

Jean McCrae
Newport



Summary of Agenda Item

Title: Developmental Fisheries Program

Date of Meeting: October 25, 1995 Exhibit #

Principal Staff Person: Jim Golden/Jean McCrae Phone: 503-867-4741

Read and Approved by:

Division Chief: REDACTED FOR PRIVACY Date: 9/22/95

Attorney General: REDACTED FOR PRIVACY Date: 10/6/95

Director: REDACTED FOR PRIVACY Date: 9/22/95

Description of Item:

- Reviews the Developmental Fishery Program for 1995 and proposes rules which amend the list of species considered as developmental fisheries species.
- Reviews petition to adopt regulation changes in commercial clam harvest regulations.

Public Involvement Process:

Meetings of the Developmental Fisheries Board.

Supplemental Information Attached:

Yes X No

Hearing Notice:

Yes X No

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Relationship to:

Oregon revised statute - ORS # 506.450-506.465

Oregon administrative rule - OAR # 635-06-850

Options available to Commission:

Developmental Fisheries

1. Amend draft rules as proposed (preferred).
2. Modify rules to add or delete species from lists.
3. Take no action (status quo).

Petition to Close Tillamook Bay to Commercial Clamming

1. No action (status quo) - preferred.
2. Amend OAR 635-005-0020 to prohibit taking of clams.

Option recommended: Option 1 for both categories

Draft Motion:

I move to amend OAR 635-006-0850 as proposed by staff to include bay clam species on the list of developmental species.

NOTICE OF PROPOSED RULEMAKING HEARING

(Statement of Need and Fiscal Impact must accompany this form.)

Oregon Department of Fish and Wildlife

(AGENCY NAME)

Fish Division

(DIVISION)

OAR CHAPTER 635

DATE	TIME	LOCATION	DATE	TIME	LOCATION
10-25-95	8:00 a.m.	Red Lion Inn 1313 N. Bayshore Drive Coos Bay, OR 97420			

HEARINGS OFFICER(s):

STATUTORY AUTHORITY: ORS 506.109 and 506.119; or

OTHER AUTHORITY:

STATUTES IMPLEMENTED: ORS 506.129, 506.450-506.465

ADOPT: _____

AMEND: Chapter 635, Divisions 005 and 006

REPEAL: _____

RENUMBR TO: _____

Prior approval _____

From Secretary of _____

State REQUIRED) _____

AMEND & RENUMBR TO: _____

Prior approval _____

From Secretary of _____

State REQUIRED) _____

☒ This hearing notice is the initial notice given for this rulemaking action.

☐ This hearing was requested by interested persons after a previous rulemaking notice.

☒ Auxiliary aids for persons with disabilities are available upon advance request.

SUMMARY: Consider amendments to commercial fishery regulations relating to the Developmental Fisheries Program, including additions to the list of developmental fisheries species.

LAST DATE FOR COMMENT: 10-25-95

RULES COORDINATOR: Jan Ragni (Agency)

ADDRESS: Oregon Department of Fish and Wildlife

P. O. Box 59

Portland, OR 97207

TELEPHONE: (503) 229-5400, Ext. 305

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments will also be considered if received by the date indicated above.

REDACTED FOR PRIVACY

Signature _____

Sept 14, 1995
Date

STATEMENT OF NEED AND FISCAL IMPACT

Before the Fish and Wildlife Commission

Chapter No.

635

In the matter of amendment of)	Statutory Authority, Statement of Need,
OAR Chapter 635, Division 005 and 006,)	
Commercial Shellfish Fishery and)	Principal Documents Relied Upon and
Developmental Fisheries Program)	
)	Statement of Fiscal Impact
)	

1. Citation of statutory authority: ORS 506.109 and 506.119

2. Statutes being implemented: ORS 506.129, 506.450-506.465

3. Need for the rules:

The rules are needed to adopt an annual list of developmental fisheries species and to establish limited entry systems for developmental fisheries.

4. Documents relied upon:

Staff report prepared for the October 25, 1995, hearing.

The above document is available for public inspection in the Department of Fish and Wildlife, Fish Division, Third Floor, 2501 SW 1st Avenue, Portland, Oregon, between 8:00 a.m. and 4:30 p.m., on normal working days, Monday through Friday.

