

SHELLFISH/MARINE HABITAT INVESTIGATION

INFORMATION REPORT

1995 RAZOR CLAM FISHERY

by

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INTRODUCTION

The fisheries on Clatsop beach (Tillamook Head to Columbia River) were sampled four days each tide series April through July. The winter and fall fisheries were sampled routinely. Sport and commercial diggers were interviewed to obtain data on digging effort, number, and age composition of clams, and harvest area. Data from beaches south of Tillamook Head were collected as time permitted. Random age and length data, samples for PSP toxins analysis, wastage of clams, and other miscellaneous data were collected and reported.

SPORT FISHERY

CLATSOP BEACH

The harvest for 1995 was 978,418 clams, including 66,780 wasted clams. These were taken on 90,571 digger trips. The average catch per trip dropped from 13.6 clams during the winter tides to 5.0 clams in the fall as the number of available clams declined. Little recruitment to the fishery occurred except in Area 1.

The weather was good during winter tides, and effort was high January through March. A harvest of 464,093 clams was taken on 34,133 digger trips. Catch per digger trip was 13.6 clams and wastage was not a problem as few small clams were observed on the beach.

A spring harvest of 506,295 clams, including 66,780 wasted clams, was taken on 54,832 digger trips. Diggers averaged eight clams per trip. Sixty three percent of the harvest came from Areas 1 and 2. Table 1 lists harvest, catch rates and number of diggers per area. A minimal wastage of only 13.2% occurred, as few 1994 year class clams were present. The lack of first year calms and increase of older clams were noticeable in the catches. The age composition of the sport catch is listed in Table 2.

The fall fishery was hindered by poor weather and a lack of clams. A harvest of 8,030 clams was taken on 1,606 digger trips. Diggers averaged 5.0 clams per trip. Most of the small clams that were dug were retained by diggers, reducing wastage. The 1994 year class was below average in numbers and was found mainly on outside bars. The 1995 set appears to have had poor survival to date.

Table 1. SPORT HARVEST OF RAZOR CLAMS AND NUMBER OF DIGGERS BY AREA FROM CLATSOP BEACH, MARCH THROUGH JULY 1995

AREA	MILES OF BEACH	NO. OF DIGGER TRIPS	CLAMS DUG /DIGGER TRIP	NO. OF CLAMS DUG	NO. OF CLAMS WASTED	TOTAL CLAMS HARVESTED
1	3.6	10,686	12.5	134,101	20,375	154,476
2	6.2	15,141	9.4	142,742	21,688	164,430
3	5.0	13,021	5.7	74,528	11,324	85,852
4	1.2	5,201	7.8	40,401	6,139	46,540
5	2.0	10,783	4.4	47,743	7,254	54,997
TOTAL	18.0	54,832	8.0	439,515	66,780	506,295

- Area 1 Columbia River to Peter Iredale
- Area 2 Peter Iredale to Sunset Beach Road
- Area 3 Sunset Beach Road to Gearhart Beach Road
- Area 4 Gearhart Beach Road to Necanicum River
- Area 5 Necanicum River to Tillamook Head

Table 2. AGE COMPOSITION OF SPORT-DUG CLAMS IN PERCENTAGE FROM CLATSOP BEACH, 1990-1995

YEAR OF HARVEST	AGE IN YEARS					
	0	1	2	3	4	5+
1990	14.3	52.1	25.5	5.9	2.1	0.1
1991	16.0	26.5	47.0	8.5	1.6	0.4
1992	no season					
1993	no season					
1994	3.1	44.6	47.6	4.5	0.2	0.0
1995	1.9	27.9	39.2	23.9	5.5	1.6
10-YR AVG	18.3	54.4	23.6	3.0	0.6	0.1

