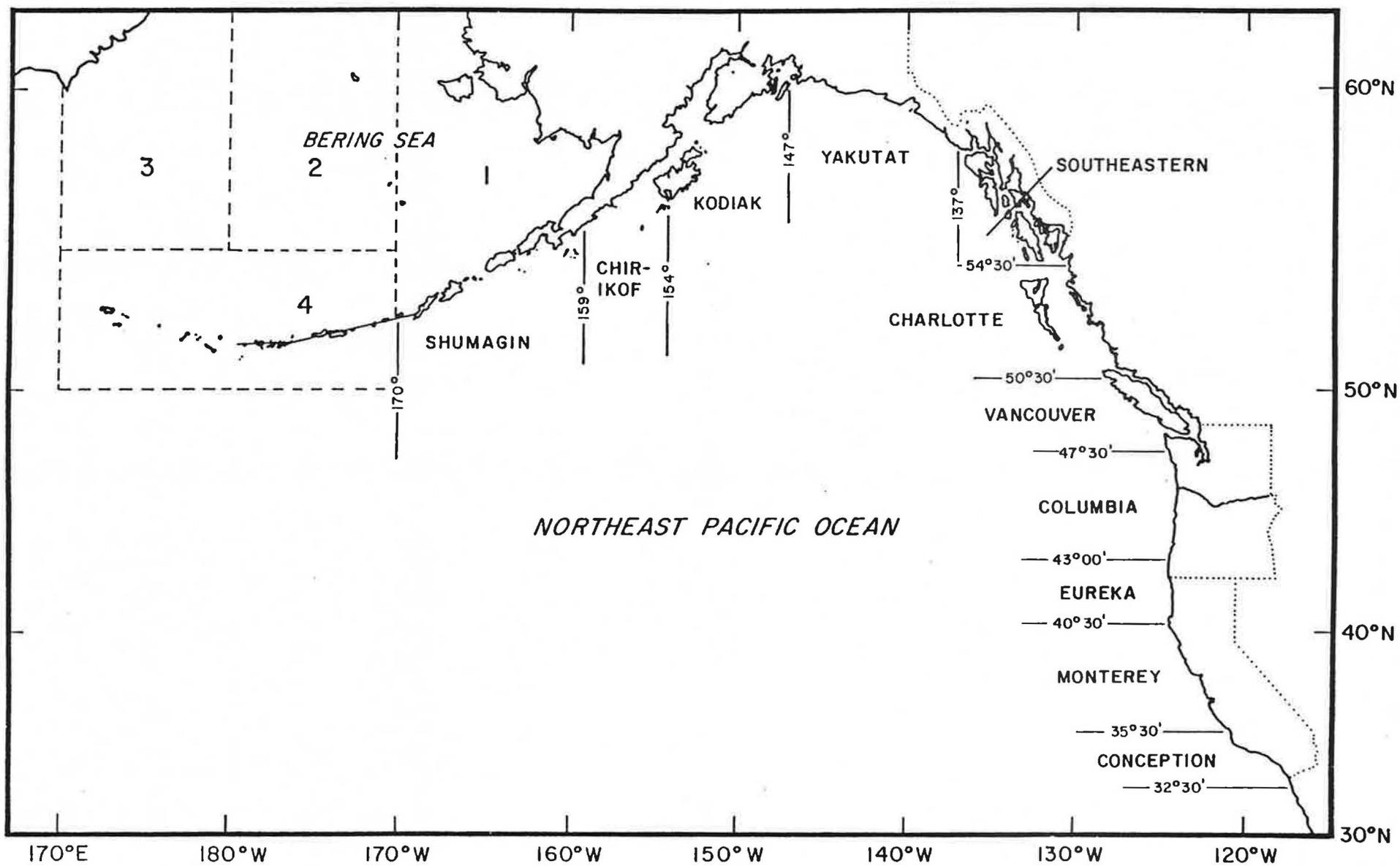


Figure 2. - Statistical areas of the Bering Sea and northeastern Pacific Ocean

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PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE
 08FEB88 14:33
 SELECTION CRITERIA