5. Fiscal and economic impact:

See attached.

6. Advisory Committee Used: Limited Entry Advisory Committee and the Developmental Fisheries Board.

If not, why:

Sept 14, 1995
Date

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Signature

Economic Impact Statement for the October 25, 1995 Hearing in the Matter of the
Amendment of Rules Relating to the Developmental Fisheries Program

Fiscal and economic impact: The proposed rules will affect state agencies, units of local government and the public, respectively, as discussed below:

- A. The only state agency which should be affected by adoption of these rules is the Oregon Department of Fish and Wildlife. No significant changes from the current legislatively approved levels of the department's operations or expenditures are expected as a result of the adoption of these rules.
- B. No units of local government are expected to be affected by these rules. No significant changes from the current levels of any local agencies' operations or expenditures are expected as a result of the adoption of these rules.
- C. The public could be affected by the adoption of these rules: Among the requirements of the existing statute and rules are requirements to adopt an annual list of developmental fisheries species, and to establish limited entry harvest systems for the associated developmental fisheries.

As a result of a petition from the public received by ODFW staff, amendments to the existing rules will be considered that add several species of bay clams to the list of developmental species. If these species are added to the list, a limited entry system to restrict access for harvest of bay clams would be adopted. ODFW is considering the implementation of such a system for subtidal harvesters only, because most commercially harvested bay clams are harvested subtidally. Those presently engaged in the subtidal harvest of bay clams are believed to support this potential action.

Overall, the rules are expected to produce positive economic effects for the public and small business both in the short run and in the long run. Rules relating to limited entry can be viewed as imposing additional costs (in the form of permit fees) on harvesters in the short run, and potentially excluding some harvesters who might not apply for limited entry permits soon enough. However, in the long run, implementation of the rules are expected to yield positive economic effects by controlling the development of fisheries, so the fisheries are sustainable in the long run. This is intended to help prevent the typical cycle in fisheries of boom (as a virgin fish stock is fished down to maximum sustainable yield levels) and bust (when the stock becomes incapable of sustaining yields at the initial exploitation level).

The rules are believed to be fully compatible with legislative direction on the goals of fish and wildlife management in Oregon.

Most businesses affected by these rules are believed to be "small business."

Staff Report Developmental Fisheries Program

Summary of Staff Report

ODFW staff is providing a review of the Developmental Fishery Program for 1995 and asking the Commission to adopt regulation changes in the list of species considered as developmental fishery species. ODFW staff is also providing a review of a petition to the Commission to adopt regulation changes in commercial clam harvest regulations.

Key elements and conclusions from the staff report are:

- Two hundred and three permits for the harvest of developmental fishery species have been issued in 1995, to date. Most landings of developmental fishery species have been as by-catch in other fisheries.
- ODFW staff conducted a research cruise to collect information on developmental fisheries species. Dock sampling was conducted on developmental fisheries landings.
- The Developmental Fishery Board considered a petition to include bay clam species on the list of developmental species. The ODFW staff recommends the addition of selected bay clams as developmental fisheries and outlines a harvest program for them.
- The Commission received a petition to prohibit the commercial harvest of bay clams with dive gear in Tillamook Bay. ODFW staff does not recommend the prohibition.

Outline of Staff Report

I.	Introduction	Page 3
II.	Annual Report of Developmental Fisheries Activities	Page 3
	<ul style="list-style-type: none">• Summarizes permits and landing activities of developmental fishery species.• Summarizes research and management activities of developmental fishery program.• Reviews procedures for adding species to Developmental Fishery list.	
III.	Background of Commercial Bay Clam Fishery	Page 6
	<ul style="list-style-type: none">• Summaries historical activities.	
IV.	Staff Analysis of Issues and Options - Recommendations	Page 9
	<ul style="list-style-type: none">• Summarizes conclusion of the evaluation of effects.	

• *Issue 1. Addition of bay clam species to developmental fishery species list.*

Option A: *(preferred)* Adopt rules adding bay clam species (butter, cockles, gapers, native littlenecks, and softshells) to the list of species considered developmental fisheries with a harvest program.

Option B: No action.

