# SHELLFISH INVESTIGATION INFORMATION REPORT

NO. 83-1

1982 Razor Clam Fishery

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in a grant of the

## INTRODUCTION

Razor clams from Clatsop Beach (Tillamook Head to Columbia River) were sampled regularly from March through September and periodically the rest of the year. Sport and commercial diggers were interviewed to obtain catch locations, number and age composition of clams dug. Random age-length samples and wastage samples were collected. Data from other beaches south of Tillamook Head were collected as time permitted.

#### SPORT FISHERY

## Clatsop Beach

A calculated 758,000 clams were harvested and an additional 123,000 clams were wasted on 84,000 digger trips to Clatsop Beach. This represents a 6% increase in number of clams dug and an 18% increase in digger trips from the ten-year average (72-81). Seaside Beach accounted for 31.8% of the clams dug and 27.4% of the digger trips with Sunset Beach accounting for 28.7% of the clams dug and 31.7% of the digger trips. Clam wastage was calculated at 14.4% with a high of 24% in late June. Reduced effort during July and September kept losses down. The lack of older clams due to 1981 winter losses is verified by the age composition of the catch listed in Table 2.

Table I lists harvest, catch rates and number of diggers by statistical area. Fall digging was hindered by stormy weather although up to 200 diggers were out on several daylight tides. Diggers averaged 10.5 clams per trip.

Table 1. Sport harvest of razor clams and number of diggers by area from Clatsop Beach, March to September, 1982.

Area	Miles of Beach	No. of Digger Trips	Clams Dug/ Digger Trip	No. of Clams Dug	No. of Clams Wasted	Harvest Total
1 2 3 4 5	3.6 6.2 5.0 1.2 2.0	5,074 26,485 20,314 8,834 22,856	7.8 8.2 6.7 14.1 10.6	39,617 217,756 135,728 124,203 241,153	6,449 35,449 22,095 20,219 39,258	46,066 253,205 157,823 144,422 280,411
TOTAL	18.0	83,563	9.1*	758,457	123,470	881,927

Area 1 - Columbia River to Ft. Stevens Park Rd.

\* weighted mean

- 2 Ft. Stevens Park Rd. to Sunset Beach Rd.
- 3 Sunset Beach Rd. to Gearhart Beach Rd.4 Gearhart Beach Rd. to Necanicum River
- 5 Necanicum River to Tillamook Head, Seaside.

Table 2. Age composition in percent of sport dug clams, from Clatsop Beach, 1977-1982.

Year of Harvest	0	1	2	3	4	5+	
1977	37.5	15.7	33.5	6.6	3.8	2.9	
1978	28.7	61.8	4.0	3.5	1.3	0.7	
1979	12.3	75.3	11.1	0.9	0.3	0.1	
1980	44.6	32.0	16.7	6.1	0.5	0.1	
1981	44.1	51.4	3.1	1.3	0.1	0.0	
1982	18.1	80.7	0.6	0.5	0.1	0.0	
10 Year Average	27.3	52.0	13.9	4.9	1.4	0.5	

## Beaches South of Tillamook Head

Data were obtained from eleven beaches. Chapman Pt. beach north of Cannon Beach, Agate Beach north of Newport, and Whiskey Run Beach south of Coos Bay were the best producing areas. Pertinent catch data listed by area is listed in Table 3.

Table 3. Razor clam data from beaches south of Tillamook Head.

Area	No. of	No. of	Clams/		Aç	e Comp	ositio	n	
<u>Sampled</u>	Diggers	Clams	Digger	0	1	2	3	4	5
Indian Beach*	6	0	0						
Crescent Beach*	2	5	2.5				40.0	60.0	
Chapman Pt. Beach	4	40	10.0			10.0	62.5	25.0	2.5
Cannon Beach	11	0	0						
Silver Point Beach	* 3	2	0.7					100.0	
Falcon Cove Beach	11	7	0.6						
Short Sand Beach	5	46	9.2	92.0	1.3	•	6.0	0.7	-
Agate Beach √ (Newport)	-	<del>-</del> .	<b>-</b>	11.0	27.4	30.1	16.4	9.6	5.5
South Beach √ (Newport)	-	-			14.3	14.3	42.8	28.6	
Whiskey Run Beach (Coos Bay)	74	510	6.9	3.0	9.9	71.4	11.5	4.2	
Myers Creek Beach* (Gold Beach)	68	289	4.3	1.1	66.3	19.8	10.7	2.1	

<sup>√</sup> biologist data

<sup>\*</sup> one sampling trip

## COMMERCIAL FISHERY

A reported 26,528 pounds (165,000 clams) were sold by 209 diggers with only 0.4% of the pounds being dug from beaches south of Tillamook Head. The fall fishery produced 4,960 pounds which made up 18.7% of the reported catch. Age composition in Table 4 reflects the lack of older clams in the catches. The annual catch data is listed in Table 5.

