

REVIEW OF COMMERCIAL BAY CLAM DIVE FISHERY AND REGULATIONS

Dive Fishery

Introduction

Commercial harvest of bay clams (cockle, butter, gaper, littleneck, and softshell clams) has occurred in Oregon estuaries for many years (Table 1). Prior to 1985, a permit was not required. Beginning in 1985, a shellfish harvest permit was required, but there was no limit to the number of permits that could be issued. Except for an experimental fishery with suction dredge gear, most harvest has been from intertidal areas until the mid-1990s. In the mid-1990s harvest from subtidal areas with dive gear began. As a result of the increased dive activity, in 1996, a developmental fishery permit was required to harvest bay clams. The number of permits using dive gear was restricted; however, the number of intertidal harvest permits was left unrestricted. Since 1996, the percent of the total annual commercial bay clam harvest taken under the dive permits has averaged 98.5%. This report is a summary of the harvest activity under the dive permits since 1996 and commercial clam harvest regulations.

Permits

Developmental fishery permits for dive harvest of bay clams were required beginning in 1996. Initially, 20 individual permits were authorized (Table 2). In 1997, the number of permits was reduced to 10, but permits could be issued to a vessel where up to two divers could work off the same permit. Initially, all permits were issued for the entire coast. In 1999, five additional permits were added, but harvest under these new permits was restricted to south coast areas (south of Heceta Head).

All available permits have been issued each year (Table 2). Most permit holders renew their permit for the next year by meeting the minimum annual renewal requirements: 5 landings of at least 100 pounds or an annual total of at least 2,500 pounds. Because most of the permit holders are meeting the renewal requirements, there are few permits available for new applicants. Of the ten coast-wide permit holders in 2001, six have had a permit for the last six years (Table 3). The remaining permits are usually issued through a lottery as numerous applications are received for the few available permits (Table 2).

Harvest

Clam harvest using dive gear has accounted for an average of 98.5% of the total annual commercial bay clam harvest since 1996 (Table 4). The majority of the harvest has come from Tillamook Bay (port of Garibaldi).

Cockle clams have made up the majority of the harvest, with butter clams comprising a significant proportion of the harvest in some years (Table 5).

Effort

Even though all permits are issued and the majority are renewed each year, most of the landings are made by a few individuals. Two to three permits have accounted for more than 75% of the harvest in each of the last five years (Table 6). The majority of permit holders make just enough landings to renew their permit. In addition, the number of individuals actually making landing can be less

than the number of permits with landings. Because some permits are issued to a vessel, a person with an individual permit can also work off a permitted vessel, and thereby qualify the individual permit as well as the vessel permit.

Table 1. Oregon commercial clam harvest and effort, 1970-2000.

Year	Pounds harvested	Number of diggers	Number of landings	Average pounds per landing	Number of permits
1970	25,884	40	258	100.3	0
1971	28,526	50	230	124	0
1972	61,523	37	354	174.8	0
1973	17,156	19	187	91.7	0
1974	16,315	23	182	39.6	0
1975	25,908	19	116	227.3	0
1976	88,054	7	97	946.8	0
1977	85,733	29	155	304	0
1978	216,926	15	218	943.2	0
1979	94,912	19	128	741.5	0
1980	80,467	36	176	442.1	0
1981	81,138	30	336	222.5	0
1982	134,105	46	538	245.3	0
1983	136,185	41	811	168	0
1984	120,574	30	704	171.3	0
1985	99,254	44	614	161.7	65
1986	82,829	36	664	124.7	65
1987	46,283	34	385	120.2	121
1988	44,696	28	258	173.2	136
1989	60,482	24	221	273.7	111
1990	72,756	38	384	189.5	92
1991	87,842	40	473	185.7	126
1992	62,044	29	410	151.3	115
1993	127,730	38	733	174.3	111
1994	180,934	32	422	428.8	113
1995	126,967	24	393	323.1	132
1996	66,733	21	450	148.3	20*
1997	75,681	10	288	262.8	11*
1998	55,246	11	233	237.1	10*
1999	87,531	20	291	300.8	15*
2000	109,842	18	315	348.7	15*

*-dive gear only

Table 2. Numbers of permits, renewals, and applications for bay clam dive permits, 1996-2001.

	1996	1997	1998	1999		2000		2001	
	cw	cw	cw	cw	sc	cw	sc	cw	sc
permits issued	20	11	10	10	5	10	5	10	5
permits renewed from previous year	-	6	7	7	1	9	3	8	3
permits issued through lottery	-	5	3	3	-	1	2	2	-
applications for lottery	-	15	12	7	-	7	6	7	-

cw-coast wide; sc-south coast

Table 3. Number of years the 2001 coast-wide permit holders have held a clam dive permit.

	years holding a permit					
	1	2	3	4	5	6
number of permit holders	2	1	1			6

Table 4. Percent landings, by port, for the commercial clam dive fishery, 1996-2000.

