# OREGON DUNGENESS CRAB FISHERY Data Report Series 1977-1990

by
Darrell Demory

Oregon Department of Fish and Wildlife Marine Region Newport, Oregon

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# DUNGENESS CRAB FISHERY Data Report Series 1977-1990

### Introduction

These reports are being produced to provide a handy record of fishery information for industry, biologists, and other interested persons. Greatly improved response from processors and dealers and our own capability to process the data have made it possible to report the information more accurately and timely. This report includes 14 years of data to reduce costs of printing.

Catch, number of boats, number of trips and price data are from fish tickets which were edited for accuracy. Crab size and grade were obtained from samples taken at fish plants and at sea aboard commercial vessels. Similar data were obtained from the commercial bay fishery and is reported separately. The number of pots was calculated by asking fishermen how many pots they fished, obtaining an average number of pots per boat for each port, then applying that average to the number of boats in each port. In 1987 hold inspections were implemented and fishermen were asked how many pots they planned to fish that year. Pot data are primarily used to show trends in fishing effort.

Field sampling was concentrated during the first three to five months of the season at the main ports of Astoria, Newport, Coos Bay and Brookings. Historic catch and effort data and criteria for crab grade are shown in Appendices A and B, respectively.

# 1976-77 DUNGENESS CRAB FISHERY

### OVERVIEW

The ocean season opened December 1, 1976, and closed September 15, 1977, including a 30-day extension requested by industry and produced 16.3 million pounds. A strike by fishermen for a higher price per pound depressed landings dramatically during December. However, landings greatly increased in January and most processors put boats on limits which stabilized the catch at 1 to 3 million pounds per month from January through June. Two helicopters joined the boat fleet which caused some concern. Price to fishermen ranged from 25 to 85 cents and stabilized at \$0.55 per pound. The estuary fishery was open all year and produced 23,481 pounds.

### OCEAN CATCH AND EFFORT

Table 1 presents a summary of catch and effort data by port. A breakdown by month is shown in Table 2. An ocean harvest of 16.3 million pounds was a new record. The port of Newport landed the most crab with 3.5 million pounds, but Astoria, Port Orford, and Brookings were close with over 3 million pounds each.

Historically most of the catch is landed during the first two or three months of the season, but a strike by fishermen during December 1976 kept landings low. By January catches increased sharply and processors imposed weekly quotas on their boats which stabilized the catch. Tables 3-10 show catch and effort by port. The data in Table 10 is from unknown ports because of fish tickets with incomplete information.

Effort also increased to record highs as reflected by the number of boats (324), trips (9,534) and pots (87,300). Although Coos Bay had the most boats, Port Orford, where boats are hoisted out of the water and stored on the dock each night, had the greatest percentage increase. Historically fewer than 15 boats fish out of this port.

Helicopters were introduced into the crab fishery in 1977 and caused quite a stir. Complaints about crabs being "rained across the beach" and other wasteful and harmful acts proved unfounded. Oversize pots up to six feet in diameter were pulled one at a time and flown about one mile to a landing site in a nearby pasture. While crabs were being sorted another pot was attached to the helicopter and flown to the fishing area. Sublegal and female crabs were returned to the water in a 55 gallon drum. The drum was rigged with two lines, a carrying line attached to the top of the drum and the electric hook on the helicopter, and a dump line attached to the bottom of the drum and the helicopter. In use the drum would be lowered to the water, the carrying line released and as the helicopter rose the drum tipped over, gently sliding the crabs into the water.

There was concern that wind stress on the crabs while in the air would cause delayed mortalities. Tests were conducted by staff and this too proved to be unfounded. A separate report by Demory gives details of the tests.

 $<sup>^{</sup>m l}$  Demory, Darrell 1977. Observations on Dungeness crab subjected to high wind stress. Processed report, Shellfish Investigations, Oregon Department of Fish and Wildlife.

### MARKET SAMPLING

Crabs were checked at the docks in Astoria, Newport, Coos Bay and Brookings on a sporadic basis. Grade was good for the bulk of the catch and size was generally larger than average (174 mm). A summary by port and month is presented in Table 11.

Detailed prices by month were not available for 1977, but they did range from 25 to 85 cents per pound with 55 cents paid for most crab. A few fishermen protested the low price by giving crab away. This was very popular with the customers who could take advantage of it.

A few fishermen also sold directly off their boats to the public. This provided crab to the customers at a considerably lower price but at a higher price than usual to the fishermen. However, the extra time to sell a load and the required record keeping for fishermen was too taxing so the practice was short-lived.

### SAMPLING AT SEA

One-day trips to sea aboard commercial crab boats were made out of the ports of Astoria, Newport, Port Orford and Bookings. Sampling at sea gave a much broader look at the crab population and a better understanding of how the fishery operates. At least one-half of the pots pulled during the day were sampled and all crabs caught were measured and condition noted. Of all crabs discarded it was interesting that females were the most numerous although most of them could have escaped through the escape ports (Table 12).

The data show much variability between ports even though all the sampling was done in 5-7 fathoms of water. The high percentage of soft crab occurring on the south coast was typical.

# BAY CRAB FISHERY

Data from the commercial bay crab fishery is summarized in Table 13. Only 23,481 pounds were reported from three estuaries with Coos Bay producing the most crabs. Most of the fishing was done from August to November (Table 14). A breakdown of the data for each bay is given in Tables 15-17.

Table 1. Summary ocean crab catch and effort by port, 1976-77.

Port	Pounds	Boats	Trips	Pots
Astoria	3,134,200	54	1,099	20,600
Tillamook	692,200	24	894	5,300
Newport	3,486,100	36	972	13,800
Winchester Bay	621,400	8	314	2,900
Coos Bay	2,068,800	87	1,329	24,100
Port Orford	3,118,100	48	2,687	7,900
Brookings	3,082,200	64	2,405	11,900
Unknown	98,800	3	80	800
Total	16,301,800	324	9,780	87,300

Table 2. Summary ocean crab catch and effort by month, 1976-77.

Month	Pounds	Boats	Trips	Pots
December	622,600	55	326	14,500
January	2,312,200	206	1,465	55,500
February	2,801,100	223	1,646	56,800
March	2,758,700	223	1,900	59,100
April	2,688,300	200	1,860	51,400
May	2,873,400	159	1,182	39,400
June	1,206,900	102	596	25,700
July	455,900	76	419	18,600
August	386,100	64	286	16,300
September	196,600	32	100	9,300
Total	16,301,800	324	9,780	87,300

Table 3. Ocean crab catch and effort, Astoria, 1976-77.

Month	Pounds	Boats	Trips	Pots
December	274,700	20	108	7,600
January	340,200	33	175	12,600
February	334,800	20	107	7,600
March	490,400	37	205	14,100
April	568,300	32	228	12,200
May	479,100	17	103	6,500
June	242,000	13	70	4,900
July	147,500	8	42	3,000
August	165,600	9	38	3,400
September	91,600	6	23	2,300
TOTAL	3,134,200	54	1 099	20,600

Table 4. Ocean crab catch and effort, Tillamook, 1976-77.

Month	Pounds	Boats	Trips	Pots
December	41,500	12	32	2,600
January	113,700	19	113	4,200
February	66,900	21	82	4,600
March	51,500	19	113	4,200
April	143,800	19	159	4,200
May	137,300	16	128	3,500
June	60,400	14	92	3,100
July	23,600	12	92	2,600
August	37,700	12	58	2,600
September	15,800	7	25	1,500
TOTAL	692,200	24	894	5,300

Table 5. Ocean crab catch and effort, Newport, 1976-77.

Month	Pounds	Boats	Trips	Pots
December	8,500	2	6	800
January	707 (300	25	179	9,600
February	1 071,200	28	199	10,800
March	576 300	28	178	10,800
April .	366,300	23	123	8,800
May	415,700	19	120	7,300
June	218,900	16	78	6,100
July -	50,100	10	46	3,800
August	34,300	8	33	3,100
September	37,500	5	10	1,900
TOTAL	3 486,100	36	972	13,800

Table 6. Ocean crab catch and effort, Winchester Bay, 1976-77.

Month	Pounds	Boats	Trips	Pots
December	0	0	0	0
January	140,600	7	63	2,500
February	135,300	8	75	2,900
March	<sup>1</sup> 69 800	8	59	2,900
April	114, 500	6	50	2,100
May	101, 400	4	31	1,400
June	37, 100	2	18	700
July	6,900	1	7	400
August	7, 400	1	5	400
September	8,400	1	6	400
TOTAL	621, 400	8	314	2, 900

Table 7. Ocean crab catch and effort, Coos Bay, 1976-77.

Month	Pounds	Boats	Trips	Pots
December	0	0	0	0
January	272,300	51	23 <b>7</b>	14,100
February	436 (800	50	344	13,800
March	412,500	39	274	10,800
April	407,200	26	236	7,200
May	387 (900	24	130	6,600
June	59,300	6	40	1,600
July	30,000	7	28	1,900
August	35 (200	6	26	1,600
September	27,600	8	14	2,200
TOTAL	2,068,800	87	2,687	24,100

Table 8. Ocean crab catch and effort, Port Orford, 1976-77.

Month	Pounds	Boats	Trips	Pots
December	264,900	18	149	2,900
January	509,300	35	501	2,900 5,700
February	383 300	41	417	6,700
March	698 700	40	576	6,300
April	420,400	41	500	6,700
May	445,300	40	282	6,500
June	301,100	25	121	4,100
July	77,100	18	97	2,900
August	18,000	13	44	2,100
September	0	0	0	' 0
TOTAL	3 118 100	48	2,687	7,900

Table 9. Ocean crab catch and effort, Brookings, 1976-77.

Month	Pounds	Boats	Trips	Pots
December	33,000	3	31	600
January	225,800	34	190	6,300
February	363,700	54	413	10,100
March	433,300	51	483	9,500
April	627,200	51	544	9,500
May	902,700	37	383	6,900
June	276,600	24	163	4,100
July	120,400	19	106	3,500
August	84,400	13	73	2,400
September	15,100	4	19	<sup>2</sup> 700
TOTAL	3,082,200	64	2,405	11,900

Table 10. Ocean crab catch and effort, unknown port, 1976-77.

Month	Pounds	Boats	Trips	Pots
December	0	0	0	0
January	3,000	2	7	500
February	9, 100	1	9	<b>30</b> 0
March	26, 200	1	12	300
April	40,600	2	20	500
May	4,000	2	5	500
June	11, 500	2	14	500
July	300	1	1	300
August	3, 500	2	9	500
September	600	1	3	300
TOTAL	98, 800	3	80	800

Table 11. Summary crab grade and average size by port and month, 1976-77(market sample).

			Grade (	%)	
Port	Month	T	II	III	Mean Size (mm)
Astoria	December January April July August	94.3 100.0 100.0 97.9 86.1	5.7 0.0 0.0 2.1 13.9	0.0 0.0 0.0 0.0 0.0	183 180 179 173 174
Newport	August	92.0	8.0	0.0	173
Coos Bay	January	94.9	5.1	0.0	178
Brookings	January March August September	100.0 99.7 82.3 30.0	0.0 0.3 17.4 29.2	0.0 0.0 0.3 40.6	181 178 175 178

Table 12. Summary sampling at sea data, August/September, 1977.

	Astoria	Newport	Port Orford	Brookings
Legal Males	294	828	86	488
Sublegal Males	65	634	21	25
Females	119	139	112	103
% Females w/eggs	0	0	0	0
% Legal Male Softshells	14	8.0	22.3	69.8
% Discard <sup>1</sup>	42.1	50.0	60.7	41.2

Table 13. Summary bay crab catch and effort by port, 1976-77.

Port	Pounds	Boats	Trips	Pots	Rings
Tillamook	7,210	8	48	60	60
Netarts	2,441	1	30	20	0
Coos Bay	13,830	38	155	0	1,180
TOTAL	23,481	47	<b>23</b> 3	80	1,240

Table 14. Summary bay crab catch and effort by month, 1976-77.

Month	Pounds	Boats	Landings	Pots	Rings
December	3, 876	16	50	60	260
January	2, 973	9	19	20	160
February	199	2	3	20	20
March	54	1	1	20	0
April	298	1	4	20	0
May	0	0	0	0	0
June	11	1	1	0	20
July	0	0	0	0	0
August	2, 291	2	11	40	0
September	2, 744	10	23	90	100
October	3, 951	21	53	80	340
November	7, 084	22	68	80	340
TOTAL	23, 481	47	233	80	780

Table 15. Bay crab catch and effort, Tillamook, 1976-77.

Month	Pounds	Boats	Trips	Pots	Rings
December	908	2	6	40	0
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	2, 291	2	11	40	0
September	1,874	4	10	70	0
October	971	3	7	60	0
November	1,166	7	14	60	60
TOTAL	7, 210	8	48	70	60

Table 16. Bay crab catch and effort, Netarts, 1976-77.

Month	Pounds	Boats	Trips	Pots
December	172	1	1	20
January	198	1	2	20
February	109	1	2	20
March	54	1	1	20
April	298	1	4	20
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	82	1	2	20
October	882	1	14	20
November	646	1	4	20
TOTAL	2, 441	1	30	20

Table 17. Bay crab catch and effort Coos Bay, 1976-77.

Month	Pounds	Boats	Trips	Rings
December	2,796	13	43	260
January	2,775	8	17	160
February	90	1	1	20
March	0	Ō	0	0
April	Ö	Ô	0	0
May	Ō	Ö	Ō	0
June	11	i	i	20
July	Õ	Ō	Ō	0
August	Ō	Ö	Ō	Ō
September	788	5	11	100
October	2,098	17	32	340
November	5,272	14	50	280
Total	13,830	38	155	780

# 1977-78 DUNGENESS CRAB FISHERY

### OVERVIEW

The ocean season opened December 1, 1977, and closed September 15, 1978, and produced 10.4 million pounds landed by 355 boats. Seventy-five percent of the catch was landed by the end of February. Size of crab was average and grade was excellent. Price opened at \$0.55 and gradually climbed to \$1.20 in August. The estuary fishery was open all year and produced 56,211 pounds of crab.

### OCEAN CATCH AND EFFORT

Table 1 summarizes catch and effort data by port. A breakdown by month is shown in Table 2. The ocean harvest of 10.4 million pounds was average. The port of Astoria landed the most crab at just over 3 million pounds with Newport and Coos Bay landing nearly 2 million pounds each. Over 60% of the harvest was landed during the first two months of the season.

Although catch was down considerably from the record 16.3 million pounds last year, the number of boats showed a slight increase suggesting that some fishermen expected another bonanza or it was wise to get one's boat on an official landing record. The number of trips also increased slightly, but the number of pots decreased. Detailed catch and effort data for each port are shown in Tables 3-9.

Six helicopters made landings in 1978, but conditions conducive to economic success did not prevail, namely, crabs were of average size and scattered over a broad area of ocean bottom. Within two months all helicopters had ceased fishing.

# MARKET SAMPLING

Crabs were checked at the docks in Astoria, Newport, Coos Bay and Brookings for the first 3 or 4 months of the season. Samples at Astoria were collected through July. Crab grade was excellent although size was average (Table 10).

## SAMPLING AT SEA

Only one trip on a boat was made in 1978. However, sampling helicopter landings one day provided similar type data (Table 11). The December sample showed that few female crabs were caught, but all were bearing eggs. The March sample was mostly females, but none had eggs. The data also showed that the discard of females and sublegal males was much higher in March.

# PRICE

Price for crab opened at \$0.55 per pound and showed a slow but steady climb during the season to \$1.20 (Table 12). The slight decrease late in the season reflects the incidence of bay crab which tends to be of a lesser quality.

# BAY CRAB FISHERY

Data from the commercial bay crab fishery is summarized in Table 13. Over 56,000 pounds were taken from 5 bays with Coos and Tillamook bays producing the most. The month of October was the best for fishing (Table 14). Detailed catch and effort data for each bay are shown in Tables 15-18.

Table 1. Summary ocean crab catch and effort by port, 1977-78.

Port	Catch	Boats	Trips	Pots
Astoria	3,036,704	69	1,890	13,800
Tillamook	663,159	32	1,338	4,500
Newport	1,987,691	52	1,016	14,700
Winchester Bay	524,978	11	411	2,800
Coos Bay	1,861,264	58	1,534	16,200
Port Orford	855,728	55	1,586	6,600
Brookings	1,449,076	80	1,879	11,400
Total	10,378,600	355	9,654	70,000

Table 2. Summary ocean crab catch and effort by month, 1977-78.

Month	Catch	Boats	Trips	Pots
December	4,089,765	274	2,137	52,300
January	2,488,054	285	1,983	56,500
February	1,317,110	270	1,495	53,300
March	903,373	246	1,406	48,800
April	762,838	174	<sup>*</sup> 976	33,800
May	295,018	134	601	25,900
June	175,668	80	353	17,200
July	96,801	62	240	12,900
August	141,432	56	175	11,500
September	108,541	46	188	7,900
Total	10,378,600	355	9,654	70,000

Table 3. Ocean crab catch and effort, Astoria, 1977-78.

Month	Catch	Boats	Trips	Pots
December	1,226,400	55	402	11,000
January	647,521	46	385	9,200
February	363,507	42	264	8,400
March	297,612	36	235	7,200
April	249,190	30	208	6,000
May	118,727	26	186	5,200
June	46,142	14	81	2,800
July	39,948	13	55	2,600
August	36,942	9	49	1,800
September	10,705	7	25	1,400
Total	3,036,704	69	1,890	13,800

Table 4. Ocean crab catch and effort, Tillamook, 1977-78.

Month	Catch	Boats	Trips	Pots
December	79,900	17	80	2,400
January	135,473	21	149	3,000
February	93,155	24	151	3,400
March	79,409	21	179	3,000
April	95,349	19	191	2,700
May	57,421	21	147	3,000
June	39,010	23	122	3,300
July	25,213	21	108	3,000
August	43,959	21	138	3,000
September	14,270	15	73	2,100
Total	663,159	32	1,338	4,500

Table 5. Ocean crab catch and effort, Newport, 1977-78.

Month	Catch	Boats	Trips	Pots
December	415,350	33	169	9,300
January	636,287	42	205	11,900
February	364,961	40	158	11,300
March	195,318	41	129	11,600
April	175,706	26	109	7,400
May	74,309	20	77	5,700
June	68,085	21	81	5,900
July	18,407	14	37	3,900
August	26,289	11	28	3,100
September	12,979	10	23	2,800
Total	1,987,691	52	1,016	14,700

Table 6. Ocean crab catch and effort, Winchester Bay, 1977-78.

Month	Catch	Boats	Trips	Pots
December	235,252	10	101	2,500
January	128,664	11	80	2,800
February	54,193	9	48	2,200
March	42,929	9	59	2,200
April	37,663	7	40	1,700
May	6,045	6	23	1,500
June	6,813	4	14	1,000
July	5,484	4	12	1,000
August	5,398	3	22	700
September	2,537	4	12	1,000
Total	524,978	11	411	2,800

Table 7. Ocean crab catch and effort, Coos Bay, 1977-78.

Month	Catch	Boats	Trips	Pots
December	906,363	41	259	11,500
January	499,141	53	399	14,800
February	175,491	51	257	14,300
March	133,890	44	281	12,300
April	80,427	27	148	7,600
May	22,348	17	62	4,800
June	12,228	12	46	3,400
July	6,164	7	21	2,000
August	6,530	9	28	2,500
September	18,792	7	33	2,000
Total	1,861,264	58	1,534	16,200

Table 8. Ocean crab catch and effort, Port Orford, 1977-78.

Month	Catch	Boats	Trips	Pots
December	453,805	51	492	6,100
January	169,230	51	343	6,100
February	93,008	46	275	5,500
March	60,922	45	244	5,400
April	68,816	36	162	4,300
May	9,547	28	65	3,400
June	355	4	4	500
July	45	1	1	120
August	0	Ō	Ō	0
September	Ö	0	0	0
Total	855,728	55	1,586	6,600

Table 9. Ocean crab catch and effort, Brookings, 1977-78.

Month	Catch	Boats	Trips	Pots
December	772,695	67	634	9,500
January	271,738	61	422	8,700
February	172,795	58	342	8,200
March	93,293	50	279	7,100
April	55,687	29	118	4,100
May	6,731	16	41	2,300
June	3,035	2	5	300
July	1,536	2	6	300
August	22,308	3	10	400
September	49,258	3	22	400
Total	1,499,076	80	1,879	11,400

Table 10. Summary crab grade and average size by port and month, 1977-78 (market sample).

			Grade (%)		
Port	Month	I	II	III	Mean size (mm)
Astoria	December	100.0	0.0	0	181
.,•	January	100.0	0.0	Ö	178
	February	95.2	4.8	0	179
	March	100.0	0.0	0	181
	April	99.5	0.5	0	173
	June	90.6	9.4	0	174
	July	92.5	7.5	0	173
Newport	December	97.1	2.9	0	175
	January	98.3	1.7	0	178
Coos Bay	December	97.2	2.8	0	177
	January	97.3	2.7	Ö	173
	March	100.0	0.0	0	171
Brookings	December	97.4	2.6	0	178
2	January	96.9	3.1	0	177
	March	100.0	0.0	0	172

Table 11. Summary sampling at sea data, 1977-78.

	Port Orford $^{ m l}$ (Dec.)	Brookings (March)
Legal males	434	75
Sublegal males	2	126
Females	5	226
% Females w/eggs	100	0.0
% Legal male softshells	0.0	0.0
% Legal male softshells % Discard <sup>2</sup>	1.6	82.4

Table 12. Crab price per pound by month, 1977-78.