• *Issue 2. Petition to prohibit the commercial harvest of clams in Tillamook Bay using dive gear.*

Option A: Adopts rules to prohibit the commercial harvest of clam from Tillamook Bay using dive gear.

Option B: *(preferred)* No action.

Oregon Administrative Rules	Page 11
Appendix A - Tables of commercial clam fishery data	Page 13
Appendix B - Synopsis of information on bay clam species	Page 19
Appendix C - Clam Petition	Page 24

I. Introduction

The public hearing on October 25 is the annual review of the Developmental Fisheries Program. At the hearing, ODFW staff will: 1) describe the activities of the Developmental Fisheries Program in 1995; 2) recommend changes to the list and harvest programs of developmental fisheries species; and 3) present a petition requesting to prohibit the commercial harvest of bay clams in Tillamook Bay using dive gear.

II. Annual Report of Developmental Fisheries Activities

Permits

ODFW staff has issued over 200 permits for the harvest of developmental fisheries species through August, 1995 (Table 1). The permits for two fisheries (gill net swordfish and spot prawns) were issued through a lottery system as there were more applicants than available permits by the filing deadline. All available permits were issued for six fisheries or areas.

Landings

Landings of developmental fisheries species through August, 1995 are summarized in Table 2. The landings of herring, smelt, and cockle clams are the result of the estuarine fisheries; none have been harvested from the ocean. Most all the landings of octopus have been by-catch of the crab fishery and most of the box crab have been by-catch of the trawl fishery. The only significant landings directed at a new developmental species has been for tanner crab; three boats have landed over 109,000 pounds through August. The landing fees for species in all categories have generated approximately \$11,800 into the developmental fisheries fund.

Research

Dock sampling has been conducted on tanner crab landings, establishing a data base for that fishery. Tanner crab have had an average size of 132 mm (5.25 in) and an average weight of 772 gm (1.7 lb). The landings have been virtually all males and there has been essentially no by-catch. An occasional king crab has also been landed.

The M/V Forerunner, owned by Clatsop Community College, was chartered for a three day research cruise to collect information on developmental fishery species. Pot and trawl gear were utilized to sample cucumbers for species identification, spot prawns to establish a conversion factor between carapace and tail segments, fragile urchins to gather size information, and box crab to gather size and sex ratio information. We also attempted to sample octopus and snails, but were unsuccessful.

Management

Staff has been working with the National Marine Fisheries Service to assist in their sampling program on the swordfish fishery which began in mid-August. In exchange, we will have access to data they collect from vessels harvesting off Oregon.

The Developmental Fishery Board received a petition requesting to include bay clam species on the developmental fisheries list. Under OAR's for the Developmental Fisheries Program, the Fish and Wildlife Commission annually reviews the program and adopts a list of species considered developmental for the next year.

Table 1. 1995 Developmental Fishery Permits (as of 8/31/95).

	Permits Allowed	Permits Issued	Applications for Lottery
Pacific hagfish	25	14	
blue shark	10	6	
swordfish	10 other 20 longline	10+* 9	54
northern anchovy & Pacific herring	15	7	
Pacific sardine & Pacific saury	15		
Pacific sandfish	10		
smelt	20	1	
Pacific pomfret	10	2	
slender sole	10	1/93	
box crab	25	18	
Oregon hair crab & scarlet king crab & grooved tanner crab	10	10*	
spot shrimp & coonstriped shrimp	6 (3N/3S) trawl 10 (5N/5S) other	3* / 3* 5* / 5*	7(N) 7/9
sidestripe shrimp			
cockle clams	5	5*	
giant octopus	10	10*	
California market squid	30 (15N/15S) trawl	7 / 15*	
other squid spp.	30 (15N/15S) other	8 / 2	
fragile urchin	6 trawl 6 other	1	
sea cucumber	6 (3N/3S) trawl 10 (5N/5S) diver 10 (5N/5S) other	3* / 3* 4 / 5*	
marine snails	10	3	

□

sub total 159

+ plus 44 permits for 5 single deliveries
to unsuccessful applicants total 203

□* no permits available

□ N/S -- permits issued geographically by home port,
split at Heceta Head, 50% N, 50% S

Table 2. Landings of developmental fisheries species, by category, through August, 1995

