

SHELLFISH INVESTIGATION
INFORMATION REPORT

1980 Razor Clam Fishery

by

Terry Link

Oregon Department of Fish and Wildlife
Marine Region

March 10, 1981

The 1980 Razor Clam Fishery

Razor clams from Clatsop beach (Tillamook Head - 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 location and 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

A harvest of 890,000 clams including wastage was taken by the sport fishery from Clatsop beach. A calculated 747,000 clams were dug on 70,000 digger trips. This represents a 4.0% decrease in digger trips and 5.7% decrease in number of clams from the 10 year average. The two-mile Seaside beach accounted for 49.8% of the digger trips and 65.8% of the clams dug. Table 1 lists harvest, catch rates and number of diggers by statistical area.

Clam wastage was estimated at 16.1% and although rate was high losses were minimal due to reduced effort in July and September. Age composition of sport dug clams in Table 2 reflects the large 1979 year class that entered the fishery.

A sport digger survey was conducted to determine who was using the clam resource. A sample of 1416 digger trips found that 98.7% were Oregon residents, 7.0% were digging for their first time and 3.0% were digging in Oregon because of the Washington clam license.

Table 1.--Sport Harvest of Razor Clams and Number of Diggers by Area from Clatsop Beach, March to September, 1980.

Area	Miles of Beach	No. of Digger Trips	Clams Dug/ Digger Trip	No. of Clams Dug	No. of Clams Wasted	Harvest Total
1	3.6	8,949	5.9	52,973	10,165	63,138
2	6.2	15,107	6.1	92,016	17,657	109,673
3	5.0	6,323	5.7	36,086	6,925	43,011
4	1.2	5,004	14.8	74,278	14,254	88,532
5	2.0	35,067	14.0	491,474	94,311	585,785
Total	18.0	70,450	10.6*	746,827	143,312	890,139

Area 1 = Columbia River to Ft. Stevens Park Rd.
 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)

* weighted mean

Table 2.--Age Composition, in Percent, of Sport Dug Razor Clams from Clatsop Beach, 1975-1980.

Year of Harvest	0	1	2	3	4	5+
1975	24.0	46.0	17.6	9.8	2.3	0.3
1976	14.6	78.9	2.8	2.0	1.3	0.4
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
10 Year Average	23.0	57.5	13.4	4.3	1.4	0.4

Commercial Fishery

A harvest of 20,291 pounds (116,000 clams) were dug by 145 diggers. Statistical area 5 accounted for 76% of the total pounds landed. The age composition in Table 3 does not include data of the 10,061 pounds of clams landed in the fall fishery which were predominately first year clams.

The commercial fishery took 11.5% of the total clam harvest from Clatsop beach. A sample of 67 commercial diggers leaving the beach indicated that 20.3% of the poundage dug was not sold to a licensed wholesale buyer, amounting to a total of 29,663 clams.

Due to the number of inexperienced diggers participating in the fishery, wastage is now a problem and should be considered in the future. The lack of replacing or replacing of damaged sublegal clams is creating wastage as well as sport-commercial social problems.

Razor Clam Production South of Tillamook Head

Data were obtained from 14 beaches south of Tillamook Head as time permitted. Table 4 lists the beaches and pertinent catch data. Most beaches south of Tillamook have better than average digging with 1+ and 2+ age clams making up most of the catch. Extra work has been involved in making the public aware that good digging is present on some southern beaches.

Breakwater extension on South Slough, Coos Bay was examined - final placement missed clam bed and a small beach is developing westward of

extension. Disposition of spit northwest of extension is still questionable but at present is stable and diggable.

Harvest Summary

Digging was hindered by an early annual beach cycle and complicated by eruptions of Mount St. Helens which left flood debris and floating pumice and sediments on the beach. Often digging was hampered by heavy plankton blooms reducing visibility in water and layering beaches obliterating clam shows.

The large 1979 set dominate the summer and fall fishery on Seaside and Gearhart beach. The set was high on the beach in many places which provided good dry digging.

Table 3.--Age Composition in Percent of Commercially Dug Clams from Clatsop Beach, 1975-1980.

Year of Harvest	0	1	2	3	4	5
1975	0.4	50.8	14.7	20.6	11.9	1.6
1976	8.7	87.4	2.6	0.9	0.4	0.0
1977	1.6	8.7	60.0	12.0	10.6	7.1
1978	0.8	70.8	10.7	12.6	3.4	1.7
1979	0.0	61.9	26.1	7.1	4.0	0.9
1980	0.7	90.9	7.5	0.7	0.0	0.2
10 Year Average	1.8	50.8	28.4	12.1	5.7	1.2

Table 4.--Razor Clam Data from Beaches South of Tillamook Head, 1980.

Area Sampled	No. of Diggers	No. of Clams	Clams/ Digger	Age Composition in Percent					
				0	1	2	3	4	5+
Indian Beach*	0	-	-	4.1	16.3	34.7	44.9		
Crescent Beach**	0	-	-				100.0		
Chapman Point	8	0	-						
Silver Point	12	96	8.0		2.4	76.2	21.4		
Falcon Cove+	28	336	12.0			20.8	70.9	8.3	
Short Sands**	0	-	-	34.6	32.7	30.8	1.9		
Bay Ocean+	11	122	11.1						
North Beach (Newport)	-	-	-	8.3	54.5	21.5	9.1	3.3	3.3
South Beach (Newport)	14	232	16.6	1.8	17.6	9.6	24.6	41.6	4.8
Bastendorf (Coos Bay)+	17	0							
South Slough Spit (Coos Bay)	10	166	16.6	29.9	38.2	11.3	9.3	10.3	1.0
Whisky Run *	20	196	9.8	23.5	33.8	32.4	4.4	5.9	
Baily Beach *	1	0							
Myer Creek (Gold Beach)	49	778	15.9	18.2	29.6	15.1	16.5	11.8	8.8

* Biologist sample only

+ One day sample