Month	Price Range	Mean 
December	_	-
January	\$0.55- \$0.75	\$0.60
February	0.70 - 0.80	0.75
March	0.75 - 0.82	0.78
April	0.80 - 0.85	0.83
May	0.80 - 0.90	0.85
June	0.85 - 0.97	0.90
July	0.95 - 1.00	0.97
August	0.90 - 1.20	0.97
September	0.95 - 0.97	0.96

Table 13. Summary bay crab catch and effort by bay, 1977-78.

Bay	Pounds	Boats	Trips	Pots	Rings
Tillamook Netarts	22,295 4,237	18 2	148 59	250 40	30 0
Yaquina Alsea	1,447 606	10 1	39 2	0	50 15
Coos	27,626	51	172	Ŏ	765
Total	56,211	82	420	290	860

Table 14. Summary bay crab catch and effort by month, 1977-78.

Bay	Pounds	Boats	Trips	Pots	Rings
December	435	3	8	0	40
January	2,374	4	20	20	45
February	1,128	6	15	40	60
March	438	4	12	40	15
April	629	2	3	20	15
May	690	3	12	0	35
June	167	3	7	20	10
July	574	6	9	35	41
August	3,526	8	38	70	50
September	9,100	23	53	140	169
October	13,335	40	106	160	410
November	25,636	30	137	140	375
Total	56,211	82	420	290	860

Table 15. Summary bay crab catch and effort Tillamook, 1977-78.

Month	Pounds	Boats	Trips	Pots	Rings
December	0	0	0	0	0
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	Ô	0	0
May	0	0	0	0	0
June	89	1	2	20	Ō
July	239	3	4	35	6
August	3,103	4	30	70	0
September	2,760	9	26	120	4
October	6,017	10	40	140	20
November	10,087	5	46	120	0
Total	22,295	18	148	250	30

Table 16. Bay crab catch and effort, Netarts, 1977-78.

Month	Pounds	Boats	Trips	Pots
December	0	0	0	0
January	2,116	ĺ	15	20
February	463	2	7	40
March	358	2	9	40
April	76	1	2	20
May	0	0	0	0
June	0	0	0	0
July	Õ	Ö	0	0
August	Ö	Ö	Ö	0
September	16	ĺ	1	20
October	249	ī	7	20
November	1,359	1	18	20
Total	4,237	2	59	40

Table 17. Bay crab catch and effort, Yaquina/Alsea bays, 1977-78.

Month	Pounds	Boats	Trips	Rings
December	50	1	1	10
January	Ō	Ō	Ō	0
February	Ö	Ö	Ō	Ō
March	80	2	3	15
April	0	ō	Ō	0
May	690	3	12	35
June	78	2	5	10
July	39	ī	Ĭ	
August	59	ī	3	5 5
September	116	3	5	15
October	222 (174)	4 (1)	6 (1)	15 (15)
November	113 (432)	i (1)	3 (1)	10 (15)
Total	1,447 (606)	10 (1)	39 (2)	50 (15)

<sup>( )</sup> Alsea Bay

Table 18. Bay crab catch and effort, Coos Bay, 1977-78.

Month	Pounds	Boats	Trips	Rings
December	385	2	7	30
January	258	3	5	45
February	665	4	8	60
March	Ö	Ô	. 0	0
April	553	ī	ĩ	15
May	0	Õ	Ö	0
June	Ō	Ō	Ō	0
July	296	2	4	30
August	364	3	5	45
September	6,208	10	21	150
October	6,673	24	52	360
November	13,645	22	69	330
Total	27,626	51	172	765

### 1978-79 DUNGENESS CRAB FISHERY

### OVERVIEW

The ocean season opened December 1, 1978, and closed September 15, 1979, and produced a new record of 16.4 million pounds, landed by 376 boats, also a record. There was a general slowdown during the first month of the fishery due to marginal grade of crab. Crab size was average. Price ranged from \$0.55 to \$1.20, but averaged about \$0.90 per pound. The estuary fishery was open all year and produced 43,456 pounds of crab.

### OCEAN CATCH AND EFFORT

The 1978-79 fishery produced 16.4 million pounds of crab, a new record. The port of Newport landed the most crab with Coos Bay and Astoria running close seconds. A small amount of crab could not be assigned to a port because of incomplete data on some fishtickets (Table 1). Over 65% of the catch was landed during the first two months of the season(Table 2).

High crab abundance enticed almost 100 new boats into the fishery with most of them landing at Brookings. The other major ports also showed an increase, but the increase in Port Orford was extraordinary (Table 1). Although catch declined after two months, effort remained high for four months (Table 2).

A detailed account of catch and effort for each port is given in Tables 3-11.

# MARKET SAMPLING

A summary of market sampling data is given in Table 12. In December up to 24% of the crabs landed were not completely filled with meat (Grade II). Grade was poorest at Astoria and best at Brookings. However, grade improved steadily during the season. Crab size was average.

# SAMPLING AT SEA

Tables 13 and 14 summarize data collected at sea on 11 trips aboard commercial vessels. It is noteworthy that the highest level of discarded crab, mostly females, occurred from January to March. Also, the egg-bearing peak occurred in January although it appears to have started earlier on the south coast.

### PRICE

The price range and mean for each month are shown in Table 15. The lowest price of \$0.55 was paid in Astoria and the highest (\$1.20) in Newport.

# BAY CRAB FISHERY

Data from the commercial bay crab fishery is summarized by port in Table 16. Total catch was 43,456 pounds with Tillamook Bay the lead producer followed closely by Netarts. Coos Bay had the most boats in the fishery although most of them made only 1 or 2 trips. November was the most productive month with October and December following (Table 17). Data for each bay are detailed in Tables 18 to 22.

Table 1. Summary ocean crab catch and effort by port, 1978-79.

Port	Catch	Boats	Trips	Pots
Astoria	2,961,242	74	1,929	18,500
Tillamook	1,038,230	56	1,684	10,200
Newport	4,375,194	76	1,605	31,100
Winchester Bay	1,232,697	20	823	5,900
Coos Bay	3,379,742	76	2,247	17,200
Port Orford	1,138,990	45	1,353	6,600
Gold Beach	46,090	8	67	1,600
Brookings	2,162,219	94	2,225	13,300
Unknown	17,405	4	12	1,000
Total	16,351,819	4451	11,945	100,800

 $<sup>^{1}\,</sup>$  Actual number of boats was 376 as 69 were from other Oregon ports.

Table 2. Summary ocean crab catch and effort by month, 1978-79.

Month	Pounds	Boats	Trips	Pots
December	6,063,863	324	2,803	74,900
January	4,946,271	323	2,543	78,500
February	1,043,904	296	1,043	63,800
March	1,565,387	319	1,959	77,000
April	975,333	233	1,170	57,200
May	798,726	173	877	45,700
June	483,089	149	704	40,100
July	190,192	81	307	23,100
August	188,097	80	344	21,100
September	76,957	69	195	24,400
Total	16,351,819	445 <sup>1</sup>	11,945	100,800

<sup>1</sup> Actual number of boats was 376 as 69 landed at more than one Oregon port.

Table 3. Ocean crab catch and effort, Astoria, 1978-79.

Month	Pounds	Boats	Trips	Pots
December	805,407	47	293	13,600
January	1,184,167	51	416	15,400
February	173,941	44	185	12,900
March	274,547	43	285	12,600
April	205,935	41	260	11,700
May	158,108	30	229	8,300
June	72,660	26	123	7,400
July	46,288	11	56	3,100
August	32,302	11	58	3,400
September	7,887	8	24	7,400
Total	2,961,242	741	1,929	18,500

<sup>1</sup> Fourteen boats were from other Oregon ports.

Table 4. Ocean crab catch and effort, Tillamook, 1978-79.

Month	Pounds	Boats	Trips	Pots
December	206,325	30	225	6,700
January	233,905	28	218	6,300
February	94,613	26	113	6,000
March	140,142	30	277	6,300
April	123,579	27	209	6,000
May	81,646	24	128	5,300
June	54,002	25	160	5,300
July	40,795	22	122	4,900
August	42,250	28	158	4,900
September	20,973	22	74	3,900
Total	1,038,230	56 <sup>1</sup>	1,684	8,600

<sup>1</sup> Nineteen boats were from other Oregon ports.

Table 5. Ocean crab catch and effort, Newport, 1978-79.

Month	Pounds	Boats	Trips	Pots	
December	1,098,966	41	230	15,900	
January	1,427,824	45	266	18,000	
February	306,477	46	136	18,800	
March	569,870	54	272	21,700	
April	348,590	40	175	15,900	
May	254,005	42	174	16,800	
June	206,750	36	167	14,700	
July	66,948	25	76	9,800	
August	67,623	19	62	7,800	
September	28,141	21	47	8,600	
Total	4,375,194	761	1,605	29,400	

 $<sup>^{1}</sup>$  Four boats were from other Oregon ports.

Table 6. Ocean crab catch and effort, Winchester Bay 1978-79.

Month	Pounds	Boats	Trips	Pots
December	462,704	16	163	4,700
January	435,595	19	217	5,600
February	93,435	19	92	5,600
March	95,113	18	130	5,300
April	38,179	12	56	3,500
May	64,944	11	74	3,200
June	27,280	9	47	2,600
July	4,997	4	14	1,200
August	6,874	4	17	1,200
September	3,556	4	13	1,200
Total	1,232,697	20	823	5,900

Table 7. Ocean crab catch and effort, Coos Bay 1978-79.

Month	Pounds	Boats	Trips	Pots	
December	1,459,709	62	556	14,300	
January	939,046	64	560	15,500	
February	207,778	60	191	14,000	
March	287,470	63	391	15,000	
April	176,101	41	211	9,700	
May	159,197	29	135	7,000	
June	80,151	26	111	6,300	
July	24,551	14	29	3,400	
August	33,005	12	37	2,900	
September	12,734	9	26	2,200	
Total	3,379,742	76 <sup>1</sup>	2,247	17,200	

 $<sup>^{1}\,\,</sup>$  Five boats were from other Oregon ports.

Table 8. Ocean crab catch and effort, Port Orford 1978-79.

Month 	Pounds	Boats	Trips	Pots	
December	562,366	41	487	6,200	
January	265,158	39	302	6,000	
February	65,872	33	94	5,100	
March	96,204	38	213	5,800	
April	44,357	29	100	4,300	
May	62,552	20	79	2,900	
June	31,314	14	62	2,000	
July	5,663	4	7	500	
August	3,493		4	300	
September	2,011	2 3	5	500	
Total	1,138,990	451	1,353	6,600	

<sup>1</sup> Two boats were from other Oregon ports.

Table 9. Ocean crab catch and effort, Gold Beach 1978-79.

Month	Pounds 	Boats	Trips	Pots <sup>2</sup>
December	0	0	0	
January	0	0	0	
February	5,563	2	5	
March	15,440	7	21	
April .	13,734	5	20	
May	5,556	4	13	
June	5,797	Ž	8	
July	0	Ō	Õ	
August	0	Õ	0	
September	0	Ö	0	
Total	46,090	81	67	

Table 10. Ocean crab catch and effort, Brookings 1978-79.

Month	Pounds	Boats	Trips	Pots
December	1,470,981	83	837	12,500
January	460,576	77	564	11,200
February	96,225	66	227	11,000
March	86,601	66	370	8,900
April	24,838	38	139	5,100
May	12,718	13	45	1,000
June	5,135	11	26	1,400
July	940	1	3	200
August	2,550	4	8	600
September	1,655	2	6	300
Total	2,162,219	941	2,225	12,000

<sup>1</sup> Seventeen boats were from other Oregon ports.

Table 11. Ocean crab catch and effort, Unknown Port 1978-79.

Month	Pounds	Boats	Trips	Pots	
December	17,405	4	12	1,000	

Table 12. Summary crab grade and average size by port and month, 1978-79 (market sample).

			Grade %		
Port	Month	T	11	Ш	Mean Size (mm)
Astoria	December	75.0	24.1	0.9	169
	January	96.4	3.6	0	176
	February	93.8	6.2	0	175
	March	96.9	3.1	0	172
	April	98.8	1.2	0	174
	May	99.1	0.9		170
Newport	December	78.7	21.3	0	176
•	January	89.2	10.8	0	178
	March	95.3	4.7	0	174
Coos Bay	December	74.2	25.8	0	173
	January	98.9	1.1		173
Brookings	December	90.4	9.6	0	172
<b>.</b>	January	94.0	6.0	0	170
	February	95.0	5.0	0	175
	March	89.6	10.4	0	-

Table 13. Sampling at sea, Astoria and Newport, 1978-79.

	December	January	/ March	April	September
Legal males Sublegal females Females % Females w/eggs % Legal male	270 55 11 0.0	31 (3	58) 54 (8) 7 (4) 81 (2) 18.5	97 28 288 3.1	140 23 171 0.0
softshells % Discard	31.5 19.6	1.6 (12. 55.6 (15.		0.0 76.5	58.6 58.1

 $<sup>^{1}</sup>$  Includes sublegal males, females, and legal softshell males. ( ) = Newport sample in January.

Table 14. Sampling at sea, Coos Bay and Brookings, 1978-79.

	December		January		March	
	Coos Bay	Brook.	Coos Bay	Brook.	Brookings	
Legal males	608	427	90	304	386	
Sublegal males	1	24	14	51	11	
Females	2	0	131	16	130	
% Females w/eggs % Legal male	50.0	0.0	88.5	68.8	1.5	
softshells	3.1	12.2	0.0	1.3	0.3	
% Discard <sup>1</sup>	0.5	5.3	61.0	14.4	26.8	

Includes sublegal males, females, and legal softshell males.

Table 15. Crab price per month, 1978-79.

Month	Price Range	Mean
December	\$0.55 - \$1.00	\$0.80
January	0.65 - 0.95	0.80
February	0.80 - 1.00	0.93
March	0.90 - 1.07	1.02
April	0.90 - 1.15	1.04
May	0.90 - 1.20	0.97
June	0.75 - 1.05	0.90
July	0.75 - 1.00	0.90
August	0.80 - 1.15	0.90
September	0.52 - 1.00	0.85

Table 16. Summary bay crab catch and effort by Port, 1978-79.

Bay	Pounds	Boats	Trips	Pots	Rings
Tillamook	16,853	9	248	120	12
Netarts	12,244	2	144	26	0
Yaquina	100	1	14	0	6
Alsea	4,558	4	24	0	80
Coos	9,701	39	86	0	180
Total	43,456	55	516	146	278

Table 17. Summary bay crab catch and effort by month, 1978-79.

Month	Pounds	Boats	Trips	Pots	Rings
December	6,313	13	48	56	116
January	1,683	6	22	16	33
February	1,957	8	23	16	70
March	943	7	16	36	42
April	1,480	7	19	36	12
May	314	2	7	20	6
June	1,867	4	17	70	26
July	3,331	4	30	60	0
August	1,159	3	20	60	20
September	2,020	7	45	96	32
October	7,116	12	111	126	68
November	15,273	32	157	126	278
Total	43,456	55	516	146	278

Table 18. Bay crab catch and effort, Tillamook Bay, 1978-79.

Month	Pounds	Boats	Trips	Pots	Rings
December	474	1	9	40	0
January	53	1	2	0	3
February	0	0	0	0	0
March	388	2	5	20	6
April	1,105	2	9	20	6
May	276	1	4	20	0
June	1,026	2	9	60	0
July	3,331	2	30	60	0
August	954	2	19	60	0
September	1,226	5	35	80	12
October	4,051	6	63	100	12
November	3,969	7	63	100	12
Total	16,853	9	248	120	12

Table 19. Bay crab catch and effort, Netarts Bay, 1978-79.

Month	Pounds	Boats	Trips	Pots	Rings
December	1,903	1	18	16	0
January	1,145	1	16	16	0
February	1,195	1	15	16	0
March	191	1	2	16	0
April	357	1	6	16	0
May	0	Ō	0	0	Ō
June	62	1	1	10	Ö
July	0	Ö	Ō	0	0
August	Ö	Ō	0	Ö	0
September	294	i	9	16	Ö
October	2,871	2	42	26	Ö
November	4,226	2	35	26	0
Total	12,244	2	144	26	0

Table 20. Bay crab catch and effort, Yaquina Bay, 1978-79.

Month	Pounds	Boats	Trips	Rings
December	10	1	1	6
January	0	Ō	0	0
February	0	0	0	0
March	14	1	2	6
April	18	1	4	6
May	38	1	3	6
June	2	1	1	6
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	4	1	1	6
November	14	1	2	6
Total	100	1	14	6

Table 21. Bay crab catch and effort, Alsea Bay, 1978-79.

Pounds	Boats	Trips	Rings
366	1	1	20
	1	1	20
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
205	1	1	20
500	1	1	20
158	2	4	40
3,089	4	16	80
4,558	4	24	80
	366 240 0 0 0 0 0 0 205 500 158 3,089	366 1 240 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 205 1 500 1 158 2 3,089 4	366 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Table 22. Bay crab catch and effort, Coos Bay, 1978-79.

Month 	Pounds	Boats	Trips	Rings
December	3,560	9	20	90
January	245	3	3	30
February	762	7	8	70
March	350	3	7	30
April	0	0	0	0
May	0	0	0	0
June	777	2	6	20
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	32	1	1	10
November	3,975	18	41	180
Total	9,701	39	86	180

#### 1979-80 DUNGENESS CRAB FISHERY

#### **OVERVIEW**

The ocean season opened December 1, 1979, and closed September 15, 1980, although a price dispute between fishermen and processors delayed fishing for one week. An extension of the season was also requested by some fishermen, but was denied. A new record of 18.2 million pounds was landed by 465 boats, also a record. Over 10 million pounds were landed during the first two months of the fishery. Some fishermen began fishing out to 80 fathoms in nontraditional areas which caused some conflicts with other fisheries. Crab grade was good and size was average. Price opened at 45 cents and ranged up to 75 cents for most of the season. The estuary fishery was open all year producing nearly 40,000 pounds.

# OCEAN CATCH AND EFFORT

The 1979-80 fishery caught a record 18.2 million pounds (Table 1). The port of Newport led all ports with 5.6 million pounds followed by the ports of Coos Bay, Brookings, and Astoria. About 91% of the harvest was taken by the end of April (Table 2).

Effort also was a record although the ports of Astoria and Tillamook had more boats the previous year. There were also more pots fished during the year compared to 1978-79, but the average number of pots per boat remained about the same.

Detailed catch and effort data for each port is given in Tables 3 to 10.

### PRESEASON SURVEY

Several fishermen expressed interest in preseason cruises with a special interest in finding a hot spot as reflected by the catch per pot. However, the type of survey done does not provide meaningful data to that end as a few pots fished without competition from many thousands of other pots would be expected to have a high catch per pot. The survey does provide a general look at crab grade and depth distribution.

Surveys were done out of the ports of Astoria and Brookings. Sets of 5 pots each were made at 10 fathom intervals from 10 to 50 fathoms in an area usually fished during the first month of the season. All crabs caught were measured, graded to sex and condition, and returned to the ocean. The data is summarized in Table 11. Although omitted from the table the data also showed that legal crabs were most plentiful from 20 to 30 fathoms.

The information collected was available upon request to the industry.

#### MARKET SAMPLING

Crabs were sampled at the dock in the ports of Astoria, Newport, Coos Bay, and Brookings, generally during the first two months of the season. Crab grade was generally good although the sample at Coos Bay showed 27% softshells (Table 12). However, there is usually considerable variation in samples depending upon the area and depth fished and the amount of sorting at sea. Crab size was average.

### SAMPLING AT SEA

Three trips aboard commercial vessels were taken out of Astoria and two out of Brookings (Tables 13 and 14). The data show few sublegal male crabs in the pots, which is expected for gear with escape ports, but the large catch of small female crabs was puzzling. Also, the percentage of female crabs with eggs decreased in February.

# PRICE

The price range and mean by month is shown in Table 15. The season opened at \$0.45 and gradually rose to \$1.10 by August. The average price for the time of heaviest catch was about \$0.65.

# BAY CRAB FISHERY

The commercial bay crab fishery is summarized in Tables 16-22. Nearly 40,000 pounds of Dungeness crabs were taken from 5 estuaries with Alsea Bay producing the most with Tillamook, Netarts, and Coos bays close behind. Most of the bay fishery occurred in October and November, but a fair December catch came from Netarts and Alsea bays.

Table 1. Summary ocean crab catch and effort by Port, 1979-80.

Port	Pounds	Boats	Trips	Pots
Astoria	2,171,266	68	1,445	19,000
Tillamook	846,897	53	1,429	11,300
Newport	5,667,540	100	2,115	39,300
Winchester Bay	1,133,904	38	999	8,200
Coos Bay	3,756,123	109	2,657	22,600
Port Orford	1,874,930	55	1,642	7,900
Gold Beach	61,988	6	40	700
Brookings	2,729,701	109	2,284	16,400
Total	18,242,526	5411	12,610	125,400

The actual number of boats was 465 as 76 either had no pots or were from other Oregon ports.

Table 2. Summary ccean crab catch and effort by month, 1979-80.

Month	Pounds	No. Boats	No. Trips	No. Pots
December	5,363,057	421	2,234	101,300
January	4,682,268	392	2,752	103,700
February	3,152,341	371	1,966	99,400
March	2,149,985	356	1,668	95,700
April	1,191,728	298	1,215	79,500
May	734,873	232	947	63,800
June	334,535	188	643	51,500
July	208,045	126	397	36,700
August	234,276	105	449	30,600
September	191,418	85	340	26,000
Total	18,242,526	541 <sup>1</sup>	12,611	125,400

The actual number of boats was 465 as 76 either had no pots or were from other Oregon ports.