TIME PERIOD: 850101 TO 851231

AREA NAME: BERING SEA I

5250 TO 6500 N;
 15700 TO 17000 W

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 62 PROCESSOR VESSELS: 78

TOW RECORDS 11625

ACTUAL PERIOD OF FISHING: FIRST DATE: 850127 LAST DATE: 851028

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	5625	16353	5332	5958	15818	16700	11625
UP	5625	16352	5331	5958	15926	16727	11284
DEL	5543	16514	5340	5842	15926	16727	3148

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	260995.6	24.4	0.0	75.0	10677
HAIL WEIGHT C/	128239.1	17.9	0.0	69.0	7174
TOTAL WEIGHT D/	184961.2	27.6	0.0	76.4	6691

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	46197.8	4.1	0.0	23.5	11230
HOURS TRAWLED WHEN CATCH IS NULL	3962.6	4.5	0.0	20.9	874

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED E/	10.8	0.0	263	10328
SUM OF CATCH / SUM OF EFFORT	5.7			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	48	16	335	10760
NET DEPTH (FATHOMS)	46	8	252	763
TEMPERATURE (CENTIGRADE)	4	0	8	1359
ENGINE SPEED (RPM)	1433.1	680	1950	1998
NUMBER OF CATCH CATEGORIES	2.7	1	5	4148

A/ SET = LOCATION WHERE TRAWL BRAKE WAS SET.

UP = WHERE HAULBACK OF NET WAS BEGUN.

DEL = WHERE CODEND WAS DELIVERED TO PROCESSOR.

B/ CATCH = HAIL WEIGHT. IF HAIL WEIGHT NOT GIVEN, THEN CATCH = TOTAL.

C/ ESTIMATED ROUND WEIGHT OF CODEND IN METRIC TONS (INPUT DATA ITEM).

D/ DATA FROM PROCESSOR. TOTAL WEIGHT OF ALL SPECIES AND GRADES OF FISH

E/ EFFORT EXPENDED DURING TOWS FOR WHICH NO CATCH WAS RECORDED.

F/ ONLY FOR TOWS WHERE CATCH AND EFFORT ARE BOTH GIVEN.

PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

11FEB88 16:56

SELECTION CRITERIA

TIME PERIOD: 850101 TO 851231

AREA NAME: BERING SEA AREA II

5500 TO 6500 N;
17000 TO 18000 W

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 16 PROCESSOR VESSELS: 7

TOW RECORDS: 283

ACTUAL PERIOD OF FISHING: FIRST DATE: 850617 LAST DATE: 850807

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	5749	17205	5604	6027	17000	17436	283
UP	5749	17204	5604	6037	16957	17435	281
DEL	5754	17209	5632	5905	16959	17543	211

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	9261.3	33.9	0.8	65.4	273
HAIL WEIGHT C/	1232.7	39.8	0.0	65.4	31
TOTAL WEIGHT D/	8087.9	32.6	0.8	62.0	248

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	1364.0	4.8	0.0	11.8	282
HOURS TRAWLED WHEN CATCH IS NULL E/	27.3	2.7	0.7	6.0	10

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED F/	9.9	0.2	171	272
SUM OF CATCH / SUM OF EFFORT	6.8			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	60	44	97	277
NET DEPTH (FATHOMS)	46	20	60	3
TEMPERATURE (CENTIGRADE)	4	2	6	116
ENGINE SPEED (RPM)	712	675	750	17
NUMBER OF CATCH CATEGORIES	3.2	1	5	39

A/ SET = LOCATION WHERE TRAWL BRAKE WAS SET.

UP = WHERE HAULBACK OF NET WAS BEGUN.

DEL = WHERE CODEND WAS DELIVERED TO PROCESSOR.

B/ CATCH = HAIL WEIGHT. IF HAIL WEIGHT NOT GIVEN, THEN CATCH = TOTAL.