Category A	Pounds	Category B	Pounds	Category C	Pounds
Pacific hagfish	1,026	salmon shark		spiny dogfish	106,328
blue shark	821	black hagfish		soupfin shark	1,931
swordfish		Eelpouts		skate	146,199
northern anchovy		skilfish		American shad	347,111
Pacific herring	137,623	carp	7,488	Pacific cod	136,992
Pacific sardine		yellow perch		Pacific flatnose	
Pacific saury		brown bullhead		Pacific grenadier	768,784
Pacific sandfish		northern squawfish		cabezon	11,380
smelt	6,883			sculpins	101
Pacific pomfret		euphausiids (krill)		kelp greenling	
slender sole		brine shrimp	42,250	jack mackerel	
		Pacific sand crab		Pacific mackerel	648,830
box crab	818	freshwater mussels		greenstriped rockfish	
Oregon hair crab				redstripe rockfish	
scarlet king crab				shortbelly rockfish	
grooved tanner crab	109,731			sharpchin rockfish	
spot shrimp &	4,784			splitnose rockfish	
coonstriped shrimp	16			Pacific sanddab	1,307,097
sidestripe shrimp	150			butter sole	56
cockle clams	84,031			English sole	483,676
giant octopus	4,975			rex sole	328,064
California market squid	211,404			rock sole	1,486
other squid spp.				sand sole	148,511
fragile urchin				lemon sole	
sea cucumber				spotted ratfish	94
marine snails	23			wolf-eel	3,172
				walleye pollock	91
				red rock crab	2,346
				purple sea urchins	7,513
				crayfish	44,925

Listing Procedure

To list a food fish species as a developmental fishery species, the Commission determines if the species is underutilized. An underutilized species is defined as a species that is not presently harvested in significant quantities due to poor markets or inadequate gear development or may be caught but not utilized due to poor markets.

If the Commission determines the species is underutilized, it shall:

- 1) Consider existing catch history, biological data, market information, any known or potential conflicts existing rules, or impacts on other species.
- 2) Place the species into one of three categories:
 - A - potential to be economically viable
 - B - unknown potential to be economically viable
 - C - under another state or federal management plan with permit or gear limitations

For species placed in category A, the Commission shall specify the number, qualifications, and conditions of use and renewal of permits. The Commission shall consider:

- 1) The level of available biological information
 - a) When there is a lack of information to meet Statewide Planning Goal 19, the numbers of permits and conditions of use are to be conservative.
 - b) As the level of information increases, numbers of permits and condition of use may be more liberal.
- 2) The availability of resources to conduct research and monitoring.
- 3) A diversity of small and large boat interests and fishing methods.
- 4) A need to prevent conflicts, waste or damage to the environment
- 5) The number of permits needed for market development.

III. Background of Commercial Bay Clam Fishery

Landings and Effort

Bay clam species harvested commercially include cockles, butters, gapers, native littlenecks, and softshells. In the past, gaper clams made up a large portion of the harvest (Figure 1). More recently, cockles have accounted for the largest share.

ODFW has kept records of the commercial harvest of bay clams since the early forties (Appendix Table 1). Annual landings in the last 10 years have averaged 86.5 thousand pounds (Table 3). The number of permits issued each year and the number of harvesters recording landings has remained fairly consistent over the last ten years (Table 3). Although the number of harvesters has remained fairly constant over the past few years, there has been a big turnover in the number of individuals. In the last five years, only 15% of the individuals have made landings in three or more years (Table 4).

Tillamook Bay has consistently been one of the major areas of harvest (Appendix Table 2). Annual landings in the last ten years have averaged 47.9 thousand pounds and accounted for an average of 53.3% of bay clam landings from all estuaries (Figure 2).

Both intertidal hand harvest and subtidal dive harvest are recorded on fish tickets and logs as hand harvest. We do not have firm data as to exactly what portion of the harvest is done subtidally with dive gear, however, our estimates from talking to harvesters is over 80% of the harvest statewide and approximately 95% of the harvest in Tillamook Bay is done with dive gear. Also individual landings are generally larger with dive gear and divers are not restricted to low tides for harvesting.