Table 3. Ocean crab catch and effort, Astoria, 1979-80.

Month	Pounds	Boats	Trips	Pots
December	516,154	48	164	14,500
January	739,032	49	381	15,500
February	275,230	41	194	14,100
March	226,300	38	184	12,800
April	155,158	32	135	10,300
May	75,096	24	90	7,900
June	34,304	13	61	4,500
July	24,292	11	47	4,600
August	60,970	15	114	4,000
September	64,730	14	75	4,500
Total	2,171,266	68 <sup>1</sup>	1,445	19,000

<sup>1</sup> Thirteen boats were from other Oregon ports.

Table 4. Ocean crab catch and effort, Tillamook, 1979-80.

Pounds	Boats	Trips	Pots
167.911	34	106	7,800
			8,100
<u>-</u>			8,100
		155	7,800
-	25	121	7,000
59,465	28	168	7,800
35,802	30	162	8,700
	32	147	8,700
32,450	23	134	6,400
22,406	23	85	6,100
846,897	531	1,429	11,300
	167,911 236,991 92,953 89,625 65,206 59,465 35,802 44,088 32,450 22,406	167,911 34 236,991 28 92,953 28 89,625 27 65,206 25 59,465 28 35,802 30 44,088 32 32,450 23 22,406 23	167,911       34       106         236,991       28       225         92,953       28       128         89,625       27       155         65,206       25       121         59,465       28       168         35,802       30       162         44,088       32       147         32,450       23       134         22,406       23       85

<sup>1</sup> Fourteen boats had no pots.

Table 5. Ocean crab catch and effort, Newport, 1979-80.

Month	Pounds	Boats	Trips	Pots	
December	1,313,590	70	286	30,400	
January	1,393,727	73	386	32,600	
February	1,245,291	71	372	31,700	
March	904,261	80	353	33,500	
April	314,281	62	211	27,300	
May	219,277	54	175	23,200	
June	101,786	42	125	17,900	
July	66,502	30	79	13,400	
August	63,338	26	69	11,200	
September	45,487	20	59	8,900	
Total	5,667,540	1001	2,115	39,300	

<sup>1</sup> Twelve boats had no pots.

Table 6. Ocean crab catch and effort, Winchester Bay, 1979-80.

Month	Pounds	Boats	Trips	Pots	
December	256,916	29	130	6,900	
January	208,472	26	154	6,600	
February	243,082	28	148	7,100	
March	172,583	26	159	6,600	
April	97,314	23	100	5,800	
May	66,291	20	115	5,000	
June	31,598	14	65	3,700	
July	26,771	8	51	2,100	
August	22,313	9	43	2,400	
September	8,564	8	34	2,100	
Total	1,133,904	381	999	8,200	

<sup>1</sup> Seven boats had no pots.

Table 7. Ocean crab catch and effort, Coos Bay, 1979-80.

Month	Pounds	Boats	Trips	Pots
December	960,406	90	475	19,000
January	777,885	86	550	18,800
February	751,506	85	456	18,400
March	538,771	77	369	16,900
April	304,225	65	281	14,200
May	223,646	44	229	9,600
June	90,017	40	131	8,500
July	22,265	22	43	4,800
August	41,1729	17	58	3,500
September	45,673	14	65	3,100
Total	3,756,123	109 <sup>1</sup>	2,657	22,600

<sup>1</sup> Six boats had no pots.

Table 8. Ocean crab catch and effort, Port Orford, 1979-80.

Month	Pounds	Boats	Trips	Pots
December	743,878	53	360	7,700
January	491,120	46	384	7,400
February	201,216	41	264	6,600
March	116,277	40	217	6,400
April	189,840	38	210	5,900
May	72,910	34	113	5,400
June	30.793	30	59	4,900
July	18,961	18	18	3,000
August	9,649	10	16	1,500
September	463	1	3	200
Total	1,875,107	591	1,644	7,900

<sup>1</sup> Seven boats had no pots.

Table 9. Ocean crab catch and effort, Gold Beach, 1979-80.

Month	Pounds	Boats	Trips	Pots
December	6,330	1	2	100
January	21,770	ī	8	100
February	21,638	3	9	400
March	10,653	4	13	500
April	714	2	2	300
May	384	2	2	300
June	322	1	2	100
July	0	Ō	Ō	0
August	100	i	1	200
September	77	1	1	200
Total	61,988	6	40	700

Table 10. Ocean crab catch and effort, Brookings, 1979-80.

Month	Pounds	Boats	Trips	Pots
December	1,397,872	96	711	14,900
January	813,271	83	664	14,600
February	321,425	74	395	13,000
March	91,515	64	218	11,200
April	64,990	51	155	8,700
May	17,804	26	57	4,600
June	9,913	18	38	3,200
July	5,166	5	12	700
August	3,726	5	15	900
September	4,019	5	19	900
Total	2,279,701	1091	2,284	16,400

<sup>1</sup> Seventeen boats had no pots.

Table 11. Preseason sampling at sea, Astoria and Brookings, November, 1979-80.

	Astoria —————	Brookings
Legal males	568	247
Sublegal males	43	38
Females	11	7
Percent females w/eggs	9.1	0
Percent legal male softshells Percent discard <sup>1</sup>	5.6	10.5
Percent discard <sup>1</sup>	8.7	15.4
Depth fished (fathoms)	10-50	15-50

<sup>1</sup> Includes sublegal males and females.

Table 12. Summary crab grade and average size by port and month 1979-80 (market sample).

			Grade %	Mean Size	
Port	Month 	I	II	III	( mm )
Astoria	December	97.6	2.4	0	176
	January	92.0	8.0	0	176
	February	97.6	2.4	0	175
	May	90.4	9.6	0	172
Newport	December	94.7	5.3	0	178
·	January	99.2	8.0	0	180
Coos Bay	January	72.4	27.6	0	170
Brookings	December	94.2	5.8	0	176
_	January	94.9	5.1	0	174

Table 13. Sampling at sea, Astoria, 1979-80.

	December	January	February ———
Legal males	69	132	212
Sublegal males	5	21	34
Females	10	213	156
Percent females w/eggs	30.0	32.4	3.2
Percent legal male softshells	0.0	0.0	0.0
Percent discard <sup>1</sup>	17.9	63.9	47.3
Depth fished (fathoms)	10	8-27	3-5

<sup>1</sup> Includes sublegal males and females.

Table 14. Sampling at sea, Brookings, 1979-80.

	December	January
Legal males	500	202
Sublegal males	19	57
Females	36	152
Percent females w/eggs	100.0	28.9
Percent legal male softshells	3.8	5.9
Percent legal male softshells Percent discard <sup>1</sup>	9.9	51.4
Depth fished (fathoms)	18-24	14-30

<sup>1</sup> Includes sublegal males and females.

Table 15. Crab price per month, 1979-80.

Month	Price Range	Mean
December	\$0.45 - 0.80	\$0.55
January	0.45 - 0.75	0.63
February	0.65 - 0.85	0.75
March	0.60 - 0.75	0.73
April	0.50 - 0.80	0.70
May	0.50 - 0.85	0.65
June	0.50 - 0.85	0.65
July	0.55 - 1.00	0.75
August	0.70 - 1.10	0.77
September	0.70 - 1.10	0.80

Table 16. Bay crab catch and effort by bay, 1979-80.

Bay	Pounds	Boats	Trips	Pots	Rings
Tillamook Bay	10,466	14	148	70	0
Netarts	9,940	3	97	60	Ō
Yaquina	174	2	23	0	12
Alsea Bay	11,718	8	64	0	120
Coos Bay	7,548	18	77	0	270
Total	39,846	45	409	130	402

Table 17. Summary bay crab catch and effort by month, 1979-80.

Month	Pounds	Boats	Trips	Pots	Rings
December	4,185	13	37	70	126
January	2,145	3	23	40	15
February	545	5	13	43	21
March	482	3	11	20	21
April	64	3	5	23	6
May	8	1	2	0	6
June	496	3	9	20	21
July	2,223	7	31	50	21
August	1,126	5	26	30	21
September	2,102	13	33	50	255
October	13,444	17	110	60	171
November	13,026	20	109	60	216
Total	39,846	45	409	130	402

Table 18. Bay crab catch and effort, Tillamook, 1979-80.

Month	Pounds	Boats	Trips	Pots
December	121	2	3	30
January	0	0	0	0
February	44	1	1	3
March	0	0	0	0
April	35	1	1	3
May	0	0	0	0
June	198	1	2	20
July	2,097	5	25	50
August	1,001	3	21	30
September	846	3	14	30
October	2,976	4	38	40
November	3,148	4	43	40
Total	10,466	14	148	70

Table 19. Bay crab catch and effort, Netarts Bay, 1979-80.

Month	Pounds	No. Boats	No. Trips	No. Pots
December	2,585	2	20	40
January	2,125	2	22	40
February	448	2	9	40
March	266	1	4	20
April	23	1	1	20
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	152	1	5	20
October	1,535	1	18	20
November	2,806	1	18	20
Total	9,940	3	97	60

Table 20. Bay crab catch and effort, Yaquina Bay, 1979-80.

Month	Pounds	Boats	Trips	Rings
December	7	1	3	6
January	0	0	0	0
February	2	1	1	6
March	20	1	1	6
April	6	1	3	6
May	8	1	2	6
June	22	1	4	6
July	24	1	4	6
August	36	1	2	6
September	0	0	0	0
October	4	1	2	6
November	45	1	1	6
Total	174	2	23	12

Table 21. Bay crab catch and effort, Alsea Bay, 1979-80.

Month	Pounds	Boats	Trips	Rings
December	1,037	5	7	75
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	739	3	8	45
October	7,098	5	34	75
November	2,844	3	15	45
Total	11,718	8	64	120

Table 22. Bay crab catch and effort, Coos Bay, 1979-80.

Month	Pounds	Boats	Trips	Rings
December	435	3	4	45
January	20	1	1	15
February	51	1	2	15
March	196	1	6	15
April	0	0	0	0
May	0	0	0	0
June	276	1	3	15
July	102	1	2	15
August	89	1	3	15
September	365	6	6	90
October	1,831	6	18	90
November	4,183	11	32	165
Total	7,548	18	77	270

### 1980-81 DUNGENESS CRAB FISHERY

### OVERVIEW

The ocean fishery opened December 1, 1980, and closed September 15, 1981. A request by fishermen to extend the season to October 15 was denied. The 1981 fishery produced 9.5 million pounds landed by 447 boats. Over 75% of the harvest was taken during the first two months of the season. Size of crab was average except at Astoria where size was slightly below average. Crab grade was good. Price started at \$0.50, but quickly rose to \$1.00 remaining near \$1.30 for most of the season. The estuary fishery was open all year and produced 23,000 pounds.

The advent of a scallop fishery in April created many conflicts with crab fishermen but the fishery was short-lived.

#### OCEAN CATCH AND EFFORT

Crab catch for 1981 was 9.5 million pounds, about one half of the 1980 season (Table 1). The port of Newport landed the most crab with Brookings a close second. The rate of harvest over time followed the usual pattern with over 75% of the catch coming in during the first two months of the season (Table 2). However, there was an increase in landings late in the season. This was also evident last year at Astoria, hence a request from north coast fishermen this year to extend the season.

Although catch declined by 50% in 1981 the number of boats declined by only 16% (Table 1) so the corresponding number of pots remained high crowding the traditional fishing areas. To compound matters a major scallop fishery using scallop dredges developed off the Coos Bay area in 40 to 50 fathoms which conflicted greatly with crab fishing. As the scallop fishery expanded north and south along the coast so did the conflicts. Scallop and crab fishermen finally met to come to some agreement, but the agreement was violated by both sides. The scallop fishery was spent by July so the problem resolved itself for the most part.

Detailed catch and effort data by port is shown in Tables 3 to 9.

### MARKET SAMPLING

Crab were sampled at the dock at the ports of Astoria, Newport, and Brookings generally during the first two months of the season. Grade and size were about average, but the size of crab at Astoria was 2-3 mm under average. Crab at Newport was slightly above average (Table 10).

# SAMPLING AT SEA

One day trips aboard commercial crab boats were made out of the ports of Astoria, Newport, and Brookings. One trip per month from each port was planned, but the advent of a scallop fishery altered plans substantially. The purpose for sampling at sea was to get a better measure of the total catch from crab pots including legal crabs, sublegal males, females, presence or absence of eggs, size, grade, and amount of sorting. Since boats were fishing from 5 to 50 fathoms we had a broad choice of areas from which to choose.

A summary of pertinent data is presented in Table 11. The sharp decrease in the number of legal males caught from December to the January/March period was also reflected in a similar decline in total harvest. A lack of sublegal males is proof that escape ports are an effective release mechanism in crab pots. However, all female crabs could have escaped through the escape ports, but for some reason stay in the pots. The number of females caught so early in the season was surprisingly large. The data also revealed that females with eggs were more common early in the season especially off Astoria.

### PRICE

The price paid for crab to fishermen is shown in Table 12. The opening price was \$0.50 but quickly rose over \$1.00 by mid-January. The average price for most of the season was about \$1.30.

### BAY CRAB FISHERY

The commercial bay crab fishery is summarized in Tables 13 and 14. Only 23,100 pounds of crab were caught in five estuaries with the most coming from Tillamook and Netarts bays. Although most bay crabbing takes place after the ocean fishery closes the increase in sport crabbing has resulted in an increase in complaints from sport crabbers. Most of the 1981 complaints came from Netarts and Alsea bays. Catch and effort data are shown in Tables 15-19.

Table 1. Summary ocean crab catch and effort by port, 1980-81.

Port	Pounds	Boats	Trips	Pots
Astoria	1,234,147	61	1,677	23,200
Tillamook	431,707	33	1,111	7,300
Newport	2,769,686	89	1,740	34,300
Winchester Bay	699,868	31	885	11,100
Coos Bay	1,513,152	81	1,696	22,400
Port Orford	856,249	48	1,296	7,900
Brookings	2,001,009	109	2,278	20,400
Total	9,505,818	452 <sup>1</sup>	10,683	126,600

<sup>1</sup> The actual number of boats was 447 as 5 boats had no pots.

Table 2. Summary ocean crab catch and effort by month, 1980-81.

Month	Pounds	Boats	Trips	Pots
December	5,734,178	408	3,209	117,300
January	1,608,276	363	2,093	103,300
February	687,431	315	1,395	89,000
March	433,203	275	1,186	78,700
April .	445,855	225	1,063	63,300
May	210,887	141	605	41,200
June	97,728	117	383	35,300
July	84,577	82	303	26,000
August	118,531	69	325	22,100
September	85,152	48	211	16,800
Total	9,505,818	452 <sup>1</sup>	10,683	126,600

<sup>1</sup> The actual number of boats was 447 as 5 boats had no pots.

Table 3. Ocean crab catch and effort, Astoria, 1980-81.

Month	Pounds	Boats	Trips	Pots	
December	632,524	45	358	17,100	
January	182,481	41	307	15,600	
February	76,677	31	161	11,800	
March	64,045	30	176	11,400	
April	87,565	32	164	12,200	
May	41,406	21	97	8,000	
June	18,720	15	70	5,700	
July	37,008	15	117	5,700	
August	59,377	18	138	6,900	
September	34,344	14	89	5,300	
Total	1,234,147	61 <sup>1</sup>	677	23,200	

 $<sup>^{1}\,\,\,\,</sup>$  Five boats were from Washington.

Table 4. Ocean crab catch and effort, Tillamook, 1980-81.

Month	Pounds	Boats	Trips	Pots
December	140,777	25	127	5,500
January	98,064	27	137	5,900
February	31,874	29	120	6,400
March	34,443	26	126	5,700
April	40,919	28	127	6,200
May	29,261	23	128	5,100
June	12,013	20	86	4,400
July	13,555	16	96	3,500
August	20,172	17	101	3,700
September	10,629	12	63	2,600
Total	431,707	331	1,111	7,300

 $<sup>^{1}</sup>$  Five boats had no pots.

Table 5. Ocean crab catch and effort, Newport, 1980-81.

Month	Pounds	Boats	Trips	Pots	
Danamhau	1 626 995	70	400	20, 000	
December	1,636,885	78 75	426	30,000	
January	543,140	75	361	28,900	
February	197,995	68	249	26,200	
March	136,225	56	226	21,600	
April	126,555	43	208	16,600	
May	49,739	34	107	13,100	
June	31,698	27	66	10,400	
July	22,016	24	47	9,200	
August	17,654	14	31	5,400	
September	7,779	8	19	3,100	
Total	2,769,686	89	1,740	34,300	

Table 6. Ocean crab catch and effort, Winchester Bay, 1980-81.

Month	Pounds	Boats	Trips	Pots	
December	377,155	29	230	10,400	
January	118,505	28	165	10,100	
February	76,174	25	147	9,100	
March	31,525	20	87	7,200	
April	41,613	13	94	4,700	
May	25,752	12	73	4,300	
June	9,908	11	41	3,900	
July	3,875	7	13	2,500	
August	7,797	6	20	2,200	
September	7,564	6	6	2,200	
Total	699,868	31	891	11,100	

Table 7. Ocean crab catch and effort, Coos Bay, 1980-81.

Month	Pounds	Boats	Trips	Pots	
December	870,645	78	491	21,600	
January	290,171	70 72	378	19,900	
February	149,783	64	261	17,700	
March	75,314	53	218	14,700	
April	64,217	34	152	9,400	
May	24,844	21	76	5,800	
June	11,774	20	47	5,500	
July	6,397	9	19	2,500	
August	12,290	8	27	2,200	
September	7,717	6	32	1,700	
Total	1,513,152	81	1,701	22,400	

Table 8. Ocean crab catch and effort, Port Orford, 1980-81.

Month	Pounds	Boats	Trips	Pots	
December	480,367	46	458	7,500	
January	165,192	38	308	6,200	
February	51,358	35	122	5,700	
March	45,615	30	128	4,900	
April	55,790	29	147	4,800	
May	30,821	17	85	2,800	
June	9,072	14	38	2,300	
July	1,335	9	6	1,500	
August	305	2	3	300	
September	16,394	1	1	200	
Total	856,249	48	1,297	7,900	

Table 9. Ocean Ccab catch and effort, Brookings, 1980-81.

Month	Pounds	Boats	Trips	Pots	
December	1,595,825	107	1,019	20,000	
January	210,723	82	442	15,300	
February	103,570	63	335	11,800	
March	46,036	61	225	11,400	
April	29,196	46	171	8,600	
May	9,064	12	39	2,200	
June	4,543	13	35	2,400	
July	391	2	5	400	
August	936	4	5	700	
September	725	1	2	200	
Total	2,001,009	109	2,278	20,600	

Table 10. Summary crab grade and average size by port and month, 1980-81 (market sample).

		Grade % Av				
Port	Month	I	II	III	Average Size (mm)	
Astoria	December	98.3	1.7	0	172	
	January	95.4	4.6	0	171	
	February	93.6	6.4	0	171	
Newport	December	98.2	1.8	0	177	
	January	99.1	0.9	0	176	
Brookings	December	97.1	2.9	0	174	

Table 11. Summary sampling at sea data, 1980-81.

	Astoria		Newport		Brookings	
	Dec.	Feb.	Dec.	March	Dec.	Jan.
Legal males	318	72	512	123	360	128
Sublegal males	49	26	38	28	63	24
Females	30	420	27	637	29	186
% Berried females	33.3	6.9	37.0	0	86.2	0.6
% Legal male softshells	1.3	0	6.4	0	0	0
% Discard <sup>1</sup>	19.9	86.1	15.9	84.4	20.4	62.1

<sup>1</sup> Includes sublegal males, females and softshell males.

Table 12. Crab price per pound by month, 1980-81.

Month	Price range	Mean
December	\$0.50-\$0.75	\$0.65
January	0.70- 1.10	0.85
February	1.10- 1.20	1.15
March	1.10- 1.30	1.20
April	1.10- 1.40	1.25
May	1.15- 1.30	1.25
June	1.15- 1.30	1.25
July	1.00- 1.15	1.05
August	1.20- 1.50	1.05
September	1.00- 1.15	1.05

Table 13. Summary bay crab catch and effort by bay, 1980-1981.

Bay	Pounds	Boats	Trips	Pots	Rings
Tillamook	8,972	15	160	40	60
Netarts	6,635	2	90	16	6
Yaquina	133	4	14	0	6
Alsea	4,135	10	37	0	60
Coos	3,225	16	60	0	64
Total	23,100	47	361	56	196

Table 14. Summary bay crab catch and effort by month, 1980-81.

Month	Pounds	Boats	Trips	Pots	Rings
December	1,161	4	12	16	43
January	1,787	į	16	16	6
February	1,076	3	19	16	9
March	118	3	3	0	29
April	6	i	ī	Ö	3
May	284	5	13	Ö	37
June	322	6	14	0	73
July	1,526	12	35	40	88
August	1,632	11	33	40	54
September	2,492	14	40	56	104
October	8,366	16	107	56	114
November	4,930	14	68	56	70
Total	23,100	47	361	56	196

Table 15. Bay crab catch and effort, Tillamook Bay, 1980-81.