C/ ESTIMATED ROUND WEIGHT OF CODEND IN METRIC TONS (INPUT DATA ITEM).

D/ DATA FROM PROCESSOR. TOTAL WEIGHT OF ALL SPECIES AND GRADES OF FISH.

E/ EFFORT EXPENDED DURING TOWS FOR WHICH NO CATCH WAS RECORDED.

F/ ONLY FOR TOWS WHERE CATCH AND EFFORT ARE BOTH GIVEN.

PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

11FEB88 16:58

SELECTION CRITERIA

TIME PERIOD: 850101 TO 851231

AREA NAME: BERING SEA AREA IV

5000 TO 5500 N;
17000 W TO 17000 E

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 14 PROCESSOR VESSELS: 20

TOW RECORDS: 716

ACTUAL PERIOD OF FISHING: FIRST DATE: 850331 LAST DATE: 850729

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	5209	17407	5108	5255	17148	18124	716
UP	5210	17402	5109	5304	17148	18119	627
DEL	5217	17245	5206	5227	17159	17259	24

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	11348.1	20.2	0.0	72.0	561
HAIL WEIGHT C/	7110.4	21.4	0.0	72.0	333
TOTAL WEIGHT D/	8242.9	20.5	0.0	77.7	403

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	1907.9	2.9	0.0	12.0	651
HOURS TRAWLED WHEN CATCH IS NULL E/	260.2	2.0	0.0	5.2	128

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED F/	9.5	0.0	144	514
SUM OF CATCH / SUM OF EFFORT	5.9			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	107	60	230	437
NET DEPTH (FATHOMS)	106	73	165	40
TEMPERATURE (CENTIGRADE)	4	3	4	3
ENGINE SPEED (RPM)	1479	1300	1600	28
NUMBER OF CATCH CATEGORIES	3.6	1	5	392

A/ SET = LOCATION WHERE TRAWL BRAKE WAS SET.

UP = WHERE HAULBACK OF NET WAS BEGUN.

DEL = WHERE CODEND WAS DELIVERED TO PROCESSOR.

B/ CATCH = HAIL WEIGHT. IF HAIL WEIGHT NOT GIVEN, THEN CATCH = TOTAL.

C/ ESTIMATED ROUND WEIGHT OF CODEND IN METRIC TONS (INPUT DATA ITEM).

D/ DATA FROM PROCESSOR. TOTAL WEIGHT OF ALL SPECIES AND GRADES OF FISH,

E/ EFFORT EXPENDED DURING TOWS FOR WHICH NO CATCH WAS RECORDED.

F/ ONLY FOR TOWS WHERE CATCH AND EFFORT ARE BOTH GIVEN.

PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

08FEB88 15:22

SELECTION CRITERIA

TIME PERIOD: 850101 TO 851231

AREA NAME: SHUMAGIN

5000 TO 5550 N;
15900 TO 17000 W

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 17 PROCESSOR VESSELS: 19

TOW RECORDS: 126

ACTUAL PERIOD OF FISHING: FIRST DATE: 850227 LAST DATE: 851029

LOCATION OF FISHING: A/

AVERAGE LATITUDE LONGITUDE LAT COUNT

	LAT	LONG	MIN	MAX	MIN	MAX	COUNT
SET	5334	16536	5209	5507	16119	16757	126
UP	5335	16537	5212	5558	16119	16739	118
DEL	5316	16555	5258	5345	16357	16737	3

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	2549.8	27.4	0.0	62.0	93
HAIL WEIGHT C/	1651.6	28.5	0.0	62.0	58
TOTAL WEIGHT D/	1143.3	25.4	0.0	53.4	45

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	400.1	3.4	0.0	12.5	118
HOURS TRAWLED WHEN CATCH IS NULL	93.0	3.3	1.0	7.9	28

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED E/ SUM OF CATCH / SUM OF EFFORT	10.7	0.3	43	89
	6.4			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	73	7	124	117
NET DEPTH (FATHOMS)	103	98	160	5
TEMPERATURE (CENTIGRADE)	4	3	4	26
ENGINE SPEED (RPM)	1025	950	1100	2
NUMBER OF CATCH CATEGORIES	2.8	1	5	41

A/ SET = LOCATION WHERE TRAWL BRAKE WAS SET.