Port	1996	1997	1998	1999	2000
Charleston			1.2	7.8	2.0
Garibaldi	94.6	93.8	91.5	90.3	96.7
Nehalem	1.8	6.2	7.3	1.9	1.0
Netarts	1.1				
Newport	2.1				
Winchester					0.3
Total pounds	66,492	74,441	54,213	85,089	107,626
% harvest using dive gear	99.6	99.2	98.1	97.2	97.9

Table 5. Percent landings, by species, for the commercial clam dive fishery, 1996-2000.

Species	1996	1997	1998	1999	2000
softshell	0	0	0	0	0
butter	2.1	17	53.4	44.8	37.4
littleneck	6.7	12.6	10.9	3.7	1.0
gaper	5.2	5.7	4.7	8	3.6
cockle	86.0	64.7	31	43.5	58.0

Table 6. Frequency of landings and % harvest, per diver, 1996-2000.

No. of landings	1996		1997		1998		1999		2000	
	divers	% harvest								
7 or less	6	14.4	4	12.6	5	15.8	7	23.6	9	
8-15	3		0		1		3		1	
15-40	2	85.6	2	87.4	2	84.2	1	76.4	0	
>100	1		1		1		1		1	(90%)

Regulations

The following table summarizes regulations for commercial bay clam harvesting with comments on the rationale and history of the regulation.

Regulation	Background / Comments
<p>Permit Required</p> <ul style="list-style-type: none"> • Developmental Fisheries permits required for estuarine harvest of bay clams (\$75 for dive harvest, \$25 for intertidal harvest). • Dive permit may be issued to individual or vessel. If issued to a vessel, no more than two divers may harvest from the vessels at any one time. • Renewal requirements of dive permits are 5 landings of at least 100 pounds each or an annual total of at least 2500 pounds. 	<p>Developmental Fisheries permits required beginning in 1996 because of increased harvest from subtidal areas using dive gear.</p>
<p>Seasons</p> <p>Ocean and estuaries are open year round except:</p> <ul style="list-style-type: none"> • No gaper clam harvest from January 1 through June 30 	<p>Gaper season established in late 1940s to protect spawning season and provide greatest yield per clam.</p>
<p>Area Restrictions</p> <p>The following areas are closed for commercial dive harvest in Tillamook Bay.</p> <ul style="list-style-type: none"> • The "Ghost Hole" • The area adjacent to Garibaldi Flat • An area around and including the recreational clam harvest area near Kincheloe Point. 	<p>Restrictions established in 1996 with increase in subtidal dive harvest to protect recreational harvest areas.</p>
<p>The following areas are closed for commercial dive harvest of cockle clams in Netarts Bay.</p> <ul style="list-style-type: none"> • The area to the north of OSU's shellfish reserve. • Areas of heavy recreational harvest. 	<p>Restrictions established in 1996 with increase in subtidal dive harvest to protect recreational harvest areas.</p>
<p>Only cockles may be taken from Netarts Bay</p>	<p>Commercial restrictions established in late 1940s because of concerns of overharvest and to protect recreational areas.</p>

<p>Following areas are closed for commercial clam harvest:</p> <ul style="list-style-type: none"> • Little Nestucca Bay; • Big Nestucca Bay; • Salmon River and Bay; • Siletz River and Bay; • all state parks south of Tillamook Head • posted shellfish preserves in Netarts and Yaquina bays • South Slough National Estuarine Sanctuary, Coos Bay 	<ul style="list-style-type: none"> • Small estuaries and state parks closed in late 1940s to all clams except cockles because of concerns of overharvest. Areas closed to all commercial harvest in 1985. • Shellfish preserves created to provide research areas for OSU. • SSNES created in 1974 for research and educational purposes.
<p>Gear Only hand or hand powered tools are authorized.</p>	<p>Mechanical equipment restricted in 1960. Experimental subtidal fishery in 1970s-80s discontinued because of lack of recruitment of gapers and over-efficiency of gear.</p>
<p>Size In Tillamook and Netarts Bays, the size limit for dive harvest of cockle clams is 2¹/₄ inches.</p>	<p>Restrictions established in 1996 with increase in subtidal dive harvest to protect subtidal stocks.</p>
<p>Annual Quotas</p> <ul style="list-style-type: none"> • In Tillamook Bay, there is an annual quota of 90,000 pounds for dive harvest of cockle clams. • In Netarts Bay, there is an annual quota of 8,000 pounds for dive harvest of cockle clams 	<p>Restrictions established in 1996 with increase in subtidal dive harvest to protect subtidal stocks.</p>
<p>Time of sale Clams must be sold within 48 hours of harvest.</p>	<p>Restriction established in 1986 to prevent abuse of personal retention under commercial license.</p>
<p>Clams from Health Closure Areas</p> <ul style="list-style-type: none"> • Clams taken from an area designated as restricted or closed by the Oregon Dept. of Agriculture may be sold as bait provided they are dyed with a Department approved dye. • Dying must occur before leaving the restricted area or before the time of docking. • Clams from a restricted area may not be aboard a vessel with clams from an unrestricted area. 	<p>Dye requirement established in 1986 to allow harvest for non-consumption uses from restricted areas.</p>

RECOMMENDATIONS

Any suggestions?

Prohibit an individual from qualifying more than one permit a year?

Why do we protect the spawning season of gapers, but not other species? Would a smaller closed season be acceptable (ie Jan through April/May)?