Month	Pounds	Boats	Trips	Pots	Rings
December	0	0	0	0	
January	0	0	0	0	0 0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	n	0
May	68	1	2	n	15
June	273	4	10	ő	60
July	1,289	8	31	40	60
August	1,175	6	26	40	20
September	1,323	5	17	40	20
October	3,307	3	47	40	0
November	1,537	3	27	40	0
Total	8,972	15	160	40	60

Table 16. Bay crab catch and effort, Netarts Bay, 1980-81.

Month	Pounds	No. Boats	No. Trips	No. Pots	Rings
December	702	1	9	16	0
January	1,187	2	16	16	6
February	1,064	2	17	16	6
March	11	1	1	0	6
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	78	1	1	16	0
October	2,031	1	26	16	0
November	1,562	1	20	16	0
Total	6,635	2	90	16	6

Table 17. Bay crab catch and effort, Yaquina Bay, 1980-81.

Month	Pounds	Boats	Trips	Rings
December	7	1	1	3
January	0	0	0	0
February	12	1	2	3
March	7	1	1	3
April	6	1	1	3
May	97	2	8	6
June	4	1	1	3
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	0	0	0	0
November	0	0	0	0
Total	133	4	14	6

Table 18. Bay crab catch and effort, Alsea Bay, 1980-81.

Month	Pounds	Boats	Trips	Rings
December	452	2	2	40
January	0	0	0	0
February	0	0	0	0
March	100	1	1	20
April	0	0	0	0
May	30	1	2	10
June	45	1	3	10
July	12	1	1	10
August	13	1	1	10
September	685	4	12	60
October	2,135	5	14	50
November	663	1	1	10
Total	4,135	10	37	60

Table 19. Bay crab catch and effort, Coos Bay, 1980-81.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	Ö	Ŏ	Ö	Ō
February	Õ	Ŏ	Ö	Ö
March	Ō	Ō	Ō	Ö
April	Ö	Ö	Ō	Ŏ
May	89	1	1	6
June	0	ō	Ō	Ö
July	225	š	3	18
August	444	4	6	24
September	406	4	10	24
October	893	ż	20	64
November	1,168	9	20	60
Total	3,225	16	60	64

### 1981-82 DUNGENESS CRAB FISHERY

### OVERVIEW

The ocean fishery opened December 1, 1981, and closed October 15, 1982, including a 30 day extension requested by fishermen. The 1982 fishery produced 8.7 million pounds landed by 370 boats. Nearly 25% of the harvest was landed during the last six weeks of the season. Crab grade was good early in the season but was fair to poor at the end. Sampling revealed that sorting at sea was very heavy, but poor quality crab was still being landed. Crab price started at \$0.80 cents and reached \$1.40 by April. However, as poor quality crab began to be landed in quantity the price fell to \$0.60. The bay crab fishery produced only 12,452 pounds, about half of last year's catch.

# OCEAN FISHERY CATCH AND EFFORT

The 1981-82 crab catch was 8.7 million pounds with the port of Coos Bay landing the most crab (Table 1). Nearly 25% of the harvest was landed during the last six weeks of the season. This occurred because a major molt took place during the spring months and crabs that would have normally been harvested the following season became available to the fishery in large numbers. The fishery was very intense in the Coos-Winchester Bay area.

The late season increase in effort is also evident (Table 2). The number of boats usually declines to a relatively small number midseason, but in 1982 an increase began in August and accelerated rapidly. Not only did the number of boats increase, but the number of trips made per month doubled from July to September. A detailed record of activity by port is given in Tables 3-9. Only the port of Brookings was slow to react to the bonanza and most fishermen waited until the last two weeks before going fishing again.

### MARKET SAMPLING

The 1981-82 season began as most have in the past with crab grade good early in the season. However, in September the picture was reversed as crab grade was marginal at best (Table 10). Even with heavy sorting at sea most crab landed were not top quality.

Many arguments between fishermen and dealers ensued as soft crab were landed. Most dealers resorted the catch as it was unloaded and unusable crabs were tossed off the dock into the estuary. Many of these crab did not survive. Meat yield was also low. Under normal circumstances some crab is sorted out and sold whole cooks with all other crab being picked. During this time all of the crab was picked and meat yield ranged from 15 to 20%, rather than over 20%.

# SAMPLING AT SEA

Sampling at sea was confined to the last two months of the season. The main purpose was to observe how many legal size crab were being discarded as softshells. Table 11 reveals that about 50 percent of the legal male crabs caught were too unfilled for fishermen and were discarded. Mortality estimates from handling soft ranged up to 50% depending upon the condition of the crab according to studies done in Washington state. In our situation the mortality was assumed to be high on the soft crabs which most likely were caught and handled repeatedly.

Table 1. Summary ocean crab catch and effort by port, 1981-82.

Port	Pounds	Boats	Trips	Pots
Astoria	1,037,140	57	1,481	16,800
Tillamook	258,605	31	922	5,400
Newport	2,126,755	81	1,497	32,400
Winchester Bay	895,128	30	1,080	7,800
Coos Bay	2,206,506	85	2,196	23,400
Port Orford	656,282	35	1,091	5,100
Brookings	1,536,121	103	2,133	16,200
Total	8,716,537	423	10,400	107,100

Table 2. Summary ocean crab catch and effort by month, 1981-82.

Month	Pounds	Boats	Trips	Pots
December	3,183,948	326	2,367	94,200
January	1,129,357	307	1,763	90,500
February	644,452	275	1,274	82,500
March	376,266	217	861	67,000
April	416,996	177	832	55,500
May	258,715	116	583	36,800
June	135,390	115	424	35,500
July	112,879	69	238	22,000
August	231,208	<b>7</b> 7	455	26,500
September	1,109,911	129	872	42,000
October	1,117,015	141	731	44,700
Total	8,716,537	423	10,400	127,400

Table 3. Ocean crab catch and effort, Astoria, 1981-82.

Month	Pounds	Boats	Trips	Pots
December	309,814	42	368	15,400
January	88,582	31	196	11,400
February	44,860	22	100	8,100
March	64,045	30	176	11,400
April	59,772	16	112	6,900
May	46,065	13	82	5,800
June	13,182	12	46	4,400
July	9,129	12	38	4,400
August	38,235	13	110	5,800
September	191,456	19	187	7,000
October	186,2897	21	120	7,900
Total	1,037,140	57	1,48	20,900

Table 4. Ocean crab catch and effort, Tillamook, 1981-82.

Month	Pounds	Boats	Trips	Pots
December	48,900	22	106	5,700
January	15,901	19	66	4,900
February	26,789	19	101	4,900
March	21,280	16	76	4,600
April	18,516	17	82	4,400
May	23,184	16	85	4,400
June	20,057	20	102	5,200
July	19,090	16	85	4,400
August	29,978	15	115	4,900
September	15,546	14	65	4,600
October	21,361	10	51	2,600
Total	258,602	31	922	8,200

Table 5. Ocean crab catch and effort, Newport, 1981-82.

Month	Pounds	Boats	Trips	Pots
December	626,511	55	262	24,700
January	280,158	60	247	27,000
February	167,438	56	198	25,200
March	136,075	49	179	22,100
April	124,212	44	136	19,800
May	70,900	25	92	11,300
June	46,491	25	80	11,300
July	50,380	12	36	5,400
August	51,143	15	41	6,700
September	247,826	22	113	9,900
October	325,621	24	113	10,800
Total	2,126,755	82	1,497	36,900

Table 6. Ocean crab catch and effort, Winchester Bay, 1981-82.

Month	Pounds	Boats	Trips	Pots
December	264,026	20	178	5,500
January	96,965	25	134	6,700
February	93,185	25	145	6,700
March	48,403	23	97	6,100
April	75,235	21	123	5,500
May	37,637	17	76	4,300
June	20,865	18	63	4,300
July	15,403	10	3	2,600
August	34,747	9	49	2,600
September	120,701	16	114	4,300
October	87,961	15	70	4,100
Total	895,128	301	1,080	7,800

<sup>1</sup> Three boats had no pots.

Table 7. Ocean crab catch and effort, Coos Bay, 1981-82.

Month	Pounds	Boats	Trips	Pots
December	653,513	62	366	18,600
January	292,609	63	377	19,200
February	162,066	59	268	18,200
March	67,567	48	178	15,400
April	62,455	30	157	9,300
May	41,722	19	126	5,800
June	18,701	17	65	5,400
July	13,707	13	33	4,200
August	47,649	15	88	4,500
September	490,491	40	283	12,800
October	356,027	44	255	13,800
Total	2,206,506	851	2,196	23,400

<sup>1</sup> Twelve boats had no pots.

Table 8. Ocean crab catch and effort, Port Orford, 1981-82.

Month	Pounds	Boats	Trips	Pots
December	289,272	34	302	5,000
January	114,083	31	209	4,800
February	53,707	25	116	4,000
March	34,303	21	103	3,300
April	45,243	18	98	2,900
May	27,883	9	75	1,400
June	12,217	9	36	1,400
July	4,925	4	12	600
August	30,639	6	36	1,000
September	30,521		78	1,400
October	13,489	9 5	26	800
Total	656,282	35 <sup>1</sup>	1,091	5,100

<sup>1</sup> Three boats had no pots.

Table 9. Ocean crab catch and effort, Brookings, 1981-82.

Month	Pounds	Boats	Trips	Pots
December	991,909	91	785	15,500
January	241,060	78	534	14,200
February	91,511	63	324	11,100
March	23,778	36	128	6,600
April	31,563	31	124	5,500
May	11,324	17	59	3,000
June	4,277	14	32	2,300
July	245	2	3	400
August	817	4	16	700
September	13,370	9	32	1,500
October	126,267	22	96	3,800
Total	1,536,121	1031	2,133	16,200

<sup>1</sup> Seventeen boats had no pots.

Table 10. Summary crab grade and average size by port and month 1981-82 (market sample).

			Grade %		Mean Size
Port	Month	I	ΙΙ	III	(mm)
Astoria	December	97.9	2.1	0	171
	January	93.4	6.6	0	172
	September	69.5	30.5	0	-
	October	59.7	40.3	0	-
Newport	December	100.0	0	0	176
•	September	40.5	59.5	0	-
	October	47.0	53.0	0	-
Brookings	January	96.3	3.7	0	172
3	October	30.8	69.2	0	-

Table 11. Summary sampling at sea, 1981-82.

Port	Month	% Legal Crab discarded <sup>1</sup>	% Softshell landed <sup>1</sup>	% Discard of sublegal males and females
Astoria	September	<b>4</b> 5	38	28
	October	2	30	32
Newport	September	51	50	53
	October	9	46	34
Winchester Bay	September	58	50	42
	October	33	30	24
Gold Beach	September	77	35	37
Port Orford	September	25	35	28
	October	3	40	50
Brookings	October	2	75	22

<sup>1</sup> Percentages calculated from the number of legal size crab.

Table 12. Crab price per pound by month, 1981-82.

Month	Price Range	Mean
December	\$0.80-\$1.02	\$0.95
January	0.80- 1.20	1.00
February	1.05- 1.35	1.20
March	1.20- 1.35	1.25
April	1.25- 1.40	1.30
May	1.10- 1.40	1.30
June	0.90- 1.40	1.25
July	1.10- 1.40	1.15
August	0.90- 1.40	1.25
September	0.60- 1.30	0.90
October	0.70- 0.90	0.80

<sup>&</sup>lt;sup>2</sup> Percentages calculated from total number of crabs caught.

Table 13. Summary bay crab catch and effort by bay, 1981-82.

Bay	Pounds	Boats	Trips	Pots	Rings
Tillamook Netarts Alsea Coos	1,486 3,071 6,764 1,211	4 1 23 15	44 58 71 33	60 16 0 0	6 0 120 24
Total	12,542	43	206	76	150

Table 14. Summary bay crab catch and effort by month, 1981-82.

Month	Pounds	Boats	Trips	Pots	Rings
December	606	5	11	36	36
January	40	ī	3	20	0
February	88	2	2	16	6
March	142	2	6	20	7
April	110	3	5	20	12
May	38	2	2	0	12
June	80	2	3	0	12
July	0	0	0	0	0
Aug	349	5	7	20	38
September	2,404	13	29	60	140
October	5,345	13	76	76	120
November	3,340	15	62	76	144
Total	12,5420	43	206	76	150

Table 15. Bay crab catch and effort, Tillamook Bay, 1981-82.

Month	Pounds	Boats	Trips	Pots	Rings
December	10	1	1	20	0
January	40	1	3	20	Ō
February	0	0	0	0	0
March	35	1	2	20	0
April	6	1	1	20	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	38	2	3	20	6
September	220	3	9	60	0
October	729	3	14	60	0
November	408	3	11	60	0
Total	1,486	4	44	60	6

Table 16. Bay crab catch and effort, Netarts Bay, 1981-82.

Month	Pounds	Boats	Trips	Pots
December	376	1	7	16
January	0	0	0	0
February	69	1	1	16
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	1,089	1	26	16
November	1,547	1	24	16
Total	3,071	1	58	16

Table 17. Bay crab catch and effort, Alsea Bay, 1981-82.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	0	0	0	0
February	0	0	n	0
March	Ö	0	0	0
April	ñ	0	0	0
May	28	1	1	6
June	0	Ō	ñ	ŏ
July	Ô	Ö	Ō	Õ
August	296	2	3	26
September	2,069	7	14	120
October	3,213	6	31	100
November	1,158	7	22	120
Total	6,764	23	71	120

Table 18. Bay crab catch and effort, Coos Bay, 1981-82.

Month	Pounds	Boats	Trips	Rings
December	220	3	3	36
January	0	0	0	0
February	19	1	1	6
March	107	1	4	6
April	104	2	4	12
May	10	1	1	6
June	80	2	3	12
July	0	0	0	0
August	15	1	1	6
September	115	3	6	20
October	314	3	5	20
November	227	4	5	24
Total	1,211	15	33	24

# 1982-83 DUNGENESS CRAB FISHERY

### OVERVIEW

The ocean crab season opened December 1, 1982, and closed September 15, 1983. A request by fishermen to extend the season to year round and a staff recommendation to close the season early were both denied by the Oregon Fish and Wildlife Commission. The 1982-83 fishery produced 4.3 million pounds, about half of the 1981-82 season. There were 393 boats in the fishery. Nearly 50% of the harvest was taken during the first two months of the season and about 25% during the last two months. Crab grade was good early in the season, but poor late in the season as fishing intensified, a condition similar to that of last year. Crab price started at \$0.90, increased to \$1.75 by March, and declined to \$1.30 at season's end. The bay crab fishery produced 10,309 pounds.

### OCEAN FISHERY CATCH AND EFFORT

Catch and effort are summarized in Tables 1 and 2. Newport was the leading port with Astoria a close second. The scenario of last year was repeated in that nearly 50% of the harvest was taken during the first two months of the season and about 25% was taken during the last two months of the season. Actually, in anticipation of a run of crab late in the season, effort began to increase in July. Although the total number of boats remained static the number of trips increased 26% and 45% in July and August, respectively. The data also show that even though catch was down 50% from last year, the number of boats decreased by only 8%. Detailed catch and effort data are given in Tables 3-10. All major ports showed the rapid increase in effort starting in July. Brookings was the exception as fishermen stayed in port until the last two weeks of the season.

### MARKET SAMPLING

Crab grade and size are shown in Table 11. Grade was good early in the season, but showed a decline late in the season. Crab size was average or slightly below average in some ports.

#### SAMPLING AT SEA

Although samples at the dock in August did not show a dramatic increase in the percentage of softshell crab in the catch, Table 12 shows that over 95% of the legal crabs caught were sorted out at sea. Most of the sorted crab were Grade II which means that they were not completely filled with meat, and the shells were flexible but not overly so. There were also fewer females taken in August than earlier in the season.

#### CRAB PRICE

Table 13 shows crab price by month. The opening price was \$0.90 cents and climbed to \$1.75 by March. As marginal grade crab began to be landed the price began to fluctuate reflecting the degree of sorting individual fishermen were doing. As more poor crab came in, the price began to fall.

### BAY CRAB FISHERY

The fishery in Oregon's estuaries is summarized in Tables 14 and 15. Only 10,309 pounds were landed from four estuaries with Alsea Bay having the most. October and November were the most productive months. Catch and effort data for each bay are detailed in Tables 16 to 19.

Table 1. Summary ocean crab catch and effort by port, 1982-83.

Port	Pounds	Boats	Trips	Pots
Astoria	935,033	63	1,101	17,500
Tillamook	210,281	25	995	5,700
Newport	1,238,455	77	1,701	26,800
Winchester Bay	277,844	33	700	10,800
Coos Bay	627,339	63	1,386	19,600
Port Orford	390,948	39	1,105	5,000
Gold Beach	119,361	17	223	1,100
Brookings	528,208	107	1,440	18,200
Total	4,327,469	425 <sup>1</sup>	8,662	104,700

 $<sup>^{</sup>m 1}$  Actual number of boats is 393 as 32 landed at more than one port.

Table 2. Summary ocean crab catch and effort by month, 1982-83.

Month	Pounds	Boats	Trips	Pots	
December	1,468,045	317	1,839	79,000	
January	497,715	247	1,093	65,000	
February	273,360	210	704	56,700	
March	313,671	202	8 <b>96</b>	55,000	
April	422,992	189	1,177	50,800	
May	119,564	115	488	31,700	
June	82,266	100	343	28,600	
July	225,965	103	477	28,100	
August	470,094	132	1,007	36,900	
September	453,797	121	638	33,800	
Total	4,327,469	425 <sup>1</sup>	8,662	104,700	

<sup>1</sup> Actual number of boats is 393 as 32 landed at more than one port.

Table 3. Ocean crab catch and effort, Astoria, 1982-83.

Month	Pounds	Boats	Trips	Pots
December	202 205	22	226	0.400
December	292,395 149,038	33 30	226 177	9,400 8,600
January February	72,312	25	108	7,200
March	65,979	24	110	6,600
April	125,133	30	109	8,600
May	47,397	22	74	6,300
June	16,557	23	47	6,600
July	25,959	21	76	6,000
August	99,008	29	119	8,100
September	41,255	18	55	5,200
Total	935,033	63 <sup>1</sup>	1,101	17,500

 $<sup>^{\, 1}</sup>$  Two boats were from other Oregon ports; nine were Washington boats.

Table 4. Ocean crab catch and effort, Tillamook, 1982-83.

Month	Pounds	Boats	Trips	Pots
December	32,742	22	131	5,000
January	22,597	18	83	4,100
February	20,613	19	65	4,300
March	24,702	19	109	4,300
April	35,255	19	159	4,300
May	17,274	17	97	3,900
June	15,888	17	96	3,900
July	24,841	16	112	3,600
August	12,943	18	112	4,100
September	3,426	10	31	2,200
Total	210,281	25	995	5,700

Table 5. Ocean crab catch and effort, Newport, 1982-83.

Month	Pounds	Boats	Trips	Pots
December	327,566	52	267	18,800
January	166,219	53	227	18,800
February	84,677	48	193	17,400
March	109,444	49	243	17,700
April	103,418	39	220	13,800
May	23,022	23	91	8,300
June	31,428	25	73	9,000
July	115,000	27	124	9,400
August	121,979	32	161	10,500
September	155,702	26	102	9,400
Total	1,238,455	77 <sup>1</sup>	1,701	26,800

<sup>1</sup> Three boats were from other Oregon ports.

Table 6. Ocean crab catch and effort, Winchester Bay, 1982-83.

Month	Pounds	Boats	Trips	Pots
December	98,627	27	145	9,000
January	27,401	21	96	7,000
February	15,861	20	53	7,000
March	25,964	18	88	6,300
April	25,881	19	117	6,600
May	3,839	9	40	3,100
June	7,803	7	33	2,400
July	14,903	10	29	3,500
August	33,248	9	66	2,800
September	24,317	10	33	3,500
Total	277,844	331	700	10,800

<sup>1</sup> Two boats were from other Oregon ports.

Table 7. Ocean crab catch and effort, Coos Bay, 1982-83.

Month	Pounds	Boats	Trips	Pots
December	181,364	47	239	13,700
January	47,220	38	116	11,900
February	40,860	30	93	9,700
March	41,137	31	130	9,700
April .	58,791	23	166	7,400
May	12,775	17	67	5,500
June	2,736	14	32	4,500
July	10,433	10	45	3,200
August	105,837	23	252	7,400
September	126,186	29	246	9,000
Total	627,339	63 <sup>1</sup>	1,386	19,600

 $<sup>^{1}\,\,\,\,</sup>$  Two boats were from other Oregon ports.

Table 8. Ocean crab catch and effort, Port Orford, 1982-83.

Month	Pounds	Boats	Trips	Pots
December	158,565	34	244	5,500
January	33,341	27	112	4,300
February	17,190	24	50	3,900
March	25,948	20	90	3,200
April	41,402	26	187	4,000
May	10,874	12	67	1,900
June	7,071	11	57	1,800
July	23,042	12	62	1,700
August	51,499	13	180	1,900
September	22,016	13	56	1,900
Total	390,948	391	1,105	5,900

<sup>1</sup> Two boats were from other Oregon ports.

Table 9. Ocean crab catch and effort, Gold Beach, 1982-1983.

Month	Pounds	Boats	Trips	Pots
December	7,459	5	11	300
January	611	ĺ	1	200
February	271	$\bar{1}$	1	200
March	198	1	1	200
April	2,802	2	8	300
May	350	2	4	300
June	567	3	4	200
July	11,367	6	26	900
August	45,447	9	112	500
September	50,289	10	64	600
Total	119,361	17 <sup>1</sup>	223	1,100

<sup>1</sup> Ten boats were from other Oregon ports.

Table 10. Ocean crab catch and effort, Brookings, 1982-1983.