UP = WHERE HAULBACK OF NET WAS BEGUN.

DEL = WHERE CODEND WAS DELIVERED TO PROCESSOR.

B/ CATCH = HAIL WEIGHT. IF HAIL WEIGHT NOT GIVEN, THEN CATCH = TOTAL.

C/ ESTIMATED ROUND WEIGHT OF CODEND IN METRIC TONS (INPUT DATA ITEM).

D/ DATA FROM PROCESSOR. TOTAL WEIGHT OF ALL SPECIES AND GRADES OF FISH.

E/ EFFORT EXPENDED DURING TOWS FOR WHICH NO CATCH WAS RECORDED.

F/ ONLY FOR TOWS WHERE CATCH AND EFFORT ARE BOTH GIVEN.

PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

08FEB88 15:06

SELECTION CRITERIA

TIME PERIOD: 850101 TO 851231

AREA NAME: CHIRIKOF

5000 TO 6500 N;
15400 TO 15900 W

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 35 PROCESSOR VESSELS: 39

TOW RECORDS: 2380

ACTUAL PERIOD OF FISHING: FIRST DATE: 850124 LAST DATE: 851105

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	5751	15434	5533	5954	15400	15823	2380
UP	5750	15434	5537	5904	15340	15821	2292
DEL	5746	15439	5700	5814	15353	15551	749

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	94570.1	41.6	0.6	65.0	2273
HAIL WEIGHT C/	46671.0	40.8	1.5	65.0	1145
TOTAL WEIGHT D/	52735.5	41.3	0.6	79.2	1278

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	6064.5	2.6	0.0	9.9	2319
HOURS TRAWLED WHEN CATCH IS NULL	195.1	2.0	0.0	6.5	97

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED E/	36.1	0.2	572	2212
SUM OF CATCH / SUM OF EFFORT	15.6			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	133	13	220	2264
NET DEPTH (FATHOMS)	104	8	190	739
TEMPERATURE (CENTIGRADE)	4	0	8	555
ENGINE SPEED (RPM)	1268	275	1800	221
NUMBER OF CATCH CATEGORIES	2.7	1	5	338

A/ SET = LOCATION WHERE TRAWL BRAKE WAS SET.

UP = WHERE HAULBACK OF NET WAS BEGUN.

DEL = WHERE CODEND WAS DELIVERED TO PROCESSOR.

B/ CATCH = HAIL WEIGHT. IF HAIL WEIGHT NOT GIVEN, THEN CATCH = TOTAL.

C/ ESTIMATED ROUND WEIGHT OF CODEND IN METRIC TONS (INPUT DATA ITEM).

D/ DATA FROM PROCESSOR. TOTAL WEIGHT OF ALL SPECIES AND GRADES OF FISH.

E/ EFFORT EXPENDED DURING TOWS FOR WHICH NO CATCH WAS RECORDED.

F/ ONLY FOR TOWS WHERE CATCH AND EFFORT ARE BOTH GIVEN.

PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

11FEB88 17:00

SELECTION CRITERIA

TIME PERIOD: 850101 TO 851231

AREA NAME: KODIAK

5000 TO 6200 N;
14700 TO 15400 W

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 29 PROCESSOR VESSELS: 28

TOW RECORDS: 445

ACTUAL PERIOD OF FISHING: FIRST DATE: 850111 LAST DATE: 851210

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	5754	15326	5518	5834	14740	15400	445
UP	5754	15330	5517	5858	14857	15413	423
DEL	5803	15359	5703	5815	15225	15409	18

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	12611.1	31.8	0.4	60.5	397
HAIL WEIGHT C/	8247.3	33.5	0.0	60.5	246
TOTAL WEIGHT D/	5144.8	26.8	0.4	58.0	192