We also do not have firm data as to what portion of the harvest is utilized as bait or for human consumption. Again, estimates from talking to harvesters is over 80% of the harvest state wide and 90-95% of the harvest in Tillamook Bay is used for bait.

Table 3. Oregon Commercial clam harvest and effort, 1985-1994.

□ Year	Harvest (lb)	No. Diggers	No. Landings	Ave. lb/ Landing	Permits Issued
1985	99,254	44	614	162	65
1976	82,829	36	664	125	65
1987	46,283	34	385	120	121
1988	44,696	28	258	173	136
1989	60,482	24	221	274	111
1990	72,756	38	384	190	92
1991	87,842	38	473	156	126
1992	62,044	28	410	151	115
1993	127,730	38	733	174	111
1994	180,934	34	422	429	113

Table 4 Commercial clam harvesters with no record of landings, years of clam harvest, and percent return from previous year, 1990-1994.

Year	1994	1993	1992	1991	1990	Total
Total harvesters	34	38	28	38	38	111
1 year of harvest	15	17	5	18	17	72
2 years of harvest						23
3 years of harvest						10
4 years of harvest						1
5 years of harvest						5
Percent return from previous year	47%	32%	48%	40%		

Management

In 1993, the commercial harvest of cockle clams from Tillamook Bay increased from a 10 year average of approximately 40,000 lb/yr to over 70,000 lb and increased again in 1994 to over 140,000 lb. This increase raised concerns from the public about possible over harvest. As an interim measure, in 1994, staff restricted the area of harvest of cockle clams used for bait from Tillamook Bay. The purpose of the restriction was to slow the rate of harvest until public meetings could be held and was done through the permit system. In January and February 1995, two public meeting were held in Garibaldi. A consensus was reached between commercial harvesters and public for the following restrictions to the commercial fishery.

- 1) A quota of 90,000 lb/yr of commercial harvest of cockles (90,000 lb is less than 10% of the biomass estimated in 1985 surveys).
- 2) A minimum harvest size for cockle clams of 2.25 in.
- 3) A conservation zone where no commercial harvest is allowed (in the "ghost hole" from Hobsonville Pt. to Larsen Pt.)
- 4) A buffer zone of 100 ft around the recreational harvest areas of Garibaldi Flat and Kincheloe Pt. where no commercial harvest is allowed.

These restriction would be effective until surveys could be conducted from which biomass estimates could be calculated.

Because of the restrictions in Tillamook Bay, some shift in harvest to Netarts Bay occurred which also raised public concern. A public meeting was held in Netarts and a consensus of similar restrictions was reached for the commercial harvest of cockles in Netarts Bay. As for Tillamook Bay, these restriction (done though the permit system) would be effective until surveys could be conducted from which biomass estimates could be calculated.

- 1) An annual quota of 8,000 (maximum historical harvest)
- 2) A minimum harvest size for cockle clams of 2.25 in.
- 3) A conservation zone where no commercial harvest is allowed (adjacent to the OSU shellfish reserve).
- 4) Commercial harvesters will avoid areas of heavy recreational harvest.

IV. Staff Analysis of Issues and Options - Recommendations

The following discusses staff recommendations. The full text of proposed rule changes is attached beginning on Page 11.

• *Issue 1. Addition of bay clam species to developmental fishery species list.*

Option A (Preferred): Staff recommends the Commission adopt rules adding bay clam species (butter, cockles, gapers, native littlenecks, and softshells) to the list of species considered developmental fisheries with the harvest program described below.

Option B: No action

There is sufficient information to meet the requirements of statewide goal 19 for all species of bay clams. Appendix B contains the life history summaries and effects evaluations for each species of bay clams proposed for the developmental fisheries list. Basic life history information is fairly well known. Distribution, abundance, and biomass data was well documented for bay clams in Oregon estuaries in the mid-seventies. The Tillamook National Estuarine Program has granted \$120,000 to ODFW for a one year research project to update the clam, eelgrass, and shrimp abundance information in Tillamook Bay. Updated information is needed from other estuaries.

Harvest Program

If bay clams are included on the developmental fisheries list, a harvest program will need to be established outlining the numbers and conditions of use of permits.