Month	Pounds	Boats	Trips	Pots
December	369,327	98	576	17,100
January	52,288	59 59	281	10,200
February	21,576	43	141	7,100
March	20,299	40	125	7,100
April	30,310	33	211	5,200
May	4,033	13	48	28400
June	216	1	1	200
July	420	1	3	200
August	133	3	3	600
September	30,606	11	51	2,000
Total	528,208	107 <sup>1</sup>	1,440	18,200

<sup>1</sup> Ten boats were from other Oregon ports.

Table 11. Summary crab grade and average size by port and month, 1982-83 (dock sample).

		Grade %				
Port	Month	I	II	III	Mean Size (mm)	
Astoria	December	96.2	3.8	0	170	
	January	84.0	16.0	0	-	
	March	80.8	19.2	0		
	August	68.0	31.0	2.0	-	
Newport	December	98.6	1.4	0	175	
Brookings	December	92.9	7.1	0	172	

Table 12. Summary sampling at sea, 1983.

Port	Month	% Legal crab discarded <sup>1</sup>	% Softshell landed <sup>1</sup>	% Discard of sublegal males and females <sup>2</sup>
Astoria	August	96.4	32.0	14.7
Coos Bay	August	94.0	50.0	5.7

<sup>1</sup> Percentages calculated from the number of legal size crab.

<sup>2</sup> Percentages calculated from total number of crabs caught.

Table 13. Crab price per pound by month, 1982-83.

Month ————————	Price Range	Mean
December	\$0.90-\$1.20	\$1.15
January	1.20- 1.45	1.30
February	1.45- 1.55	1.45
March	1.45- 1.75	1.60
Apri l	1.20- 1.75	1.55
May	1.45- 1.75	1.60
June	1.45- 1.70	1.55
July	1.25- 1.70	1.45
August	1.25- 1.55	1.35
September	1.15- 1.55	1.30

Table 14. Summary bay crab catch and effort by bay, 1982-83.

Bay	Pounds	Boats	Trips	Pots	Rings
Tillamook Netarts Alsea Coos	1,044 823 5,360 3,082	3 1 12 15	49 31 59 63	10 16 0 0	10 0 120 130
Total	10,309	31	202	26	260

Table 15. Summary bay crab catch and effort by month, 1982-83.

Month	Pounds	Boats	Trips	Pots	Rings
December	538	3	16	26	10
January	263	2	11	16	10
February	70	3	6	26	10
March	56	2	6	10	10
April	121	2	7	10	10
May	149	2	9	10	10
June	210	1	4	10	0
July	302	2	6	10	10
August	75	2	3	10	15
September	348	6	8	0	55
October	6,661	26	97	10	100
November	1,516	14	29	16	60
Total	10,309	31	202	26	260

Table 16. Bay crab catch and effort, Tillamook Bay, 1982-83.

Month	Pounds	Boats	Trips	Pots	Rings
December	39	2	4	10	10
January	29	1	1	0	10
February	27	2	4	10	10
March	56	2	6	10	10
April	121	2	7	10	10
May	149	2	9	10	10
June	210	1	4	10	10
July	302	2	6	10	10
August	38	1	2	10	0
September	45	1	1	0	10
October	28	$\bar{1}$	5	10	0
November	0	ō	0	0	Ö
Total	1,044	3	49	10	10

Table 17. Bay crab catch and effort, Netarts Bay, 1982-83.

Month	Pounds —————————	Boats	Trips	Pots
December	499	1	12	16
January	234	1	10	16
February	43	1	2	16
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	38	1	5	16
November	9	1	2	16
Total	823	1	31	16

Table 18. Bay crab catch and effort, Alsea Bay, 1982-83.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	Ō	Ö	Ō	0
February	Ö	Ö	Ö	0
March	0	0	0	Ō
April	0	0	Ö	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	37	1	1	15
September	283	4	6	45
October	4,530	11	42	100
November	510	6	10	60
Total	5,360	12	59	120

Table 19. Bay crab catch and effort, Coos Bay, 1982-83.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	ő	ŏ	Õ	ő
February	Ö	Ö	Ö	Ŏ
March	Ō	Ō	Ō	Ō
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	120	1	1	6
October	2,065	13	45	130
November	997	7	17	70
Total	3,082	15	63	130

#### 1983-84 DUNGENESS CRAB FISHERY

# **OVERVIEW**

The ocean crab season opened December 1, 1983, and closed September 1, 1984, two weeks earlier than scheduled. Fishing was intense early in the season with 317 boats participating. Consensus among fishermen and processors was that crab grade was so poor late in the season that the season should end early. Still, 4.7 million pounds were landed. As in the past two years there was a marked increase in effort late in the season. Also, crab grade was good early in the season but poor toward the end. This was also reflected in the price which opened at \$1.25, reached \$2.00 by February only to fall as crab grade became poor. The bay crab fishery produced 12,102 pounds.

# OCEAN FISHERY CATCH AND EFFORT

Catch and effort are summarized in Tables 1 and 2. Newport was again the leading port of landing, followed closely by Astoria. As in the past two years, fishing was intense during the first two months of the season and again during the final six weeks of the season.

Effort followed a similar pattern and would have increased even more near season's end had not the season closed early. Testimony at an August hearing indicated that many fishermen were waiting for the outcome of the hearing. Had the season run two more weeks, many would have been fishing again, compounding even more a bad situation. Detailed catch and effort data by port are given in Tables 3 to 9.

#### MARKET SAMPLING

The percentage of softshell or unfilled crab (Grade II) and the average size from samples taken at the dock are shown in Tables 10 and 11. The data from Astoria show the general trend that culminates in a very high percentage of unfilled crab being landed. Crab size (Table 11) was a little below average for most ports and just average at Newport.

# SAMPLING AT SEA

Samples taken at sea also reflected a high percentage of unfilled crab in the population. Table 12 shows that in general most crabs were unfilled and sorted out at sea. Handling mortality on these crabs was not measured, but studies done in Washington indicate that mortality could be as high as 50%.

In contrast to other years the percentage of females caught in August this year was relatively high (Table 13).

### CRAB PRICE

The highest starting price on record opened the 1983-84 crab season and within two weeks the price was up to \$2.00. However, in July the price began to range widely and the average price showed a definite decline as more unfilled crab was landed (Table 14).

#### BAY CRAB FISHERY

The commercial fishery for Dungeness crab is summarized in Tables 15 and 16. The fishery was almost nonexistent in Tillamook, Netarts, and Yaquina bays, and Alsea Bay was mediocre compared to past years. Only Coos Bay produced a sizeable catch with most of it landed in October and November. Detailed catch and effort data for each port are shown in Tables 17-19.

The bay fishery became more restricted starting September 16 as new regulations were enacted. Bay crabbers are now limited to rings only and no more than 15 per boat, with fishing prohibited on weekends and all holidays.

Table 1. Summary ocean crab catch and effort by port, 1983-84.

Port	Pounds	Boats	Trips	Pots
Astoria	1,183,801	62	1,532	18,500
Tillamook	128,200	18	677	3,800
Newport	1,254,469	78	1,587	28,500
Winchester Bay	540,590	34	938	9,800
Coos Bay	612,972	57	1,358	12,600
Port Orford	343,669	31	1,000	4,500
Brookings	616,307	69	1,658	12,600
Total	4,680,013	3491	8,750	90,300

 $<sup>^{1}\,</sup>$  Actual number of boats is 317 as 32 landed at more than one port.

Table 2. Summary ocean crab catch and effort by month, 1983-84.

Month	Pounds	Boats	Trips	Pots
December	2,471,266	270	2,219	72,200
January	841,762	255	1,803	76,800
February	217,681	210	681	58,200
March	206,664	207	820	58,300
April	234,582	179	956	48,700
May	194,219	152	832	40,000
June	84,671	123	470	35,100
July	94,974	96	378	28,200
August	334,194	123	591	34,200
Total	4,680,013	3491	8,750	90,300

<sup>1</sup> Actual number of boats is 317 as 32 landed at more than one port.

Table 3. Ocean crab catch and effort, Astoria 1983-84.

Month	Pounds	Boats	Trips	Pots
December	651,762	43	343	13,600
January	247,009	38	300	11,000
February	93,155	35	157	10,000
March	82,701	39	220	11,300
April	28,688	33	154	9,400
May	50,709	27	158	8,100
June	131,808	19	86	5,800
July	6,386	14	45	4,500
August	9,583	15	69	4,700
Total	1,183,801	571	1,532	18,500

<sup>1</sup> Five boats were from other Oregon ports; 13 were from Washington.

Table 4. Ocean crab catch and effort, Tillamook 1983-84.

Month	Pounds	Boats	Trips	Pots
December	22,629	15	93	3,400
January	18,145	15	90	3,400
February	8,452	15	47	3,400
March	13,667	15	77	3,400
April	15,448	15	76	3,400
May	21,578	15	96	3,400
June	9,107	12	59	2,500
July	7,422	11	62	2,500
August	11,757	14	77	3,200
Total	128,200	181	677	3,800

 $<sup>^{1}\,\,\,\,\,\,</sup>$  One boat was from another Oregon port.

Table 9. Ocean crab catch and effort, Brookings, 1983-84.

Month	Pounds	Boats	Trips	Pots
December	424,367	59	680	10,900
January	59,826	59 50	382	9,400
February	11,629	30	103	5,600
March	11,875	22	99	4,100
April	21,657	25	174	4,500
May	5,582	21	89	3,900
June	424	7	15	1,300
July	409	4	15	700
August	80,538	22	101	4,100
Total	616,307	691	1,658	12,600

<sup>1</sup> Two boats were from other Oregon ports.

Table 10. Percentage of softshell crab (grades II and III), 1983-84.

	Astoria	Newport	Brookings	
			Winchester Bay	<u> </u>
December	2.9	2.4		2.6
January	1.0			
February	28.0			
April	A004 - E404		water states	
May	<b></b> —			
June				
July	81.3	<b></b>	35.3	60.0
August	87.8	79.2	33.8	95.0

Table 5. Newport ocean crab landings and effort, 1983-84.

Port	Pounds	Boats	Trips	Pots
December	664,366	57	93	21,800
January	239,520	59	312	22,600
February	50,288	51	122	19,800
March	48,392	57	169	22,200
April	50,557	42	159	16,200
May	37,182	28	117	10,700
June	35,115	31	106	12,300
July	54,283	31	115	11,500
August	74,766	32	150	12,300
Total	1,254,469	78 <sup>1</sup>	1,587	28,500

Table 6. Ocean crab catch and effort, Winchester Bay, 1983-84.

Month	Pounds	Boats	Trips	Pots
December	213,256	23	193	7,700
January	82,095	24	193	6,700
February	9,732	20	63	6,300
March	20,518	17	80	5,600
April	33,832	15	100	4,900
May	22,872	13	94	4,200
June	12,580	16	70	5,300
July	15,439	12	63	4,200
August	130,266	13	82	4,600
Total	540,590	341	938	9,800

 $<sup>^{1}</sup>$  Six boats were from other Oregon Ports.

Table 7. Ocean crab catch and effort, Coos Bay, 1983-84.

Month	Pounds	Boats	Trips	Pots
December	339,985	50	330	11,300
January	108,572	45	282	11,500
February	26,667	39	119	10,200
March	23,114	35	111	8,600
April	39,797	28	133	7,100
May	38,509	26	179	6,800
June	8,972	21	87	5,500
July	7,587	13	47	3,400
August	19,769	13	70	3,400
Total	612,972	571	1,358	12,600

 $<sup>^{1}</sup>$  Nine boats were from other Oregon ports.

Table 8. Ocean crab catch and effort, Port Orford, 1983-84.

Month	Pounds	Boats	Trips	Pots
December	154,901	22	243	3,500
January	86,595	22	244	3,200
February	17,758	19	70	2,900
March	6,397	20	64	3,100
April	44,603	28	160	3,200
May	17,787	20	99	2,900
June	4,665	15	47	2,400
July	3,448	11	31	1,400
August	7,515	14	42	1,900
Total	343,669	311	1,000	4,500

<sup>1</sup> Three boats were from other Oregon ports.

Table 11. Mean size (mm) of legal male crab by port, 1983-84.

Month	Astoria	Newport	Coos/Win Bay	Brookings	
December	171	174	171	170	

Table 12. Percent discard of legal male crab at sea, 1983-84.

	Astoria	Newport	Brookings	
December	<b></b>	··· ···		2.5
July	81.3	1000 0100	35.3	
August	87.8	79.2	41.3	

Table 13. Percent discard of sublegal males/females at sea, 1983-84.

	Astoria	Newport	Coos/Win Bay	Brookings
December				21.3/47.2
July	16.1/58.5		15.3/56.7	
August	4.7/72.2	22.2/29.4	12.6/59.3	No. 100

Table 14. Crab price per pound by month, 1983-84.

Month 	Price Range	Mean
December	\$1.25-\$1.75	\$1.60
January	1.50- 1.75	1.75
February	1.50- 2.00	1.80
March	1.75- 2.00	1.80
April	1.75- 2.00	1.80
May	1.75- 2.00	1.80
June	1.75- 2.00	1.80
July	1.50- 2.00	1.75
August	1.11- 2.00	1.50

Table 15. Summary bay crab catch and effort by port, 1983-84.

Estuary	Pounds	Boats	Trips	Pots	Rings
Tillamook	27	1	5	21	0
Netarts	373	1	22	16	0
Yaquina	597	2	13	0	23
Alsea	1,825	11	57	0	150
Coos	9,280	17	140	0	280
Total	12,102	32	237	37	453

Table 16. Summary bay crab catch and effort by month, 1983-84.

Month	Pounds	Boats	Trips	Pots	Rings
December	740	7	24	16	110
January	4	i	1	16	0
February	109	4	9	37	23
March	357	7	12	21	45
April	38	2	2	0	12
May	93	3	5	Ö	12
June	67	2	5	16	6
July	222	3	7	0	18
August	311	1	9	0	15
September	1,094	7	21	0	30
October	4,041	21	91	16	280
November	5,026	18	51	16	280
Total	12,102	32	237	37	453

Table 17. Bay crab catch and effort, Tillamook/Netarts (  $)^1$ , 1983-84.

Month	Po	ounds	Во	oats	Tr	ips	Po	ots
December January February March April May June July August September October November	0 0 17 10 0 0 0 0 0	(14) (4) (3) 0 0 (14) 0 0 (79) (259)	0 0 1 1 0 0 0 0 0 0	(1) (1) (1) 0 0 (1) 0 0 (1) (1) (1)	0 0 3 2 0 0 0 0 0	(3) (1) (1) 0 0 0 (3) 0 0 (9) (5)	0 0 21 21 0 0 0 0 0	(16) (16) (16) 0 0 (16) 0 (16) (16)
Total	27	(373)	1	(1)	5	(22)	21	(16)

<sup>1</sup> ( ) = Netarts

Table 18. Bay crab catch and effort, Alsea/Yaquina bays ( ) $^1$ , 1983-84.

Month		Pounds		Boats	T	rips	Ri	ngs
December January	61		2		2 0		30 0	
February	0	(5)	0	(1)	0	(2)	0	(3)
March	0		0		0		0	
April	0		0		0		0	
May	0		0		0		0	
June	0		0		0		0	
July	8	(3)	1	(1)	1	(1)	6	(3)
August	0		0		0		0	
September	171		4		7		60	
October	962	(110)	9	(1)	36	(5)	150	(20)
November	623	(479)	5	(1)	11	(5)	100	(20)
Total	1,825	(597)	11	(2)	57	(13)	150	(23)

<sup>1</sup> ( ) = Yaquina Bay

Table 19. Bay crab catch and effort, Coos Bay, 1983-84.

Month	Pounds	Boats	Trips	Rings
December	665	4	19	80
January	0	0	0	0
February	84	1	3	20
March	347	6	10	45
April	38	2	2	12
May	93	3	5	12
June	53	1	2	6
July	211	ī	5	15
August	311	ī	9	15
September	923	3	14	30
October	2,890	11	30	260
November	9	1	2	16
Total	9,280	<b>17</b> .	140	280

# 1984-85 DUNGENESS CRAB FISHERY

# **OVERVIEW**

The ocean season opened December 1, 1984, and closed August 15, 1985. Effort was similar to last year at 314 boats and 4.9 million pounds were landed. Crab size was average and the grade good. Price opened at \$1.25 but was up to \$2.00 by February. A buoy brand regulation was implemented in 1985 and nearly 500 fishermen registered gear by end of the year. The bay crab fishery produced 25,325 pounds with 63 boats participating.

#### OCEAN FISHERY CATCH AND EFFORT

Catch and effort by port and month are summarized in Tables 1 and 2. The port of Newport led in landings followed by Astoria and Brookings. Fifty-seven percent of the catch was landed during the first month of the season. About 84,000 pots were fished during the season.

#### MARKET SAMPLING

The percentage of unfilled crab (Grade II) and the average size taken at the dock are shown in Tables 10 and 11. Crab condition was generally good, but the increase in the percentage of unfilled crab as the season progressed indicated some early molting. Crab size was average, but there was a notable increase in the percentage of undersize crab in the catch (Table 12). This happens when fishing is slow and the overall harvest is down, and/or when a large year class is about to enter the fishery.

### CRAB PRICE

Crab price opened at \$1.25 but in 10 days had climbed to \$1.40 (Table 13). By February the price was ranging up to \$2.00 and up to \$2.15 in July. The wider range in price from April to August indicates that some crab was not full.

#### BAY CRAB FISHERY

The commercial catch of crab from the estuaries was 25,325 pounds (Tables 14 and 15) though sizeable landings were made only from Alsea and Coos bays. Over 80% of the catch was landed from September through November. Detailed catch and effort data for each bay are shown in Tables 16 to 23.

Table 1. Summary ocean crab catch and effort by port, 1984-85.

Port	Catch	Boats	Trips	Pots
Astoria Tillamook Newport Winchester Bay Coos Bay Port Orford Brookings	895,670 217,562 1,579,435 384,706 659,671 426,315 737,909	53 22 77 34 57 30 70	1,080 560 1,636 821 1,254 1,075	15,900 3,500 29,900 9,900 13,600 6,000 11,500
Total	4,900,725	343 <sup>1</sup>	8,153	83,600

 $<sup>^{1}</sup>$  Actual number of boats is 314 as 29 landed at more than one port.

Table 2. Summary ocean crab catch and effort by month, 1984-85.

Month	Catch	Boats	Trips	Pots
December	2,808,790	275	2,462	73,300
January	974,011	244	1,881	68,700
February	318,904	203	920	58,300
March	182,370	180	631	51,700
April	252,286	163	824	46,100
May	193,896	137	712	37,400
June	66,930	102	326	28,700
July	49,230	74	243	21,800
August	54,308	50	150	13,600
Total	4,900,725	343 <sup>1</sup>	8,149	83,600

 $<sup>^{1}\,</sup>$  Actual number of boats is 314 as 29 landed at more than one port.

Table 3. Ocean crab catch and effort, Astoria, 1984-85.

Month	Catch	Boats	Trips	Pots
December	537,861	44	283	12,100
January	132,378	35	207	10,800
February	51,219	24	116	7,600
March	37,820	23	90	7,000
April	58,169	25	136	7,000
May	38,420	23	124	6,700
June	14,105	15	55	4,800
July	8,669	10	35	3,200
August	16,469	8	34	2,500
Total	895,110	53 <sup>1</sup>	1,080	14,700

 $<sup>^{1}</sup>$  Four boats were from other Oregon ports.

Table 4. Ocean crab catch and effort, Tillamook, 1984-85.

Month	Catch	Boats	Trips	Pots
December	72,847	13	78	2,500
January	39,998	11	83	2,200
February	22,042	14	59	2,500
March	13,625	13	40	2,500
April	20,092	13	81	2,500
May	20,380	12	75	2,300
June	10,507	13	54	2,500
July	10,921	12	57	2,300
August	7,167	13	33	2,000
Total	217,562	221	560	3,300

 $<sup>^{1}\,\,\,\,\,</sup>$  Five boats were from other Oregon ports.

Table 5. Ocean crab catch and effort, Newport, 1984-85.

Month	Catch	Boats	Trips	Pots
December	753,376	64	348	25,400
January	435,904	62	432	25,400
February	132,307	57	207	23,400
March	72,692	47	151	18,900
April	87,968	41	193	16,400
May	53,752	29	128	11,100
June	17,366	22	72	8,600
July	14,795	17	61	6,600
August	11,275	12	44	4,900
Total	1,579,435	77 <sup>1</sup>	1,636	26,600

 $<sup>^{1}</sup>$  Four boats were from other Oregon Ports.

Table 6. Ocean crab catch and effort, Winchester Bay, 1984-85.

Month	Catch	Boats	Trips	Pots
December	169,126	18	164	5,900
January	86,072	20	198	6,200
February	32,168	21	109	6,200
March	17,403	18	52	6,600
April	35,870	17	110	5,900
May	20,614	15	77	5,100
June	11,616	14	51	4,800
July	9,430	13	46	4,800
August	2,407	6	14	2,200
Total	384,706	341	821	9,900

 $<sup>^{1}\,\,</sup>$  Seven boats were from other Oregon ports.

Table 7. Ocean crab catch and effort, Coos Bay, 1984-85.

Month	Catch	Boats	Trips	Pots
December	449,699	46	459	11,000
January	103,820	44	309	11,000
February	23,860	33	89	8,400
March	13,685	27	69	6,900
April	32,494	26	147	6,600
May	22,009	24	99	5,900
June	7,578	22	51	4,900
July	2,728	10	18	2,300
August	3,798	5	9	1,000
Total	659,674	57 <sup>1</sup>	1,250	12,500

 $<sup>^{1}</sup>$  Four boats were from other Oregon ports.