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	989.0	2.3	0.0	10.0	431
HOURS TRAWLED WHEN CATCH IS NULL E/	109.1	2.5	0.1	6.3	44

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED F/	41.8	0.1	576	385
SUM OF CATCH / SUM OF EFFORT	12.8			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	100	45	166	392
NET DEPTH (FATHOMS)	73	8	138	134
TEMPERATURE (CENTIGRADE)	3	0	8	73
ENGINE SPEED (RPM)	1296	800	1800	35
NUMBER OF CATCH CATEGORIES	3.3	1	5	168

A/ SET = LOCATION WHERE TRAWL BRAKE WAS SET.

UP = WHERE HAULBACK OF NET WAS BEGUN.

DEL = WHERE CODEND WAS DELIVERED TO PROCESSOR.

B/ CATCH = HAIL WEIGHT. IF HAIL WEIGHT NOT GIVEN, THEN CATCH = TOTAL.

C/ ESTIMATED ROUND WEIGHT OF CODEND IN METRIC TONS (INPUT DATA ITEM).

D/ DATA FROM PROCESSOR. TOTAL WEIGHT OF ALL SPECIES AND GRADES OF FISH.

E/ EFFORT EXPENDED DURING TOWS FOR WHICH NO CATCH WAS RECORDED.

F/ ONLY FOR TOWS WHERE CATCH AND EFFORT ARE BOTH GIVEN.

PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

11FEB88 17:04

SELECTION CRITERIA

TIME PERIOD: 850101 TO 851231

AREA NAME: COLUMBIA

4300 TO 4730 N;
12200 TO 13300 W

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 3 PROCESSOR VESSELS: 7

TOW RECORDS: 182

ACTUAL PERIOD OF FISHING: FIRST DATE: 850530 LAST DATE: 851001

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	4516	12430	4317	4730	12402	12458	182
UP	4515	12430	4313	4735	12406	12457	177
DEL	4438	12431	4315	4647	12406	12459	85

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	1567.5	9.7	1.0	21.5	161
HAIL WEIGHT C/	1550.0	9.5	0.0	21.5	163
TOTAL WEIGHT D/	1406.8	10.8	1.3	49.7	130

EFFORT

	SUM.	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	374.7	2.1	0.0	6.0	177
HOURS TRAWLED WHEN CATCH IS NULL E/	27.3	1.6	0.5	3.0	17

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED F/	5.4	0.4	30	160
SUM OF CATCH / SUM OF EFFORT	4.2			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	87	27	500	164
NET DEPTH (FATHOMS)	64	20	118	155
TEMPERATURE (CENTIGRADE)	9	9	9	3
ENGINE SPEED (RPM)				0
NUMBER OF CATCH CATEGORIES	1.0	1	2	66

A/ SET = LOCATION WHERE TRAWL BRAKE WAS SET.

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B/ CATCH = HAIL WEIGHT. IF HAIL WEIGHT NOT GIVEN, THEN CATCH = TOTAL.

C/ ESTIMATED ROUND WEIGHT OF CODEND IN METRIC TONS (INPUT DATA ITEM).

D/ DATA FROM PROCESSOR. TOTAL WEIGHT OF ALL SPECIES AND GRADES OF FISH.

E/ EFFORT EXPENDED DURING TOWS FOR WHICH NO CATCH WAS RECORDED.

F/ ONLY FOR TOWS WHERE CATCH AND EFFORT ARE BOTH GIVEN.

PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

11FEB88 16:52

SELECTION CRITERIA

TIME PERIOD: 830101 TO 831231

AREA NAME: NORTHEASTERN PACIFIC OCEAN & BERING SEA

0 TO 9000 N;

0 TO 17000 E

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 16 PROCESSOR VESSELS: 17

TOW RECORDS: 3953

ACTUAL PERIOD OF FISHING: FIRST DATE: 830103 LAST DATE: 831231

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	5610	16219	5210	5955	14937	17359	3780
UP	5611	16224	5210	5952	14940	17358	3618
DEL	5627	16148	5211	5951	15015	17303	1085

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	117901.1	30.9	0.0	99.5	3813
HAIL WEIGHT C/	60609.7	25.5	0.0	76.0	2375
TOTAL WEIGHT D/	65373.1	37.4	0.0	99.5	1746

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	14940.7	4.0	0.0	17.4	3766
HOURS TRAWLED WHEN CATCH IS NULL E/	381.2	4.2	0.0	17.4	91

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED F/	19.2	0.0	602	3667
SUM OF CATCH / SUM OF EFFORT	7.9			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	58	13	210	2190
NET DEPTH (FATHOMS)	69	34	134	90
TEMPERATURE (CENTIGRADE)	4	2	9	333
ENGINE SPEED (RPM)	1107	800	1800	645
NUMBER OF CATCH CATEGORIES	3.7	1	5	671

A/ SET = LOCATION WHERE TRAWL BRAKE WAS SET.

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C/ ESTIMATED ROUND WEIGHT OF CODEND IN METRIC TONS (INPUT DATA ITEM).

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PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

11FEB88 16:53

SELECTION CRITERIA

TIME PERIOD: 840101 TO 841231

AREA NAME: NORTHEASTERN PACIFIC OCEAN & BERING SEA

0 TO 9000 N;

0 TO 17000 E

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 36 PROCESSOR VESSELS: 70

TOW RECORDS: 8832

ACTUAL PERIOD OF FISHING: FIRST DATE: 840101

LAST DATE: 841231

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	5512	15921	4100	6106	12400	17954	8266
UP	5513	15917	4056	5958	12405	17956	7871
DEL	5622	16358	4326	5957	12404	17938	2433

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	225797.5	27.7	0.1	71.0	8159
HAIL WEIGHT C/	75301.3	19.1	0.0	65.7	3945
TOTAL WEIGHT D/	184264.7	31.5	0.0	88.5	5858

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	26989.8	3.2	0.0	12.0	8345
HOURS TRAWLED WHEN CATCH IS NULL E/	1555.4	2.8	0.0	11.8	562

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED F/	14.6	0.0	2616	7665
SUM OF CATCH / SUM OF EFFORT	8.4			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	80	12	350	8295
NET DEPTH (FATHOMS)	72	8	200	1930
TEMPERATURE (CENTIGRADE)	6	2	9	376
ENGINE SPEED (RPM)	1663	670	3800	2145
NUMBER OF CATCH CATEGORIES	2.9	1	5	2497

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E/ EFFORT EXPENDED DURING TOWS FOR WHICH NO CATCH WAS RECORDED.

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PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

11FEB88 16:36

SELECTION CRITERIA

TIME PERIOD: 850101 TO 851231

AREA NAME: NORTHEASTERN PACIFIC OCEAN & BERING SEA

0 TO 9000 N;

0 TO 17000 E

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 71 PROCESSOR VESSELS: 101

TOW RECORDS: 16171

ACTUAL PERIOD OF FISHING: FIRST DATE: 850111

LAST DATE: 851211

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	5620	16219	4317	6027	12402	17924 E	15573
UP	5621	16216	4313	6037	12406	17919 E	15106
DEL	5558	16250	4315	5905	12406	17924	4200

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	395162.3	26.8	0.0	96.1	14746
HAIL WEIGHT C/	199298.3	21.0	0.0	72.0	9495
TOTAL WEIGHT D/	261334.3	28.8	0.0	96.1	9062

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	57345.9	3.8	0.0	23.5	15285
HOURS TRAWLED WHEN CATCH IS NULL E/	4915.1	3.8	0.0	20.9	1283

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED F/	15.4	0.0	660	13924
SUM OF CATCH / SUM OF EFFORT	6.9			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	66	7	500	14409
NET DEPTH (FATHOMS)	74	8	252	1816
TEMPERATURE (CENTIGRADE)	4	0	9	2090
ENGINE SPEED (RPM)	1407	275	1950	2297
NUMBER OF CATCH CATEGORIES	2.8	1	5	5382

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E/ EFFORT EXPENDED DURING TOWS FOR WHICH NO CATCH WAS RECORDED.