Table 4. Age composition in percent of commercially dug clams from Clatsop Beach, 1977-1982.

Year of	Age							
Harvest	0	1	2	3	4	5		
1977	1.6	8.7	60.0	12.0	10.6	7.1		
1978	8.0	70.8	10.7	12.6	3.4	1.7		
1979	0	61.9	26.1	7.1	4.0	0.9		
1980	0.7	90.9	7.5	0.7	0	0.2		
1981	1.4	89.8	8.8	0	0	0		
1982	0.4	98.7	0.7	0.2	0	0		
10-Year Average	1.6	57.8	25.8	9.4	4.3	1.1		

However, a check of 69 commercial diggers revealed that an additional 18,662 pounds (41.3%) had been taken, but not sold to licensed dealers, thus increasing the catch to 322,000 clams including wastage. The real commercial total harvest was 322,000 clams which includes wastage of 40,000 clams. The commercial fishery actually took 26.8% of the total harvest of razor clams from Clatsop Beach. Statistical Area 2 accounted for 45.6% of the total pounds dug.

Table 5. Annual Harvest and Effort Data for the Sport and Commercial Fishery.

		ercial		Sport	,		,	
Voss	Number of	Number of	Number of	Clams per	Number of	Maghaga	Total	
Year	Diggers	Clams Landed	Diggers	Digger Trip	Clams Dug	Wastage	Harvest	
1955	295	904,000	56,000	21.6	1,212,000	295,000	2,411,000	
1956	253	490,000	60,000	17.7	1,061,000	295,000	1,846,000	
1957	193	336,000	77,000	21.4	1,646,000	416,000	2,398,000	
1958	221	386,000	89,000	18.9	1,679,000	218,000	2,283,000	
1959	118	179,000	54,000	12.0	646,000	124,000	949,000	
1960	93	154,000	48,000	12.4	596,000	46,000	796,000	
1961	58	80,000	51,000	11.4	583,000	70,000	733,000	
1962	79	102,000	56,000	15.9	892,000	105,000	1,099,000	
1963	77	107,000	55,000	13.0	713,000	70,000	890,000	
1964	125	125,000	71,000	15.5	1,098,000	264,000	1,487,000	
1965	213	399,000	76,000	14.9	1,134,000	186,000	1,719,000	
1966	217	282,000	78,000	13.6	1,052,000	434,000	1,768,000	
1967	297	494,000	74,000	19.9	1,472,000	195,000	2,161,000	
1968	340	361,000	64,000	13.0	831,000	162,000	1,354,000	
1969	185	111,000	59,000	14.4	851,000	155,000	1,117,000	
1970	79	61,000	56,000	12.8	751,000	125,000	901,000	
1971	134	123,000	77,000	12.6	968,000	213,000	1,304,000	
1972	76	49,000	69,000	9.2	636,000	139,000	824,000	
1973	111	89,000	76,000	9.5	725,000	159,000	973,000	
1974	58	32,000	44,000	7.9	347,000	5,000	384,000	
1975	146	171,000	75,000	10.5	785,000	157,000	1,113,000	
1976	391	717,000	119,000	12.0	1,431,000	63,000	2,211,000	
1977	269	143,000	51,000	9.6	499,000	33,000	675,000	
1978	253	205,000	72,000	11.8	849,000	137,000	1,191,000	
1979	236	180,000	90,000	10.7	958,000	63,000	1,201,000	
1980	145	116,000	70,000	10.6	747,000	143,000	1,006,000	
1981	91	128,000	30,000	6.2	187,000	49,000	364,000	
1982	209	165,000	84,000	9.₽	758,000	123,000	1,046,000	