Table 8. Ocean crab catch and effort, Port Orford, 1984-85.

Month	Catch	Boats	Trips	Pots
December	249,417	25	327	4,900
January	84,070	21	239	4,500
February	32,101	21	156	4,500
March	11,082	21	93	4,500
April	8,038	18	78	3,900
May	20,726	15	105	3,000
June	5,527	14	40	2,800
July	2,266	9	23	1,700
August	13,088	4	14	700
Total	426,315	30 <sup>1</sup>	1,075	5,600

 $<sup>^{1}\,\,\,\,</sup>$  Two boats were from other Oregon ports.

Table 15. Summary bay crab catch and effort by month, 1984-85.

Month	Pounds	Boats	Trips	Rings
December	1,099	6	28	90
January	126		4	30
February	131	3	6	45
March	84	2 3 2	6	30
April -	308	2	11	30
May	161	6	9	90
June	282	6	9	90
July	583	4	21	60
August	828	4	9	60
September	5,865	17	57	255
October	9,223	30	89	450
November	6,635	22	83	330
Total	25,325	63	332	945

Table 16. Bay crab catch and effort, Nehalem Bay, 1984-85.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	18	1	1	15
July	90	1	2	15
August	48	Ĩ	1	15
September	0	0	0	0
October	0	0	0	0
November	0	0	0	0
Total	156	1	4	15

Table 9. Ocean crab catch and effort, Brookings, 1984-85.

Month	Catch	Boats	Trips	Pots
December	576,464	65	803	10,300
January	91,769	51	413	8,600
February	25,207	33	184	5,700
March	16,063	31	136	5,300
April	9,655	23	79	3,800
May	17,995	19	104	3,300
June	231	2	3	300
July	421	3	3	500
August	104	2	2	300
Total	737,909	70 <sup>1</sup>	1,727	11,000

 $<sup>^{1}</sup>$  Three boats were from other Oregon ports.

Table 10. Percentage of softshell crab (grades II and III) landed, 1984-85.

Month	Astoria	Newport	Coos Bay	Brookings
December	1.8	1.5	4.5	1.3
January	9.8	4.4	5.0	2.8
February	3.8		13.2	7.8
March	1.2			
April	0.0	Aud 448		

Table 11. Mean size (mm) of legal male crab, 1984-85.

Month	Astoria	Newport	Coos Bay	Brookings
December	174	175	171	174
January	171	174	173	170
February	171	Anne Valla	166	165
March	173	-		***
April	173	-		

Table 12. Percentage of sublegal crab landed, 1984-85.

Month	Astoria	Newport	Coos Bay	Brookings
December	4.5	2.9	5.1	0.0
January	8.7	13.9	9.2	3.6
February	7.0		2.8	7.9
March	8.7	****		
April	18.7			

Table 13. Crab price per month, 1984-85.

Month	Price Range	Mean
December	\$1.25- \$1.00	\$1.50
January	1.75	1.75
February	1.75 - 2.00	1.75
March	1.75 - 2.00	1.80
April	1.60 - 2.00	1.80
May	1.60 - 2.00	1.80
June	1.50 - 2.10	1.80
July	1.50 - 2.15	1.80
August	1.50 - 1.90	1.65

Table 14. Bay crab catch and effort by bay, 1984-85.

Bay	Pounds	Boats	Trips	Rings
Nehalem Bay	156	1	4	15
Tillamook Bay	173	2	7	30
Netarts Bay	518	$\bar{1}$	18	15
Yaquina Bay	20	4	4	60
Alsea Bay	14,758	15	100	225
Winchester Bay	945	11	48	165
Coos Bay	8,313	27	139	405
Coquille Bay	442	2	12	30
Total	25,325	63	332	945

Table 17. Bay crab catch and effort, Tillamook Bay, 1984-85.

Month	Pounds	Boats	Trips	Rings
December	109	1	2	15
January	0	Ö	Ō	0
February	27	1	3	15
March	37	ī	2	15
April	0	ō	ō	Ō
May	Ö	Ō	Ö	0
June	Õ	Ŏ	Ŏ	Õ
July	Õ	Õ	Ŏ	ō
August	Ö	Ŏ	Õ	Ō
September	Õ	Ŏ	Ŏ	Ŏ
October	Ō	ŏ	Ŏ	Ō
November	Ŏ	Ö	Ŏ	Ö
Total	173	2	7	30

Table 18. Bay crab catch and effort, Netarts Bay, 1984-85.

Month	Pounds	Boats	Trips	Rings
December	327	1	10	15
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	Ó	0	0	0
August	Ö	Ō	Ô	0
September	0	0	0	0
October	62	1	4	15
November	129	1	4	15
Total	518	1	18	15

Table 19. Bay crab catch and effort, Yaquina Bay, 1984-85.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	Ö	Ō	Ö	Ö
February	Ō	0	0	Ö
March	0	0	0	Ô
April	Ö	Ö	Ŏ	Ö
May	18	3	3	45
June	2	ĭ	i	15
July	ō	ō	Õ	0
August	Õ	Ŏ	Õ	Õ
September	Õ	Ŏ	Ŏ	Ô
October	Ŏ	Ŏ	Ŏ	Ô
November	Ŏ	Ŏ	Õ	0
Total	20	4	4	60

Table 20. Bay crab catch and effort, Alsea Bay, 1984-85.

Month	Pounds	Boats	Trips	Rings
December	28	1	4	15
January	Ö	0	0	0
February	Ö	0	0	0
March	Ö	0	0	0
April	Ö	Ŏ	Ö	0
May	Ö	0	Ö	Ō
June	Ö	0	Ö	0
July	Ö	0	Ö	0
August	409	i	4	15
September	5,246	9	40	135
October	6,383	11	31	165
November	2,692	6	21	90
Total	14,758	15	100	225

Table 21. Bay crab catch and effort, Winchester Bay, 1984-85.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	Õ	Ö	0	Ō
February	Õ	0	Ō	0
March	Ö	Ō	0	0
April	0	0	Ō	0
May	61	2	2	30
June	68	2	5	30
July	175	$\bar{2}$	15	30
August	371	2	4	30
September	ō	ō	Ò	0
October	96	2	8	30
November	174	3	14	45
Total	945	11	48	165

Table 22. Bay crab catch and effort, Coos Bay, 1984-85.

Month	Pounds	Boats	Trips	Rings
December	635	3	· 12	45
January	126	2	4	30
February	104	2	3	30
March	47	1	4	15
April	308	2	11	30
May	82	1	4	15
June	194	2	2	30
July	318	$\overline{1}$	4	15
August	Ö	Ō	0	0
September	296	6	9	90
October	2,563	15	42	225
November	3,640	12	44	180
Total	8,313	27	139	405

Table 23. Bay crab catch and effort, Coquille Bay, 1984-85.

Month	Catch	Boats	Trips	Rings
December	0	0	0	0
January	Ō	Ö	0	Ö
February	Ö	0	0	Õ
March	Õ	Ō	Ō	Ō
April	Õ	Ö	Ö	Ö
May	Ö	Ö	0	Ö
June	Ö	0	0	0
July	Õ	Ö	Ō	Ö
August	Õ	0	0	0
September	323	2	8	30
October	119	$\overline{1}$	4	15
November	0	Ō	Ó	0
Total	442	2	12	30

#### 1985-86 DUNGENESS CRAB FISHERY

# **OVERVIEW**

The ocean season opened December 1, 1985, and closed August 15, 1986. There were 330 boats in the fleet that landed 7.1 million pounds. Crab size was average and grade good for the most part, although the percentage of undersized crab was relatively high at Astoria. The price for crab opened at \$1.25 but climbed to \$1.75 by mid-December. The bay fishery produced 28,883 pounds.

### OCEAN FISHERY CATCH AND EFFORT

Catch and effort by port and month are summarized in Tables 1 and 2. The port of Newport landed the most crab followed closely by Astoria. Seventy-four percent of the catch was landed during December. Both the number of boats and pots increased, but the number of trips made decreased compared to last year. There were a number of large Alaska boats landing at Newport along with others from California and Washington. Also of note, extensive jetty work at the mouth of the Siuslaw estuary coincides with a marked increase in landings at Florence. Detailed catch and effort data by port are given in Tables 3 to 10.

#### MARKET SAMPLING

Crab grade was good early in the season when most of the catch was landed (Table 11) and size was average although a little below average at Astoria (Table 12). However, the percentage of undersize crab in the catch was relatively high in Astoria (Table 13) and generally reflects a degree of desperation among some fishermen to land some crabs. Appropriate legal action was taken by OSP.

# CRAB PRICE

Although the crab price to fishermen started at \$1.25 it climbed to \$1.75 by mid-December (Table 14) but had a wide range during the season. The lower price from May on reflects a poorer quality of crab.

### BAY CRAB FISHERY

The commercial fishery for crab in the estuaries produced 28,883 pounds (Tables 15 and 16). Coos and Alsea bays produced the most crab while Winchester Bay showed the greatest increase in catch from 945 pounds in 1985 to nearly 8,000 pounds in 1986. Late in the season unrest between sport and commercial crabbers began to surface. Detailed catch and effort data by bay are given in Tables 17 to 22.

Table 1. Summary ocean crab catch and effort by port, 1985-86.

Port	Catch	Boats	Trips	Pots
Astoria Tillamook Newport Florence Winchester Bay Coos Bay Port Orford Brookings	1,266,817 408,763 2,816,960 93,412 627,768 840,207 349,957 738,418	. 42 23 92 5 34 67 35 68	929 660 1,473 165 704 1,296 753 1,227	16,200 5,100 31,800 1,000 9,000 13,000 5,500 12,400
Total	7,142,302	366 <sup>1</sup>	7,207	93,600

 $<sup>^{1}</sup>$  Actual number of boats is 330 as 36 landed at more than one port.

Table 2. Summary ocean crab catch and effort by month, 1985-86.

Month	Catch	Boats	Trips	Pots
December	5,315,075	315	3,042	86,700
January	738,892	262	1,018	73,800
February	411,342	235	854	68,100
March	260,103	199	864	55,400
April	91,845	123	450	34,700
May	102,584	88	379	25,600
June	107,870	67	292	18,600
July	71,861	48	198	12,300
August	42,730	30	110	8,700
Total	7,142,302	366 <sup>1</sup>	7,207	93,600

 $<sup>^{1}</sup>$  Actual number of boats is 330 as 36 landed at more than one port.

Table 3. Ocean crab catch and effort, Astoria, 1985-86.

Month	Catch	Boats	Trips	Pots
December	907,509	33	325	13,000
January	148,319	27	157	11,000
February	89,767	28	118	11,400
March	48,949	25	101	9,700
April	21,030	21	74	8,500
May	16,120	19	64	7,700
June	16,347	12	46	4,900
July	10,747	7	30	2,800
August	8,029	3	14	1,200
Total	1,266,817	42	929	16,200

Table 4. Ocean crab catch and effort, Tillamook, 1985-86.

Month	Catch	Boats	Trips	Pots
December	196,396	13	159	3,700
January	48,386	13	56	3,700
February	41,715	12	72	3,400
March	30,318	12	80	3,400
April	19,220	13	60	3,100
May	26,449	12	84	2,800
June	19,598	13	58	3,400
July	19,582	10	60	2,300
August	7,099	7	30	2,000
Total	408,763	23	659	5.100

Table 5. Ocean crab catch and effort, Newport, 1985-86.

Month	Catch	Boats	Trips	Pots
December January	2,173,996 306,215	90 76	577 263	31,100 27,100
February	155,689	67	220	23,900
March	85,697	51	189	18,200
April	21,947	25	85	8,900
May	20,557	12	52	4,300
June	30,918	7	42	2,500
July	16,234	8	32	2,800
August	5,707	5	14	1,800
Total	2,816,960	92	1,474	31,400

Table 6. Ocean crab catch and effort, Florence, 1985-86.

Month	Catch	Boats	Trips	Pots
December	65,938	5	54	1,000
January	7,945	5	22	1,000
February	6,827	5	23	1,000
March	4,728	4	20	800
April	2,447	4	13	800
May	2,656	4	13	800
June	1,295	2	9	400
July	706	2	6	400
August	870	2	5	400
Total	93,412	5	165	1,000

Table 7. Ocean crab catch and effort, Winchester Bay, 1985-86.

Month	Catch	Boats	Trips	Pots
December	420,046	22	228	7,800
January	78,836	22	104	7,400
February	34,996	1 <b>9</b>	72	7,000
March	30,140	21	104	7,000
April	9,012	13	47	3,900
May	11,228	10	40	3,500
June	14,545	8	41	2,700
July	14,416	9	39	2,700
August	14,549	5	29	1,900
Total	627,768	34	704	9,000

Table 8. Ocean crab catch and effort, Coos Bay, 1985-86.

Month	Catch	Boats	Trips	Pots
December	611,262	59	531	13,000
January	83,433	45	170	10,400
February	56,892	46	178	10,400
March	38,352	37	174	7,900
April	9,897	20	83	4,800
May	14,553	19	80	4,600
June	13,998	12	49	2,600
July	7,789	8	21	1,700
August	4,031	5	10	1,000
Total	840,207	67	1,296	13,000

Table 9. Ocean crab catch and effort, Port Orford, 1985-86.

Month	Catch	Boats	Trips	Pots
December	282,096	30	369	5,000
January	21,877	25	94	4,400
February	15,933	24	83	4,200
March	13,339	25	110	4,200
April	1,141	12	27	2,000
May	7,071	7	38	1,300
June	4,749	6	21	700
July	1,803	Ĭ	7	200
August	1,948	2	5	200
Total	349,957	35	753	5,500

Table 10. Ocean crab catch and effort, Brookings, 1985-86.

Month	Catch	Boats	Trips	Pots
December	657,832	64	800	12,400
January	43,881	50	150	9,700
February	9,523	36	88	7,400
March	8,580	24	85	4,700
April	7,151	15	61	3,100
May	3,950	5	8	1,000
June	6,420	7	26	1,400
July	584	3	3	600
August	497	1	3	200
Total	738,418	68	1,224	12,400

Table 11. Percentage of softshell crab (grades II and III) landed, 1985-86.

Month	Astoria	Newport	Coos Bay
December	3.5	5.5	5.6
January	8.5	****	-
March	4.8	***	
April	1.8		and stan

Table 12. Mean size (mm) of legal male crab, 1985-86.

Month	Astoria	Newport	Coos Bay
December	170	174	172
January	174		
March	167		
April	168		

Table 13. Percentage of sublegal crab landed, 1985-86.

Month	Astoria	Newport	Coos Bay
December	4.0	1.0	2.2
January	4.8	Make various	****
March	17.1	***	
April	18.8	****	

Table 14. Crab price per month, 1985-86.

Month	Price Range	Mean
December	\$1.25- \$1.75	\$1.35
January	1.50 - 1.95	1.70
February	1.50 - 2.00	1.75
March	1.60 - 2.00	1.75
April	1.60 - 2.00	1.75
May	1.50 - 2.00	1.75
June	1.50 - 2.00	1.60
July	0.50 - 2.00	1.40
August	0.65 - 2.00	1.40

Table 15. Bay crab catch and effort by bay, 1985-86.

Bay	Pounds	Boats	Trips	Rings
Nehalem Bay	176	2	6	30
Tillamook Bay	120	2	3	30
Yaquina Bay	191	4	12	45
Alsea Bay	10,052	<b>17</b>	99	255
Winchester Bay	7,495	13	108	195
Coos Bay	10,849	24	166	360
Total	28,883	62	394	930

Table 16. Summary bay crab catch and effort by month, 1985-86.

Month	Pounds	Boats	Trips	Rings
December	1,250	12	21	180
January	0	0	0	0
February	Ō	0	0	0
March	Ö	Ō	0	Ō
April	79	2	5	30
May	4	ī	ī	15
June	225	7	15	105
July	216	7	8	105
August	688	6	11	90
September	8,099	25	119	375
October	10,269	29	115	420
November	8,053	26	99	360
Total	28,883	62	394	930

Table 17. Bay crab catch and effort, Nehalem Bay, 1985-86.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	0	0	0	0
February	0	0	0	0
March	Ö	Ŏ	Õ	. 0
April	Ō	Ö	Ŏ	Ō
May	Õ	Ŏ	Ŏ	Ō
June	Ō	Ö	Ō	Ō
July	18	i	ī	15
August	50	ī	$\bar{2}$	15
September	58	Ž	$\bar{2}$	30
October	0	Ō	ō	0
November	50	ĭ	i	15
Total	176	2	6	30

Table 18. Bay crab catch and effort, Tillamook Bay, 1985-86.

Month	Pounds	Boats	Trips	Rings
December	109	1	2	15
January	0	0	0	0
February	0	0	0	0
March	Ö	0	0	0
April	11	1	1	15
May	Ō	Ō	Ō	0
June	Ŏ	Ō	0	0
July	Ō	Ö	Ō	0
August	Ö	Ŏ	Ŏ	Ö
September	Ô	Ŏ	Ō	Ō
October	Õ	Õ	Ŏ	Ŏ
November	0	Ö	Ö	Ō
Total	120	2	3	30

Table 19. Bay crab catch and effort, Yaquina Bay, 1985-86.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	Ö	0	0	0
May	Ō	0	Ō	0
June	189	3	11	45
July	0	Ō	0	0
August	Ō	Ō	Ö	Ō
September	Ŏ	Ö	Ō	Õ
October	2	ĺ	ĺ	ī
November	Ō	ō	Ō	Ō
Total	1911	4	12	45

<sup>1</sup> Includes 121 pounds of red rock crab.

Table 20. Bay crab catch and effort, Alsea Bay, 1985-86.

Month	Pounds	Boats	Trips	Rings
December	483	4	6	60
January	0	0	0	0
February	Ö	0	0	0
March	Ŏ	Ö	Ö	Ō
April	68	1	4	15
May	4	1	1	15
June	12	$\overline{1}$	$\bar{1}$	15
July	130	2	3	30
August	474		6	30
September	2,065	2 5	16	75
October	4,341	9	37	135
November	2,475	9	25	135
Total	10,052	17	99	255

Table 21. Bay crab catch and effort, Winchester Bay, 1985-86.

Month	Pounds	Boats	Trips	Rings
December	140	2	2	30
January	0	Ō	Ö	0
February	0	0	0	0
March	Ö	Ö	Ó	0
April	Õ	Ö	Ö	0
May	Ŏ	Ō	Ŏ	0
June	24	3	3	45
July	60	3	3	45
August	105	3 2	2	30
September	3,564		61	120
October	1,897	5	21	75
November	1,705	8 5 3	16	15
Total	7,495	13	108	195

Table 22. Bay crab catch and effort, Coos Bay, 1985-86.

Month	Pounds	Boats	Trips	Rings
December	518	5	11	75
January		Ō	0	0
February	0	Ö	Ō	0
March	Ö	Ö	0	0
April	Ö	Ö	Ŏ	Ō
May	Ŏ	Ö	Ŏ	Ō
June	Ŏ	Ö	0	Ō
July	8	ĺ	ĺ	15
August	59	ī	ī	15
September	2,412	8	40	120
October	4,029	14	56	210
November	3,823	13	57	195
Total	10,849	24	166	360

# 1986-87 DUNGENESS CRAB FISHERY

### OVERVIEW

The ocean season opened December 1, 1986, and closed August 15, 1987. There were 324 boats in the fishery which landed 4.7 million pounds. Crab grade was generally good, but the percentage of unfilled and sublegal crab in the catch increased from last year. Crab price opened at \$1.25 but ranged to \$2.00 during the season. The bay fishery produced nearly 65,000 pounds. A sport/commercial conflict erupted in Coos Bay and resulted in additional restrictions on commercial bay crabbing.

### OCEAN FISHERY CATCH AND EFFORT

Catch and effort by port are shown in Table 1. Newport was the lead port followed by Astoria and Brookings. About 88,000 pots were used during the year. Sixty percent of the total catch was landed during the first month of the season (Table 2). Although the catch was down from last season both Florence and Brookings showed an increase. Detailed catch and effort data by port are given in Tables 3 to 10.

### MARKET SAMPLING

Crabs were checked at the docks during December and January. Grade was generally good although the percentage of unfilled crabs at Astoria was relatively high. Also, there was a definite increase in the percentage of sublegal crab in both Astoria and Coos Bay (Table 11).

# CRAB PRICE

Crab price by month is summarized in Table 12. The opening price in most ports was \$1.00 but ranged to \$1.75 in some areas before the end of December. The price reached \$2.00 by February then gradually declined.

#### BAY CRAB FISHERY

The commercial bay crab fishery produced 64,673 pounds and is summarized in Tables 13 and 14. Alsea Bay produced the most crab followed by Coos Bay. There were 90 boats participating but 21 boats landed 70% of the catch. Nearly 75% of the catch was landed during October and November. Detailed catch and effort by estuary are shown in Tables 15 to 22. The unrest between sport and commercial crabbers that surfaced in Coos Bay last year continued to grow. A petition was sent to the Fish and Wildlife Commission in December asking for a ban on all commercial crabbing in estuaries. Staff held a series of listening meetings along the coast and in key inland areas to obtain public comment on the matter. Only the meetings at Waldport and Coos Bay drew a crowd. The matter went to public hearing before the Fish and Wildlife Commission on June 19, 1987. It was determined that there was no biological issue with the crab and that the economic gains and losses between the sport and commercial fisheries were about equal. This left us a social matter and on that basis the commercial crabbers were further restricted to a season that starts the day after Labor Day and ends December 31.