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PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

11FEB88 16:54

SELECTION CRITERIA

TIME PERIOD: 860101 TO 861231

AREA NAME: NORTHEASTERN PACIFIC OCEAN & BERING SEA

0 TO 9000 N;

0 TO 17000 E

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 39 PROCESSOR VESSELS: 67

TOW RECORDS: 6586

ACTUAL PERIOD OF FISHING: FIRST DATE: 860117

LAST DATE: 861022

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	5608	16337	4346	6011	12408	17606	6535
UP	5609	16339	4242	6012	12407	17556	6460
DEL	5714	16757	4752	6013	15308	17556	3920

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	251781.1	38.9	0.0	94.0	6466
HAIL WEIGHT C/	52828.8	23.6	0.0	73.0	2241
TOTAL WEIGHT D/	216052.3	41.1	0.0	94.0	5254

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	23943.4	3.7	0.0	23.8	6482
HOURS TRAWLED WHEN CATCH IS NULL E/	380.5	3.6	0.3	12.3	106

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED F/	22.8	0.0	1040	6371
SUM OF CATCH / SUM OF EFFORT	10.5			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	81	9	999	5682
NET DEPTH (FATHOMS)	90	15	215	1347
TEMPERATURE (CENTIGRADE)	5	1	8	1378
ENGINE SPEED (RPM)	1260	1000	1750	928
NUMBER OF CATCH CATEGORIES	2.4	1	5	1439

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PACFIN STATISTICAL REPORT FOR THE JOINT VENTURE LOGBOOK DATABASE

11FEB88 16:54

SELECTION CRITERIA

TIME PERIOD: 870101 TO 871231

AREA NAME: NORTHEASTERN PACIFIC OCEAN & BERING SEA 0 TO 9000 N;
0 TO 17000 E

CATCH CATEGORIES: ALL SPECIES CATEGORIES COMBINED

VESSEL COUNT: CATCHER BOATS: 19 PROCESSOR VESSELS: 52

TOW RECORDS: 6713

ACTUAL PERIOD OF FISHING: FIRST DATE: 870116 LAST DATE: 871017

LOCATION OF FISHING: A/

	AVERAGE		LATITUDE		LONGITUDE		LAT COUNT
	LAT	LONG	MIN	MAX	MIN	MAX	
SET	5520	16519	4341	6044	12401	17832	6711
UP	5520	16521	4343	6053	12400	17837	6700
DEL	5554	16907	4728	6027	12458	17835	5505

CATCH (IN METRIC TONS)

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
CATCH B/	280500.4	42.2	0.0	96.0	6648
HAIL WEIGHT C/	20525.1	17.4	0.0	62.0	1180
TOTAL WEIGHT D/	267817.0	45.0	0.0	96.0	5955

EFFORT

	SUM	AVERAGE	MINIMUM	MAXIMUM	COUNT
HOURS TRAWLED	20687.3	3.1	0.0	23.5	6687
HOURS TRAWLED WHEN CATCH IS NULL E/	176.2	2.9	0.2	8.7	60

CATCH PER UNIT EFFORT

	AVERAGE	MINIMUM	MAXIMUM	COUNT
METRIC TONS/HOURS TRAWLED F/ SUM OF CATCH / SUM OF EFFORT	47.6	0.0	3900	6624
	13.6			

MISCELLANEOUS

	AVERAGE	MINIMUM	MAXIMUM	COUNT
BOTTOM DEPTH (FATHOMS)	79	4	475	5078
NET DEPTH (FATHOMS)	102	8	403	1633
TEMPERATURE (CENTIGRADE)	7	5	9	19
ENGINE SPEED (RPM)	1567	1350	1750	229
NUMBER OF CATCH CATEGORIES	2.0	1	5	946

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