Table 3. ANNUAL EFFORT AND HARVEST DATA FOR THE RAZOR CLAM FISHERY

YEAR	COMMERCIAL FISHERY		NO. OF TRIPS	SPORT FISHERY		NO. OF CLAMS WASTED	TOTAL CLAMS HARVESTED
	NO. OF DIGGERS	NO. OF CLAMS		CLAMS/TRIP	NO. OF CLAMS DUG		
1955	295	904,000	56,000	22	1,212,000	295,000	2,411,000
1956	253	490,000	60,000	18	1,061,000	295,000	1,846,000
1957	193	336,000	77,000	21	1,646,000	416,000	2,398,000
*1958	221	386,000	89,000	19	1,679,000	218,000	2,283,000
1959	118	179,000	54,000	12	646,000	124,000	949,000
1960	93	154,000	48,000	12	596,000	46,000	796,000
1961	58	80,000	51,000	11	583,000	70,000	733,000
1962	79	102,000	56,000	16	892,000	105,000	1,099,000
1963	77	107,000	55,000	13	713,000	70,000	890,000
1964	125	125,000	71,000	16	1,098,000	264,000	1,487,000
1965	213	399,000	76,000	15	1,134,000	186,000	1,719,000
1966	217	282,000	78,000	14	1,052,000	434,000	1,768,000
1967	297	494,000	74,000	20	1,472,000	195,000	2,161,000
1968	340	361,000	64,000	13	831,000	162,000	1,354,000
1969	185	111,000	59,000	14	851,000	155,000	1,117,000
1970	79	61,000	56,000	13	715,000	125,000	901,000
1971	134	123,000	77,000	13	968,000	213,000	1,304,000
1972	76	49,000	69,000	9	636,000	139,000	824,000
*1973	111	89,000	76,000	10	725,000	159,000	973,000
1974	58	32,000	44,000	8	347,000	5,000	384,000
1975	146	171,000	75,000	10	785,000	157,000	1,113,000
1976	391	717,000	119,000	12	1,431,000	63,000	2,211,000
*1977	269	143,000	51,000	10	499,000	33,000	675,000
1978	253	205,000	72,000	12	849,000	137,000	1,191,000
1979	236	180,000	90,000	11	958,000	63,000	1,201,000
1980	145	116,000	70,000	11	747,000	143,000	1,006,000
1981	91	128,000	30,000	6	187,000	49,000	364,000
1982	209	165,000	84,000	9	758,000	123,000	1,046,000
*1983	9	1,000	32,000	3	105,000	12,000	118,000
1984	34	37,000	23,000	15	341,000	15,000	393,000
1985	340	303,000	94,000	10	984,000	147,000	1,434,000
1986	51	18,000	46,000	5	260,000	33,000	311,000
1987	173	236,000	68,000	15	1,010,000	83,000	1,329,000
1988	178	161,000	84,000	11	1,016,000	168,000	1,345,000
1989	228	195,000	97,000	11	1,082,000	136,000	1,413,000
1990	151	75,000	55,000	11	579,000	61,000	715,000
*1991	129	130,000	57,000	11	643,000	80,000	853,000
1992		NO SEASON BECAUSE OF DOMOIC ACID AND PSP					
1993		NO SEASON BECAUSE OF PSP					
1994	107	78,000	59,000	15	885,000	0	963,000
1995	159	276,000	91,000	10	912,000	67,000	1,255,000

Concerned sport diggers have requested changes in regulations. These requests are listed in order of importance: 1. Require a license to harvest clams. 2. Every-other-day digging should be required. 3. Ban Oregon's razor clams from being used as bait. 4. Stop driving on the clam beds. 5. Ban commercial digging. 6. Lower sport bag limit. Users were encouraged to put their request in writing to aid staff in documenting user concerns. These concerns culminated in a request from petitioners to go to a every-other-day fishery. Meetings were held in Astoria and in Portland. The proposal was brought to a Commission hearing where it was denied and will be considered later in the sport regulations review.

BEACHES SOUTH OF TILLAMOOK HEAD

Digging occurred on many beaches along the coast, but effort was minimal and catches poor. The best catches came from Newport beaches. Surveys found no clams on beaches in the Cannon Beach area.

COMMERCIAL FISHERY

Clatsop beach harvesters landed 276,501 clams (58,830 pounds) in 1995. Harvest data are listed in Table 3. Areas 1 and 2 produced 74.2% of the pounds landed. Many of the spring catches came from boat bars not reached by the sport diggers. Commercial catch and effort by harvest area is listed in Table 4. Experienced commercial diggers continually move from one area to another, thus catch per unit of effort is not a good measure of depletion. Most of the catch (43.2%) was made up of two-year old clams. The age composition of commercially dug clams is listed in Table 5.

Table 4. COMMERCIAL CATCH/EFFORT AND POUNDS IN PERCENTAGE LANDED BY AREA FROM CLATSOP BEACH, 1995

	AREA 1	AREA 2	AREA 3	AREA 4	AREA 5	TOTAL
Pounds/Hour	8.9	9.8	8.1	7.9	5.6	8.3
Percent of Pounds Landed	43.5	30.7	8.9	3.6	13.3	100.0

Table 5. AGE COMPOSITION IN PERCENTAGE FOR COMMERCIALY DUG CLAMS, CLATSOP BEACH, 1990-1995

YEAR OF HARVEST	AGE IN YEARS					
	0	1	2	3	4	5+
1990	0.0	52.3	42.9	3.7	0.8	0.3
1991	4.5	18.5	60.4	13.8	2.2	0.6
1992	NO SEASON					
1993	NO SEASON					
1994	1.5	38.5	46.4	12.0	1.5	0.1
1995	0.0	20.7	43.2	22.9	10.4	2.8
10 YR AVG	6.2	58.8	29.5	4.7	0.6	0.2

A total of 257 commercial harvesters were issued ODFW shellfish harvest permits, but only 159 diggers sold clams. Many diggers sold clams for bait because the demand for bait was high, and a new \$75 ODA permit was required to sell calms for human consumption. The value of clams to the digger averages about \$2.00 per pound but ranged as high as \$3.70 per pound.

MISCELLANEOUS PROJECTS

PARALYTIC SHELLFISH CLOSURE

PSP occurred in mussels July 28. The beaches were closed from Columbia River to Yachats to the commercial and sport harvest of clams and mussels until August 11.