Table 1. Summary ocean crab catch and effort by port, 1986-87.

Port	Catch	Boats	Trips	Pots
Astoria	849,896	48	1,094	14,000
Tillamook	252,744	26	614	4,800
Newport	1,366,815	85	1,286	32,800
Florence	144,079	13	280	2,400
Winchester Bay	499,119	28	552	7,800
Coos Bay	535,648	62	1,081	11,000
Port Orford	226,036	25	<b>598</b>	3,700
Brookings	806,127	67	1,291	12,200
Total	4,680,464	354 <sup>1</sup>	6,796	88,700

 $<sup>^{1}\,</sup>$  Actual number of boats is 324 as 30 landed at more than one port.

Table 2. Summary ocean crab catch and effort by month, 1986-87.

Month	Catch	Boats	Trips	Pots
December	2,814,875	286	2,006	81,800
January	715,301	247	1,194	72,200
February	335,873	208	975	61,000
March	170,916	176	779	50,400
April	175,177	121	607	35,600
May	149,357	84	444	23,500
June	89,189	68	323	16,700
July	147,483	52	289	13,900
August	82,293	48	181	13,100
Total	4,680,464	354 <sup>1</sup>	6,798	88,700

 $<sup>^{1}\,</sup>$  Actual number of boats is 324 as 30 landed at more than one port.

Table 3. Ocean crab catch and effort, Astoria, 1986-87.

Month	Catch	Boats	Trips	Pots
December	540,016	38	285	13,000
January	157,245	34	215	11,500
February	44,618	25	126	9,000
March	41,426	24	144	7,900
April	28,717	18	112	6,500
May	15,980	13	73	4,300
June	8,075	10	62	2,500
July	10,133	7	55	1,800
August	3,686	4	22	1,400
Total	849,896	48	1,094	14,000

Table 4. Ocean crab catch and effort, Tillamook, 1986-87.

Month	Catch	Boats	Trips	Pots
December	85,004	16	109	4,000
January	49,291	15	89	4,200
February	24,996	15	79	4,200
March	17,632	15	78	4,200
April	9,570	10	52	2,800
May	21,317	7	50	1,700
June	13,942	10	56	1,700
July	23,423	13	64	1,700
August	7,569	9	39	1,700
Total	252,744	26	616	4,800

Table 5. Ocean crab catch and effort, Newport, 1986-87.

Month	Catch	Boats	Trips	Pots
December	856,078	80	392	31,200
January	223,056	69	254	27,100
February	109,517	56	238	21,900
March	33,950	38	137	15,400
April	38,392	23	95	9,300
May	37,863	14	70	5,700
June	28,789	11	47	4,500
July	27,511	9	30	3,600
August	11,657	8	23	3,200
Total	1,366,815	85	1,286	32,800

Table 6. Ocean crab catch and effort, Florence, 1986-87.

Month	Catch	Boats	Trips	Pots
December	66,837	9	63	1,700
January	11,848	8	24	1,700
February	12,063	8	27	1,700
March	5,486	8	34	1,900
April	10,329	5	25	1,000
May	11,284	6	36	1,400
June	9,178	7	32	1,400
July	8,052	6	21	1,400
August	9,002	5	19	1,200
Total	144,079	13	281	2,400

Table 7. Ocean crab catch and effort, Winchester Bay, 1986-87.

Month	Catch	Boats	Trips	Pots
December	260,650	18	136	6,700
January	95,870	22	101	6,700
February	43,020	15	86	5,100
March	18,385	14	69	4,700
April	26,555	8	45	3,600
May	13,934	6	32	2,500
June	8,785	6	35	2,000
July	18,222	6	29	1,600
August	13,698	6	19	2,000
Total	499,119	28	552	7,800

Table 8. Ocean crab catch and effort, Coos Bay, 1986-87.

Month	Catch	Boats	Trips	Pots
December	285,627	53	291	10,100
January	62,090	39	138	8,000
February	40,557	34	141	7,100
March	26,830	36	167	7,100
April	28,800	27	137	5,400
May	24,370	21	92	4,300
June	13,350	16	42	3,200
July	33,513	15	42	2,800
August	20,511	13	31	2,400
Total	535,648	62	1,081	11,000

Table 9. Ocean crab catch and effort, Port Orford, 1986-87.

Month	Catch	Boats	Trips	Pots
December	67,223	20	133	3,500
January	37,967	17	91	3,300
February	26,497	16	88	2,900
March	14,376	17	50	2,900
April	19,234	15	75	2,400
May	17,485	11	55	1,800
June	6,185	6	37	1,400
July	24,339	5	44	<sup>1</sup> 800
August	12,730	6	25	800
Total	226,036	25	598	3,700

Table 10. Ocean crab catch and effort, Brookings, 1986-87.

Month	Catch	Boats	Trips	Pots
December	653,440	62	597	12,000
January	77,932	52	282	10,100
February	34,605	45	190	9,100
March	12,831	32	100	6,300
April	13,580	18	66	4,600
May	7,124	9	36	2,200
June	885	6	12	1,000
July	2,290	ĺ	4	200
August	3,440	2	4	400
Total	806,127	67	1,291	12,200

Table 11. Percentage of softshell crab (grades II and III) landed, 1986-87.

Port	Month	% Softshell	Mean Size (mm)	% Undersize
Astoria	December	3.8	171	8.3
	January	16.7	168	20.2
Newport	December	0.0	173	0.0
	January	4.1	175	7.0
Coos Bay	December	5.1	171	21.7
	January	2.1	171	2.1

Table 12. Crab price per month, 1986-87.

Month	Price Range	Mean
December	\$1.00- \$1.75	\$1.25
January	1.00 - 1.85	1.75
February	1.00 - 2.00	1.75
March	1.40 - 2.00	1.75
April	1.40 - 2.00	1.75
May	1.40 - 2.00	1.70
June	1.50 - 2.00	1.70
July	1.50 - 1.75	1.60
August	1.50 - 1.75	1.60

Table 13. Bay crab catch and effort by bay, 1986-87.

Bay	Pounds	Boats	Trips	Rings
Nehalem Bay	173	1	7	10
Tillamook Bay	264	2	5	20
Netarts Bay	244	1	5	12
Yaquina Bay	259	9	31	90
Alsea Bay	35,567	20	177	200
Siuslaw Bay	505	2	7	20
Winchester Bay	6,631	15	144	150
Coos Bay	21,030	40	246	400
Total	64,673	90	622	902

Table 14. Summary bay crab catch and effort by month, 1986-87.

Month	Pounds	Boats	Trips	Rings
December	1,761	12	40	122
January	966	6	24	60
February	254	4	8	44
March	163	3	10	34
April	48	2	2	22
May	79	3 2 6	8	55
June	91	6	8	60
July	2	1	1	10
August	0	0	0	0
September	9,844	35	123	350
October	27,509	49	228	492
November	20,983	42	150	422
December	2,973	14	20	120
Total	64,673	90	622	902

Table 15. Bay crab catch and effort, Nehalem Bay, 1986-87.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	Õ	Ŏ	Ö	Ō
February	Õ	Ö	Ō	0
March	Ō	Ö.	Ö	0
April	Ö	Ō	Ō	0
May	15	ĺ	1	10
June	25	ī	ī ·	10
July	0	0	0	0
August	0	0	0	0
September	50	1	2	10
October	24	1	1	10
November	34	1	1	10
December	25	1	1	10
Total	173	1	7	10

Table 16. Bay crab catch and effort, Tillamook Bay, 1986-87.

Month	Pounds ·	Boats	Trips	Rings
December	0	0	0	0
January	Ō	0	Ô	0
February	Ō	Ô	0	0
March	0	0	0	0
April	0	0	0	0
May	Ô	0	0	0
June	Ō	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	170	1	3	10
November	84	ī	1	10
December	10	1	1	10
Total	264	2	5	20

Table 17. Bay crab catch and effort, Netarts Bay, 1986-87.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	Ō	0	0	0
February	Ŏ	0	Ö	Ŏ
March	Ō	0	Ô	Ô
April	Ö	0	Ō	Ŏ
May	Õ	Ö	0	0
June	0	0	0	0
July	Ō	0	0	0
August	Ō	0	0	0
September	0	0	0	0
October	166	1	4	12
November	78	1	1	12
December	0	0	0	0
Total	244	1	5	12

Table 18. Bay crab catch and effort, Yaquina Bay, 1986-87.

Month	Pounds	Boats	Trips	Rings
December	77	1	3	12
January	0	Ō	0	0
February	26	2	3	24
March	36	2	8	24
April	4	1	1	12
May	64	5	7	45
June	33	3	5	30
July	2	1	1	10
August	Ō	Ō	Ō	0
September	Ŏ	0	Ô	Ō
October	Õ	Ö	Ö	Ö
November	Ŏ	0	0	0
December	17	3	3	20
Total	259	9	31	90

Table 19. Bay crab catch and effort, Alsea Bay, 1986-87.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	Ö	Ö	Ö	Ö
February	Ö	0	0	0
March	Ö	0	Ö	0
April	Ö	Ö	Ō	0
May	Ö	Ö	Ö	Ō
June	Ö	Ō	0	0
July	0	0	0	0
August	0	0	0	0
September	5,849	14	45	140
October	17,711	16	89	160
November	11,288	12	39	120
December	719	4	4	30
Total	35,567	20	177	200

Table 20. Bay crab catch and effort, Siuslaw Bay, 1986-87.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	0	. 0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	0	Ō	0	0
July	0	0	0	0
August	0	0	0	0
September	158	2	2	20
October	221	2	4	20
November	0	0	0	0
December	126	1	1	10
Total	505	2	7	20

Table 21. Bay crab catch and effort, Winchester Bay, 1986-87.

Month	Pounds	Boats	Trips	Rings
December	0	0	0	0
January	Ō	0	0	Ô
February	Ō	0	Ö	Ō
March	Ō	Ö	Ö	Ö
April	ō	Ö	ō	Ö
May	Ō	Ō	Ō	Ō
June	30	ì	i	10
July	0	Ō	ō	0
August	Ō	Ö	Ö	Õ
September	2,760	9	57	90
October	2,356	8	61	80
November	1,313	8 5	23	50
December	172	2	2	20
Total	6,631	15	144	150

Table 22. Bay crab catch and effort, Coos Bay, 1986-87.

Month	Pounds	Boats	Trips	Rings
December	1,684	11	37	110
January	966	6	24	60
February	228	2	5	20
March	127	1	2	10
April	44	Ī	1	10
May	Ö	Ō	Ō	0
June	3	ĺ	ĺ	10
July	Ö	Ö	Ō	0
August	Ö	Ö	Ō	0
September	1,027	9	17	90
October	6,861	20	66	200
November	8,186	22	85	220
December	1,904	2	8	20
Total	21,030	40	246	400

### 1987-88 DUNGENESS CRAB FISHERY

### **OVERVIEW**

The ocean season opened December 1, 1987, and closed August 15, 1988. There were 327 boats in the fishery which landed 8.7 million pounds of crab. Condition was generally good except off the north coast early in the season. Price opened at \$1.25 but declined as the season progressed. The commercial bay crab catch was 39,272 pounds.

### OCEAN FISHERY CATCH AND EFFORT

Catch and effort are shown in Tables 1-11. Astoria was the leading port followed by Newport. About 43% of the total catch was landed during the month of December. The catch was nearly twice that of 1987, but the number of boats and pots remained about the same.

#### MARKET SAMPLING

Market samples were taken at Astoria, Newport, Coos Bay and Brookings (Table 12). Crab condition was generally good but comments from processors suggested a soft market. The average size of crab was down slightly but the percentage of sublegal crab was above average except at Newport.

### CRAB PRICE

The crab price for each month is shown in Table 13. There was a wide range in the price each month and a general decline from February on. Although the price reached \$2.00 very little crab was sold at prices over \$1.45. This was the first year since 1977 that price showed such a flat curve.

#### BAY CRAB FISHERY

The commercial bay crab catch was 39,272 pounds down considerably from 1987. Coos and Alsea bays were the leading producers followed by the Siuslaw estuary (Table 14). Most of the catch was landed during the September to November period (Table 15). Additional data for the bay fishery is shown in Tables 16-21.

Table 1. Summary ocean crab catch and effort by port, 1987-88.

Port	Catch	Boats	Trips	Pots
Astoria	3,144,849	54	1,502	16,900
Tillamook	427,298	21	640	4,200
Depoe Bay	125,188	11	218	1,600
Newport	2,273,939	76	1,256	24,000
Florence	335,030	13	456	2,700
Winchester Bay	586,846	25	438	7,400
Coos Bay	803,248	67	1,275	10,100
Port Orford	184,377	22	444	4,100
Brookings	773,705	65	1,440	14,200
Total	8,654,480	354 <sup>1</sup>	7,669	85,200

 $<sup>^{1}\,</sup>$  327 boats landed crab as 27 landed at more than one port.

Table 2. Summary ocean crab catch and effort by month, 1987-88.

Month	Pounds	Boats	Trips	Pots
December	4,061,507	290	2,095	78,000
January	1,778,031	265	1,709	72,800
February	981,045	228	1,375	60,500
March	562,056	173	814	48,200
April	469,915	144	625	40,000
May	450,224	90	403	23,100
June	143,981	73	314	18,950
July	137,713	49	193	12,350
August	70,008	47	141	10,850
Total	8,654,480	354 <sup>1</sup>	7,669	85,200

 $<sup>^{</sup>m 1}$  327 boats landed crab as 27 landed at more than one port.

Table 3. Ocean crab catch and effort by month, Astoria, 1987-88.

Month	Catch	Boats	Trips	Pots
December	1,164,715	44	460	14,500
January	661,488	35	246	11,000
February	371,927	27	164	9,700
March	285,979	25	145	9,000
April	277,999	27	159	9,400
May	283,023	21	139	6,800
June	61,307	19	102	6,100
July	29,516	9	49	2,900
August	8,895	10	38	3,200
Total	3,144,849	54	1,502	16,900

Table 4. Ocean crab catch and effort by month, Tillamook, 1987-88.

Month	Catch	Boats	Trips	Pots
December	130,370	14	105	3,700
January	69,362	14	123	3,700
February	67,745	14	105	3,700
March	48,632	15	86	3,700
April	29,343	12	56	2,900
May	42,173	8	47	2,100
June	21,055	8	52	1,600
July	14,982	7	39	1,600
August	3,636	6	27	1,000
Total	427,298	21	640	4,200

Table 5. Ocean crab catch and effort by month, Depoe Bay, 1987-88.

Month	Catch	Boats	Trips	Pots
December	39,772	9	39	1,600
January	26,931	7	44	1,600
February	29,447	6	46	1,600
March	18,208	7	42	1,600
April	9,640	6	30	1,600
May	548	3	8	400
June	542	ī	7	50
July	30	ī	1	50
August	70	ī	ī	50
Total	125,188	11	218	1,600

Table 6. Ocean crab catch and effort by month, Newport, 1987-88.

Month	Catch	Boats	Trips	Pots
December	1,315,973	69	363	23,700
January	508,301	62	325	22,600
February	175,239	52	210	16,200
March	89,044	40	143	12,400
April	56,780	30	87	8,600
May	58,990	16	51	4,800
June	29,044	8	33	3,800
July	28,160	5	24	1,900
August	12,408	6	20	2,100
Total	2,273,939	76	1,256	24,000

Table 7. Ocean crab catch and effort by month, Florence, 1987-88.

Month	Catch	Boats	Trips	Pots
December	156,891	10	86	2,500
January	62,578	10	90	2,500
February	54,105	11	100	2,500
March	18,218	9	56	2,500
April	16,920	8	39	2,200
May	9,053		29	500
June	7,158	3 5	27	1,400
July	4,689	7	15	1,600
August	5,420	6	14	1,400
Total	335,030	13	456	2,700

Table 8. Ocean crab catch and effort by month, Winchester Bay, 1987-88.

Month	Catch	Boats	Trips	Pots
December	236,889	15	67	6,500
January	110,820	14	84	6,000
February	75,694	15	97	6,000
March	36,209	8	50	3,700
April	23,253	6	35	3,600
May	21,131	6	32	1,500
June	8,844	7	30	1,900
July	44,592	5	29	1,700
August	29,414	3	14	1,000
Total	586,846	25	438	7,400

Table 9. Ocean crab catch and effort by month, Coos Bay, 1987-88.

Month	Catch	Boats	Trips	Pots
December	469,249	51	338	8,100
January	144,716	52	285	8,600
February	78,181	42	258	7,200
March	33,456	30	129	5,300
April	23,566	27	110	4,600
May	17,049	21	58	3,900
June	12,235	16	42	2,900
July	15,115	11	31	1,600
August	9,681	12	24	2,000
Total	803,248	67	1,275	10,100

Table 10. Ocean crab catch and effort by month, Port Orford, 1987-88.

Month	Catch	Boats	Trips	Pots
December	69,934	19	116	3,700
January	41,955	16	106	3,500
February	51,533	17	115	3,500
March	11,764	13	48	2,800
April	5,560	11	34	2,400
May	2,292	6	13	1,000
June	619	3	6	600
July	389	3	4	600
August	331	2	2	100
Total	184,377	22	444	4,100

Table 11. Ocean crab catch and effort by month, Brookings, 1987-88.

Month	Catch	Boats	Trips	Pots
December	477,714	59	521	13,700
January	151,880	55	406	13,300
February	77,174	44	280	10,100
March	20,546	26	115	7,200
April	26,854	17	75	4,700
May	15,965	6	26	2,100
June	3,177	6	15	600
July	242	i	1	400
August	153	$\bar{1}$	1	0
Total	773,705	65	1,440	14,200

Table 12. Percentage of softshell crab (grades II and III) landed, 1987-88.

Port	Month	% Softshell	Mean Size (mm)	% Undersize
Astoria	December January February	14 9 5	171 170 169	6 5 13
Newport	December January	3 5	173 170	1 2
Coos Bay	December	5	171	10
Brookings	December	3	167	11

Table 13. Crab price per month, 1987-88.

Month	Price Range	Mean
December	\$1.15- \$1.40	\$1.24
January	1.15 - 1.60	1.27
February	1.00 - 2.00	1.22
March	1.00 - 2.00	1.12
April	0.80 - 2.00	1.12
May	0.87 - 2.00	1.11
June	0.75 - 2.00	1.18
July	0.50 - 1.75	1.16
August	0.60 - 1.70	1.16

Table 14. Summary bay crab catch and effort by bay, 1988.

Bay	Pounds	Boats	Trips	Rings
Tillamook Bay	290	6	8	90
Netarts	109	1	5	10
Alsea Bay	9,085	20	106	300
Siuslaw	8,587	16	55	200
Winchester Bay	4,773	14	97	200
Coos Bay	16,428	30	214	450
Total	39,272	87	485	1,150

Table 15. Summary bay crab catch and effort by month, 1988.

Month	Pounds	Boats	Trips	Rings
September	10,481	42	134	595
October .	16,084	47	175	640
November	9,095	44	132	645
December	3,612	18	44	250
Total	39,272	87	485	1,150

Table 16. Bay crab catch and effort, Tillamook Bay, 1988.

Month	Pounds	Boats	Trips	Rings
September	106	3	5	45
October November	96 78	1	1	15 15
December	10	1	1	15
Total	290	6	8	90

Table 17. Bay crab catch and effort, Netarts, 1988.

Month	Pounds	Boats	Trips	Rings
September	0	0	0	0
October	109	1	5	10
November	0	0	0	0
December	0	0	0	0
Total	109	1	5	10

Table 18. Bay crab catch and effort, Alsea Bay, 1988.

Month	Pounds	Boats	Trips	Rings
September	3,768	15	47	200
October	3,972	īĭ	39	150
November	613	6	15	90
December	732	5	5	70
Total	9,085	20	106	300

Table 19. Bay crab catch and effort, Siuslaw, 1988.

Month	Pounds	Boats	Trips	Rings
September October November December	2,319 4,261 2,007 0	9 13 6 0	18 25 12 0	130 175 90 0
Total	8,587	16	55	200

Table 20. Bay crab catch and effort, Winchester Bay, 1988.

Month	Pounds	Boats	Trips	Rings
September	2,939	10	48	150
October	1,477	6	37	90
November	228	4	10	50
December	129	1	2	15
Total	4,773	14	97	200

Table 21. Bay crab catch and effort, Coos Bay, 1988.

Month	Pounds	Boats	Trips	Rings
September	1,349	5	16	70
October	6,169	15	68	200
November	6,169	27	94	400
December	2,741	11	36	150
Total	16,428	30	214	450

### 1988-89 DUNGENESS CRAB FISHERY

### OVERVIEW

The ocean season opened December 1, 1988, and closed August 15, 1989. There were 11.2 million pounds of crab landed by 342 boats. A severe softshell problem developed off the Astoria area and north which impacted the fishery and markets. Crab price opened at \$1.25 in most ports. The bay crab fishery produced 63,327 pounds.

# OCEAN FISHERY CATCH AND EFFORT

The 1988-89 harvest was the highest since the record year of 1979-80. Astoria was again the leading port followed by Newport (Table 1). Newport had the most boats and pots followed closely by Coos Bay and Astoria. About 43% of the catch was landed during the month of December (Table 2). Detailed catch and effort by port and month are shown in Tables 3-11.

