# SHELLFISH INVESTIGATION INFORMATION REPORT NO. 76-9

THE 1975 RAZOR CLAM FISHERY

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Razor clam catches from Clatsop beaches were sampled regularly from March through September and periodically the rest of the year. Diggers were interviewed for number and age composition of the clams harvested and the distribution and number of diggers. Data from beaches south of Tillamook Head were collected as time permitted. Data were compiled on clams returned from the 1973 tagging program.

#### SPORT FISHERY

During the 1975 season an estimated 785,000 clams were dug on 75,000 digger trips to Clatsop beaches. This represented a 70% increase in digger trips and a 126% increase in number of clams dug compared to the 1974 season (Figure 1). The two mile Seaside beach accounted for 57% of the digger trips and 68% of the clams dug. Table 1 lists the harvest, catch rates and number of diggers by statistical area.

Clam wastage became a problem in early May when the large 1974 year class entered the fishery. Estimated wastage was kept to a yearly average of 16.7% with the aid of news media and law enforcement. Age composition of recreationally dug clams varied little from trends of the previous five years (Table 2). The 1974 year class (age 1) dominated the fall and winter catches as usual from Seaside and Gearhart Beach.

# COMMERCIAL FISHERY

In 1975, 146 commercial diggers harvested 41,412 pounds (181,000 clams). The age composition of commercially dug clams in 1975 showed an increase over 1971-74 catches in three, four, and five year-old clams (Table 3). The 1974 year class which dominated the fall and winter catches is not fully represented in Table 3, as most of the catch occurred after the regular sampling season. Commercial harvest

trends closely parallel those of the recreational fishery (Figure 1).

Some wastage occurred during the fall and winter fishery, due to an increase in number of inexperienced diggers and the large number of small clams available. It is difficult to measure due to the areas in which most commercial digging is done (nearshore bars) which become inaccessible to our samplers too soon to adequately sample for wastage. In September, only 25% of the clam population on Seaside and Gearhart beaches was of legal commercial size; by December, 56% of the population was of legal size.

An attempt by one digger to dig subtidal razor clams was time consuming and economically unrewarding. Clams could be dug, but not enough to make the venture profitable.

## RAZOR CLAM PRODUCTION SOUTH OF TILLAMOOK HEAD

Data were obtained from 11 beaches south of Tillamook Head as time permitted. Table 4 lists the beaches and pertinent catch data. The most productive areas were Short Sands Beach, South Beach (Newport), and Bastendorff Beach (Coos Bay). The 1974 year class was found in substantial numbers along the entire coast.

# 1973 RAZOR CLAM TAGGING

Data for 382 tagged clams has been analyzed from the 1973 tagging study. Tag loss, growth and mortality rates are being determined which will be compared with Hirschhorn's work in 1952. The report will be written in 1976.

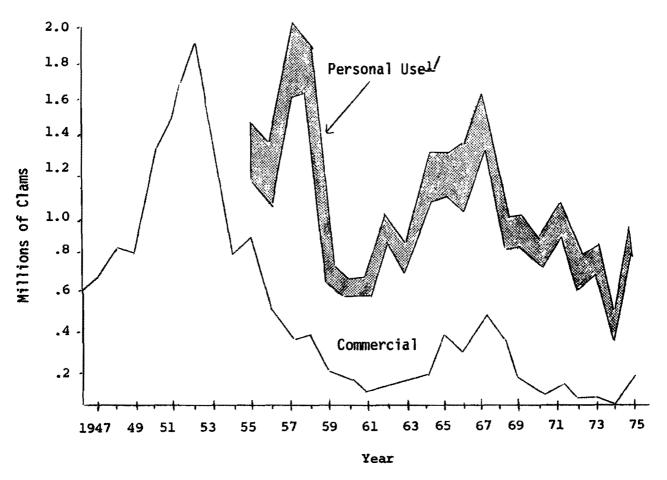


Figure 1. Annual Number of Clams Dug from 1946 to Present, Shaded Areas Indicate Estimated Number of Clams Wasted.

1/ No data prior to 1955.

Table 1. Personal Use Harvest of Razor Clams and Number of Diggers by Area from Clatsop Beaches, March to September, 1975.

Area Number	Miles of Beach	Number of Diggers	Clams/ Digger Trip	Number of Clams Dug	Number of Clams Wasted	Harvest Total
1	3.6	5,906	7.3	43,111	8,643	51,754
2	6.2	10,770	6.2	67,283	13,489	80,772
3	5.0	7,022	6.1	42,515	8,523	51,038
4	1.2	8,297	11.6	95,882	19,222	115,104
5	2.0	42,737	12.5	536,012	107,460	643,472
Total	18.0	74,732	10.5	784,803	157,337	942,140

<sup>1 -</sup> Columbia River to Fort Stevens Park Road

Table 2. Percentage Age Composition of Personal Use Razor Clams from Clatsop Beaches, 1970-1975.

Year of	Age								
Harvest	0	1	2	3	4	5			
1970	25.1	64.7	8.0	1.7	0.4	0.1			
1971	33.0	54.2	8.6	3.3	0.7	0.2			
1972	24.2	53.8	18.2	3.4	0.3	0.1			
1973	32.4	49.9	8.1	8.5	1.0	0.1			
1974	10.0	55.3	24.3	6.9	3.3	0.2			
1975	24.0	46.0	17.6	9.8	2.3	0.3			
10 Year									
Average	24.7	<u>56.3</u>	14.1	4.0	8.0	0.1			

<sup>2 -</sup> Fort Stevens Park Road to Sunset Beach Road

<sup>3 -</sup> Sunset Beach Road to Gearhart Beach Road

<sup>4 -</sup> Gearhart Beach Road to Necanicum River

<sup>5 -</sup> Necanicum River to Tillamook Head (Seaside)

Table 3. Percentage Age Composition of Commercially Dug Razor Clams from Clatsop Beaches, 1970-1975.

3 27.0 5.7 11.4	12.2 4.1 0.7	1.0 0.4 0.0
5.7 11.4	4.1 0.7	0.4
11.4	0.7	0.0
4.7.0		
15.8	1.3	0.2
13.0	10.2	0.2
20.6	11.9	1.6
12 7	Е Э	0.6
		20.6 11.9

Table 4. Razor Clam Catch Data from Beaches South of Tillamook Head, 1975.

Area	No. of	No. of	Clams/		Age Cor	npositio	on in Per	rcentage	?
Sampled	Diggers	Clams	Digger	0	1	2	3	4	5
Indian Beach	5	17	3.4	0.0	0.0	20.0	40.0	20.0	20.0
Arch Cape Beach	-	•	-	0.0	25.0	50.0	15.0	10.0	0.0
Cove Beach	2	1	0.5	0.0	0.0	0.0	100.0	0.0	0:0
Short Sands Beach	-	-	-	61.1	11.1	17.8	10.0	0.0	0.0
South Beach (Newport)	36	494	13.7	0.0	3.0	26.7	54.5	13.8	2.0
South Slough Spit (Coos Bay)	7	64	9.1	42.9	9.0	34.4	13.2	0.5	0.0
Bastendorff Beach (Coos Bay)	4	94	23.5	87.1	4.3	4.3	4.3	0.0	0.0
Whiskey Cr. Beach (Coos Bay)	3	0	0.0	-	-	-	-	-	-
Merchant Beach (Coos Bay)	2	0	0.0	upos	-	-	-	-	-
Bailey Beach (Gold Beach)	2	0	0.0	-	-	-	-	-	-
Meyers Cr. Beach (Gold Beach)	2	15	7.5	20.0	20.0	40.0	20.0	0.0	0.0