### MARKET SAMPLE

Market samples for crab condition and average size were taken at Astoria, Newport, Coos Bay, Port Orford and Brookings. Table 12 indicates that Newport was the only area where crab condition was good early in the season and even there some sorting at sea was done. Condition was generally much worse on the north coast into Washington because of the volume of crab available. Washington officials asked Oregon to support closing the season, but with gear already in the water and a lesser problem off most of Oregon, support was withheld. Most of the crabs being landed off northern Oregon and Washington were being rejected by processors who put their boats on limits. The one at sea sample taken off Coos Bay had the highest percentage softshell, but so few legal sized crab were being caught the fisherman stopped fishing after pulling a few pots.

### CRAB PRICE

The volume of soft crab being landed also impacted the price of crab to fishermen (Table 13). The price was \$1.25 for all ports except Astoria early in the season and then declined, although some crab sold for \$2.00. At Astoria the price ranged from \$0.50 to \$1.10.

### BAY CRAB FISHERY

Commercial landings of bay crab rebounded to 63,327 pounds due to a doubling of the catch in Alsea and Coos bays (Table 14). The catch was evenly distributed over the first three months of the 4-month season (Table 15). Detailed catch and effort data by bay and month are shown in Tables 16-21.

Table 1. Summary ocean crab catch and effort by port, 1988-89.

Port	Catch	Boats	Trips	Pots
Astoria	4,306,571	72	1,582	19,100
Tillamook	599,678	31	819	5,900
Depoe Bay	113,422	10	171	1,700
Newport	3,051,232	81	1,182	27,500
Florence	361,485	21	381	3,700
Winchester Bay	661,302	32	472	7,400
Coos Bay	811,003	73	1,077	10,400
Port Orford	141,458	16	365	3,400
Brookings	1,117,144	58	1,476	12,800
Total	11,161,925	394 <sup>1</sup>	7,525	91,900

 $<sup>^{1}\,</sup>$  342 boats landed crab as 52 landed at more than one port.

Table 2. Summary ocean crab catch and effort by month, 1988-89.

Month	Catch	Boats	Trips	Pots
December	4,787,219	275	2,185	78,300
January	2,791,502	245	1,502	71,800
February	1,378,145	208	1,114	60,500
March	550,587	159	680	47,100
April	619,286	143	735	42,300
May	508,381	77	484	23,600
June	187,504	66	325	19,700
July	239,226	55	337	16,400
August	101,445	44	163	14,600
Total	11,163,329	342	7,525	91,900

Table 3. Ocean crab catch and effort by month, Astoria, 1988-89.

Month	Catch	Boats	Trips	Pots
December	949,824	48	270	14,100
January	1,544,756	40	319	12,100
February	761,572	34	207	10,700
March	242,977	31	137	10,000
April	343,692	30	186	9,700
May	234,450	27	170	8,700
June	94,841	22	122	7,000
July	102,903	1 <del>7</del>	123	5,400
August	31,556	12	48	4,000
Total	4,306,571	72	1,582	19,100

Table 4. Ocean crab catch and effort by month, Tillamook, 1988-89.

Month	Catch	Boats	Trips	Pots
December	124,236	15	104	4,700
January	113,115	16	104	5,000
February	99,989	18	139	5,000
March	50,116	17	95	5,000
April	74,295	19	119	5,000
May	71,237	11	86	3,400
June	33,429	12	58	3,700
July	26,101	11	77	3,400
August	7,160	10	37	3,000
Total	599,678	31	819	5,900

Table 5. Ocean crab catch and effort by month, Depoe Bay, 1988-89.

Month	Catch	Boats	Trips	Pots
December	60,261	9	64	2,200
January	23,566	6	36	1,500
February	13,354	7	17	1,500
March	5,207	6	17	1,500
April	6,170	3	19	1,000
May	2,530	2	6	500
June	1,954	$\bar{1}$	6	100
July	380	2	6	100
August	0	ō	Ö	0
Total	113,422	10	171	1,700

Table 6. Ocean crab catch and effort by month, Newport, 1988-89.

Month	Catch	Boats	Trips	Pots
December	1,924,274	68	444	24,500
January	637,200	67	301	24,100
February	215,345	54	181	19,200
March	99,146	36	91	12,800
April	88,265	31	98	10,900
May	53,568	10	33	3,400
June	14,540	7	15	2,300
July	15,932	4	15	1,500
August	2,962	ż	4	700
Total	3,051,232	81	1,182	27,500

Table 7. Ocean crab catch and effort by month, Florence, 1988-89.

Month	Catch	Boats	Trips	Pots
December	204,249	16	98	3,700
January	62,316	12	65	3,700
February	28,278	12	52	3,300
March	19,466	8	43	2,700
April	17,457	8	39	2,700
May	11,901	5	25	1,700
June	4,999	4	22	1,300
July	9,294	5	25	1,700
August	3,525	6	12	2,000
Total	361,485	21	381	3,700

Table 8. Ocean crab catch and effort by month, Winchester Bay, 1988-89.

Month	Catch	Boats	Trips	Pots
December	333,175	19	144	5,400
January	102,733	11	60	3,900
February	47,268	12	74	3,900
March	21,958	7	34	2,700
April	13,286	5	32	1,900
May	37,502	5	33	1,200
June	14,995	6	31	1,500
July	57,970	7	41	1,900
August	32,415	6	23	2,300
Total	661,302	32	472	7,400

Table 9. Ocean crab catch and effort by month, Coos Bay, 1988-89.

Month	Catch	Boats	Trips	Pots
December	431,223	50	345	8,700
January	136,251	47	200	8,700
February	86,591	36	174	7,200
March	36,396	29	105	5,600
April	33,964	25	97	4,600
May	37,467	15	52	2,300
June	9,587	13	36	1,900
July	20,131	10	37	1,400
August	19,393	12	31	2,000
Total	811,003	73	1,077	10,400

Table 10. Ocean crab catch and effort by month, Port Orford, 1988-89.

Month	Catch	Boats	Trips	Pots
December	29,399	14	85	2,700
January	14,623	12	70	2,500
February	24,857	$\overline{11}$	49	2,300
March	22,158	11	42	2,300
April	14,888	12	55	2,500
May	20,466	4	28	800
June	6,037	3	18	600
July	4,947	3	11	600
August	4,083	2	7	400
Total	141,458	16	365	3,400

Table 11. Ocean crab catch and effort by month, Brookings, 1988-89.

Month	Catch	Boats	Trips	Pots
December	730,578	56	631	12,300
January	156,942	46	347	10,300
February	100,891	33	221	7,400
March	53,163	20	116	4,500
April	27,269	18	90	4,000
May	39,260	7	51	1,600
June	7,122	6	17	1,300
July	1,568	2	2	400
August	351	ī	ī	200
Total	1,117,144	58	1,476	12,800

Table 12. Percentage of softshell crab (grades II and III), mean size and undersize landed, 1988-89.

Port	Month	Softshell	Mean Size (mm)	Undersize
Astoria	December January February	44.0 21.0 12.0	176 173 173	1.0 4.0 1.0
Newport	December	6.0	178	1.0
Coos Bay	December August <sup>I</sup>	15.0 42.3	173 171	2.7
Port Orford	December	48.0	166	9.5
Brookings	December	33.4	173	3.3

 $<sup>^{1}\,</sup>$  At sea sample - all softshells discarded at sea.

Table 13. Crab price per pound by month, 1988-89.

Month	Price Range	Mean
December	\$0.50- \$2.00	\$1.19
January	0.60 - 2.00	1.08
February	1.00 - 1.30	1.09
March	1.00 - 2.00	1.12
April	1.00 - 2.00	1.18
May	0.75 - 1.50	1.22
June	1.15 - 1.75	1.21
July	0.85 - 1.75	1.13
August	1.15 - 1.85	1.50

Table 14. Bay crab catch and effort by bay, 1989.

Bay	Pounds	Boats	Trips	Rings
Tillamook Bay	24	1	3	12
Yaquina Bay	1,089	6	22	45
Alsea Bay	16,236	8	129	96
Siuslaw Bay	2,993	7	39	80
Winchester Bay	7,254	18	122	150
Coos Bay	35,731	44	437	350
Total	63,327	76	752	733

Table 15. Summary bay crab catch and effort by month, 1989.

Month	Pounds	Boats	Trips	Rings
September October November December	21,358 21,165 20,012 792	53 27 24 6	269 228 239 16	606 312 283 62
Total	63,327	76	752	733

Table 16. Bay crab catch and effort, Tillamook Bay, 1989.

Month	Pounds	Boats	Trips	Rings
September	0	0	0	0
October	0	0	0	0
November	6	1	1	12
December	18	1	2	0
Total	24	1	3	12

Table 17. Bay crab catch and effort, Yaquina Bay, 1989.

Month	Pounds	Boats	Trips	Rings
September October November December	601 481 7 0	4 4 1 0	8 13 1 0	40 40 10 0
Total	1,089	5	22	90

Table 18. Bay crab catch and effort, Alsea Bay, 1989.

Month	Pounds	Boats	Trips	Rings
September	5,879	8	48	96
October	6,369	6	44	72
November	3,689	5	34	60
December	299	3	3	30
Total	16,236	8	129	96

Table 19. Bay crab catch and effort, Siuslaw Bay, 1989.

Month	Pounds	Boats	Trips	Rings
September October November December	2,164 727 102 0	7 3 1 0	31 6 2 0	80 20 0 0
Total	2,993	7 .	39	80

Table 20. Bay crab catch and effort, Winchester Bay, 1989.

Month	Pounds	Boats	Trips	Rings
September October November December	4,280 1,179 1,795 0	16 4 7 0	75 18 29 0	192 40 84 0
Total	7,254	18	122	192

Table 21. Bay crab catch and effort, Coos Bay, 1989.

Month	Pounds	Boats	Trips	Rings
September October November December	8,434 12,409 14,413 475	21 15 18 5	107 147 172 11	250 180 215 50
Total	35,731	33	437	350

# 1989-90 DUNGENESS CRAB FISHERY

# OVERVIEW

The ocean season which opened December 1, 1989, and closed August 15, 1990, produced 9.3 million pounds of crab landed by 455 boats. The season began in turmoil and uncertainty as at-sea-sampling off Washington indicated a high percentage of unfilled crab which prompted Washington to delay the opening of their season to January 10, 1990. As a result, 57 Washington boats moved into Oregon waters and landed crab at Oregon ports. Crab grade off northern Oregon was marginal as reflected by a lower starting price (\$1.00) compared to \$1.25 for the rest of the coast. The commercial estuary fishery produced 61,371 pounds.

### OCEAN CATCH AND EFFORT

Table 1 summarizes catch and effort by port. Astoria was the lead port with Newport a close second. Coos Bay and Brookings each landed over one million pounds. The number of boats landing in Oregon was the second highest on record but the number of pots was a record. The greatest increase in boats occurred at Astoria. Most of the increase was Washington boats with some from other Oregon ports and California. Fifty-seven percent of the total catch was landed in December (Table 2). Detailed catch and effort are found in Tables 3-12.

# MARKET SAMPLING

A summary of market sampling is shown in Table 13. Samples from Astoria plants in December and January showed that considerable unfilled crab was being landed. Crab grade from Newport south was much better. Since our grading method is subjective staff agreed to process 25 jumbo crabs from Astoria which had been high-graded by a local fisherman. After cooking, the loss of weight ranged from 5 to 30% clearly showing that the crabs were not full of meat even though the shells were hard. The price paid for crab from northern Oregon started at \$1.00 also reflecting the marginal quality of the crab. The opening price from Newport south was \$1.25 and topped out at \$3.00 in June (Table 14). One sample at sea was done out of Brookings in December.

# BAY CRAB FISHERY

Commercial fishing for crab occurred in nine estuaries but sizeable landings occurred in only three (Table 15). Ninety-two boats fished in the bays with 53 of them fishing in Coos Bay. The only surprise was the almost total decline of commercial crabbing in the Siuslaw estuary. October was the peak month for landings (Table 16).

Detailed catch and effort data for each estuary are in Tables 17 to 25.

Table 1. Summary ocean crab catch and effort by port, 1989-90.

Port	Catch	Boats	Trips	Pots
Astoria	2,907,503	123	2,311	37,300
Tillamook	344,958	32	<sup>*</sup> 810	7,900
Depoe Bay	35,885	8	162	700
Newport	2,152,046	120	1,488	41,900
Florence	241,355	16	328	4,400
Winchester Bay	591,076	32	646	22,700
Coos Bay	1,479,859	107	1,728	17,200
Port Orford	443,954	23	<sup>2</sup> 694	3,300
Gold Beach	<sup>448</sup>	5	10	20
Brookings	1,059,646	66	1,448	16,000
Total	9,256,730	455 <sup>1</sup>	9,625	151,400

 $<sup>^{1}</sup>$  77 boats landed at more than one port.

Table 2. Summary ocean crab catch and effort by month, 1989-90.

Month	Catch	Boats	Trips	Pots
December	5,247,075	420	3,368	113,200
January	1,566,325	257	10,65	70,700
February	685,517	223	984	61,700
March	669,219	228	1,240	60,800
April	301,878	167	847	46,300
May	261,705	135	728	35,300
June	177,273	112	543	28,900
July	221,413	95	528	26,700
August	126,325	83	322	25,200
Total	9,256,730	455 <sup>1</sup>	9,625	151,400

 $<sup>^{1}</sup>$  77 boats landed at more than one port.

Table 3. Ocean crab catch and effort by month, Astoria, 1989-90.

Month	Catch	Boats	Trips	Pots
December	1,093,135	93	697	32,280
January	1,019,752	71	321	20,862
February	301,028	50	229	15,372
March	233,189	50	290	15,738
April	100,061	38	225	13,542
May	91,288	35	222	11,712
June	32,794	24	137	8,418
July	26,953	19	135	7,000
August	9,303	13	55	4,800
Total	2,907,503	123 <sup>1</sup>	2,311	37,300

 $<sup>^{1}\,</sup>$  60 boats were from other ports: Washington 37; California 5; Oregon 18.

Table 4. Ocean crab catch and effort by month, Tillamook, 1989-90.

Month	Catch	Boats	Trips	Pots
December	109,477	20	176	4,964
January	21,068	13	38	3,796
February	29,535	15	74	4,380
March	58,164	19	118	4,672
April	30,584	13	78	3,796
May	28,137	10	85	2,920
June	30,355	11	88	2,920
July	23,160	12	86	2,600
August	14,478	14	67	4,100
Total	344,958	321	810	7,900

 $<sup>^{1}\,</sup>$  5 boats were from other ports.

Table 5. Ocean crab catch and effort by month, Depoe Bay, 1989-90.

Month	Catch	Boats	Trips	Pots
December	8,399	8	31	702
January	1,103	2	6	234
February	532	2	5	234
March	2,436	4	15	468
April	2,363	5	23	585
May	3,649	3	23	351
June	5,664	4	21	351
July	6,971	4	24	351
August	4,768	4	14	351
Total	35,885	81	162	702

 $<sup>^{1}\,</sup>$  2 boats were from other ports.

Table 6. Ocean crab catch and effort by month, Newport, 1989-90.

Month	Catch	Boats	Trips	Pots
December	1,531,231	109	656	37,232
January	189,859	53	145	18,974
February	151,869	52	176	18,258
March	99,100	50	165	17,542
April	37,351	29	97	10,382
May	30,372	17	71	6,086
June	27,273	12	52	4,296
July	54,543	18	80	6,086
August	30,448	13	46	4,654
Total	2,152,046	120 <sup>1</sup>	1,488	41,900

 $<sup>^{1}\,</sup>$  34 boats were from other ports: Washington 27; California 2; Oregon 5.

Table 7. Ocean crab catch and effort by month, Florence, 1989-90.

Month	Catch	Boats	Trips	Pots
December	93,394	7	60	2,359
January	23,062	4	22	1,348
February	12,341	5	23	1,685
March	18,383	7	39	2,022
April	14,201	5	30	1,685
May	13,247	4	37	1,348
June	23,767	4	41	1,348
July	32,889	6	44	2,000
August	10,071	5	32	1,700
Total	241,355	16 <sup>1</sup>	328	4,400

 $<sup>^{1}\,</sup>$  1 boat was from another port.

Table 8. Ocean crab catch and effort by month, Winchester Bay, 1989-90.

Month	Catch	Boats	Trips	Pots
December	308,684	21	179	5,880
January	46,290	12	42	4,312
February	44,873	12	68	4,312
March	35,782	14	87	4,312
April	18,560	7	53	2,744
May	23,489	11	50	3,528
June	19,780	9	43	3,136
July	49,666	12	73	4,700
August	43,952	15	51	5,880
Total	591,076	321	646	22,700

 $<sup>^{1}\,</sup>$  9 boats were from other ports.

Table 9. Ocean crab catch and effort by month, Coos Bay, 1989-90.

Month	Catch	Boats	Trips	Pots
December	959,915	83	648	12,276
January	144,405	45	168	8,181
February	96,875	44	193	7,920
March	136,479	44	247	7,722
April	42,202	36	146	6,534
May	37,183	30	117	4,554
June	26,919	27	96	4,356
July	24,307	18	70	2,772
August	11,574	15	43	2,970
Total	1,479,859	107 <sup>1</sup>	1,728	17,200

 $<sup>^{1}</sup>$  20 boats were from other ports: Washington 1; Oregon 19.

Table 10. Ocean crab catch and effort by month, Port Orford, 1989-90.

Month	Catch	Boats	Trips	Pots
December	273,402	18	233	2,975
January	51,986	15	97	2,625
February	20,170	14	84	2,450
March	42,288	15	96	2,450
April	31,460	14	89	2,100
May	14,849	9	47	1,400
June	5,989	9	29	1,400
July	2,714	4	13	700
August	1,096	3	6	525
Total	443,954	231	694	3,300

 $<sup>^{1}</sup>$  3 boats were from other ports.

Table 11. Ocean crab catch and effort by month, Gold Beach, 1989-90.

Month	Catch	Boats	Trips	Pots
December	20	1	1	20
January	0	0	0	0
February	0	0	0	0
March	20	1	1	0
April	0	0	0	0
May	155	2	3	0
June	253	$\overline{1}$	2	0
July	Ō	Ō	Ö	Ō
August	Ō	Ö	3	0
Total	448	51	10	20

 $<sup>^{1}\,</sup>$  1 boat was from another port.

Table 12. Ocean crab catch and effort by month, Brookings, 1989-90.

Month	Catch	Boats	Trips	Pots
December	869,418	60	687	14,514
January	68,800	42	226	10,332
February	28,294	29	132	7,134
March	43,378	24	182	5,904
April	25,096	20	106	4,920
May	19,336	14	73	3,444
June	4,479	11	34	2,706
July	210	2	3	492
August	635	$\overline{1}$	5	246
Total	1,059,646	66 <sup>1</sup>	1,448	16,000

 $<sup>^{1}\,</sup>$  1 boat was from another port.

Table 13. Summary crab grade and average size by port and month 1989-90 (market sample).

			Grade (%)	<b>)</b>	%	Average
Port	Month	Ī	II	III	Sublegal	size (mm)
Astoria	December	66	28	6	1 3	175
	January February	76 88	23 12	0	3 2	172 174
Newport	December January	86 98	14 2	0 0	2 1	173 177
Florence	December	92	8	0	3	172
Coos Bay	December	89	11	0	4	178
Port Orford	December January	88 66	12 25	0 9	0 0	169 169
Brookings	December	82	18	0	0	171

 $<sup>^{1}\,</sup>$  At sea sample - all softshells discarded at sea.

Table 14. Crab price per pound by month, 1989-90.

Month	Price Range	Mean
December	\$0.75- \$1.70	\$1.20
January	1.00 - 1.50	1.25
February	1.25 - 1.85	1.37
March	1.50 - 1.95	1.51
April	1.50 - 2.05	1.66
May	1.00 - 2.10	1.76
June	1.00 - 3.00	1.75
July	1.75 - 3.00	1.75
August	1.75 - 3.00	1.80

Table 15. Bay crab catch and effort by bay, 1990.

Bay	Pounds	Boats	Trips	Rings
Columbia River	283	1	1	15
Nehalem Bay	55	$\bar{1}$	2	10
Tillamook Bay	18	$\bar{1}$	2	10
Yaquina Bay	481	10	20	110
Alsea Bay	15,325	7	132	84
Siuslaw Bay	27	1	1	12
Winchester Bay	8,155	18	143	216
Coos Bay	36,766	53	517	636
Coquille	261	2	3	20
Total	61,371	941	821	1,100

 $<sup>^{1}\,</sup>$  3 boats fished in more than one bay.

Table 16. Summary bay crab catch and effort by month, 1990.

Month	Pounds	Boats	Trips	Rings
$\operatorname{July}^1$	55	1	2	10
September	12,530	43	202	516
October	31,685	65	350	782
November	15,104	50	218	599
December	1,997	11	49	130
Total	61,371	922	821	1,100

Table 17. Bay crab catch and effort, Columbia River, 1990.

Month	Pounds	Boats	Trips	Rings
September	0	0	0	0
October	0	0	0	0
November	283	1	1	15
December	0	0	0	0
Total	283	1	1	15

Table 18. Bay crab catch and effort, Nehalem Bay, 1990.

Month	Pounds	Boats	Trips	Rings
July	55	1	2	10
September	0	0	0	0
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Total	55	1	2	10

Table 19. Bay crab catch and effort, Tillamook Bay, 1990.

Month	Pounds	Boats	Trips	Rings
September October November December	0 0 0 18	0 0 0 1	0 0 0 2	0 0 0 10
Total	18	1	2	10