A. One permit to cover all estuaries, all species.

Most harvesters will target and land only one species of bay clams (Table 5); however, many will harvest more than one species. Most harvesters will work in only one estuary (Table 5); however, many will harvest in more than one estuary. Even though harvesters will move between estuaries, at least in the last five years, no one moved between the north coast and the south coast. Issuing

permits for individual species or individual estuaries would create much repetitive paper work for staff and harvesters. One permits should be issued to cover all estuaries and all bay clams species.

Table 5. Percent of harvesters landing multiple species, in multiple estuaries, and by area, 1990-1994.

Year	1994	1993	1992	1991	1990
Total harvesters	34	38	28	38	38
Percent landing single species	71	55	64	82	66
Percent landing multiple species	29	45	36	18	34
Percent landing in single estuary	82	71	79	74	92
Percent landing in multiple estuaries	18	29	21	26	8
Percent landing on north coast	50	61	61	45	53
Percent landing on south coast	50	39	39	55	47

B. 15 permits for harvest with SCUBA gear.

Staff recommends issuing 15 permits to harvest bay clams subtidally using SCUBA gear and no permits necessary to harvest intertidally with hand tools. Because a larger portion of adult populations are found subtidally, and a large proportion of the landings is with dive gear, our concerns regarding overharvest are mainly in the subtidal areas. We believe, as long as the subtidal populations are adequate, they will maintain the intertidal areas. Fifteen permits will allow for all the major harvesters and allow for some turnover which is normal in this fishery.

C. Qualification and renewal requirements.

Staff recommends an annual renewal requirement of 5 landings of at least 50 lb. Again, these landings will allow for all the major harvesters and a certain amount of turnover.

Renewal requirements have also been used to determine initial qualification for permits; a preference given to those who have meet the renewal requirements in at least one year in the past. Using the last five years, Table 6 shows how many individuals would be qualified for a permit given different options. Because we have no documentation regarding gear type, both intertidal harvest and subtidal harvest is included in table 6. In talking with harvesters, 8 - 10 individuals annually harvest the larger landings using SCUBA gear.

Table 6. Number of individual with landings of various amounts in 1990-1994.

Number and amount of landings	Individuals	Qualifying Individuals
1 landing (total less than 100 lb)	26	111
2-4 landings totaling at least 100 lb	35	85
5 landings	3	50
5 landings, each at least 25 lb	7	47
5 landings, each at least 50 lb	12	40
5 landings, each at least 100 lb	9	28
5 landings, each at least 200 lb	9	19
5 landings, each at least 500 lb	10	10

D. Other requirements.

The annual quota, minimum size limit, and conservation zones (reached by consensus through public meetings) should continue for Tillamook and Netarts until biomass studies are completed.

- *Issue 2. Petition to prohibit the commercial harvest of clams in Tillamook Bay using dive gear.*

Option A: Adopt rules to prohibit the commercial harvest of bay clams in Tillamook Bay using dive gear.

Option B (Preferred): Staff recommends the Commission take no action to prohibit the commercial harvest of bay clams in Tillamook Bay using dive gear.

Concerns of an increased harvest of cockle clams from Tillamook Bay surfaced in 1994. Initially, ODFW restricted the area of harvest of cockle clams used for bait from Tillamook Bay until public meetings could be held. The restrictions were done through the present permit system. Staff met with commercial clam divers in January, 1995 to develop a plan and options prior to a public meeting. The commercial harvesters agree to an annual quota, minimum size, and no-harvest areas (see management section above for details). A second meeting was held in January, 1995 with commercial divers, Garibaldi city officials and port commissioners, State Police, a member of the Fish and Wildlife Commission, and other concerned citizens. All agreed on the proposed plan. The plan was presented at a public meeting in February which was attended by approximately 70 people. A consensus of agreement was reached and the plan went into effect February 14, 1995. The plan was to stay in effect until a bay clam survey could be completed by ODFW. These restrictions are sufficient to slow commercial harvest until biomass studies are completed.

Number of Individuals with annual landings of various amounts, 1990-1994.

Annual landings of at least	Qualifying Individuals
1 lb	111
100 lb	85
500 lb	50
1,000 lb	33
2,500 lb	22
5,000 lb	14
10,000 lb	12

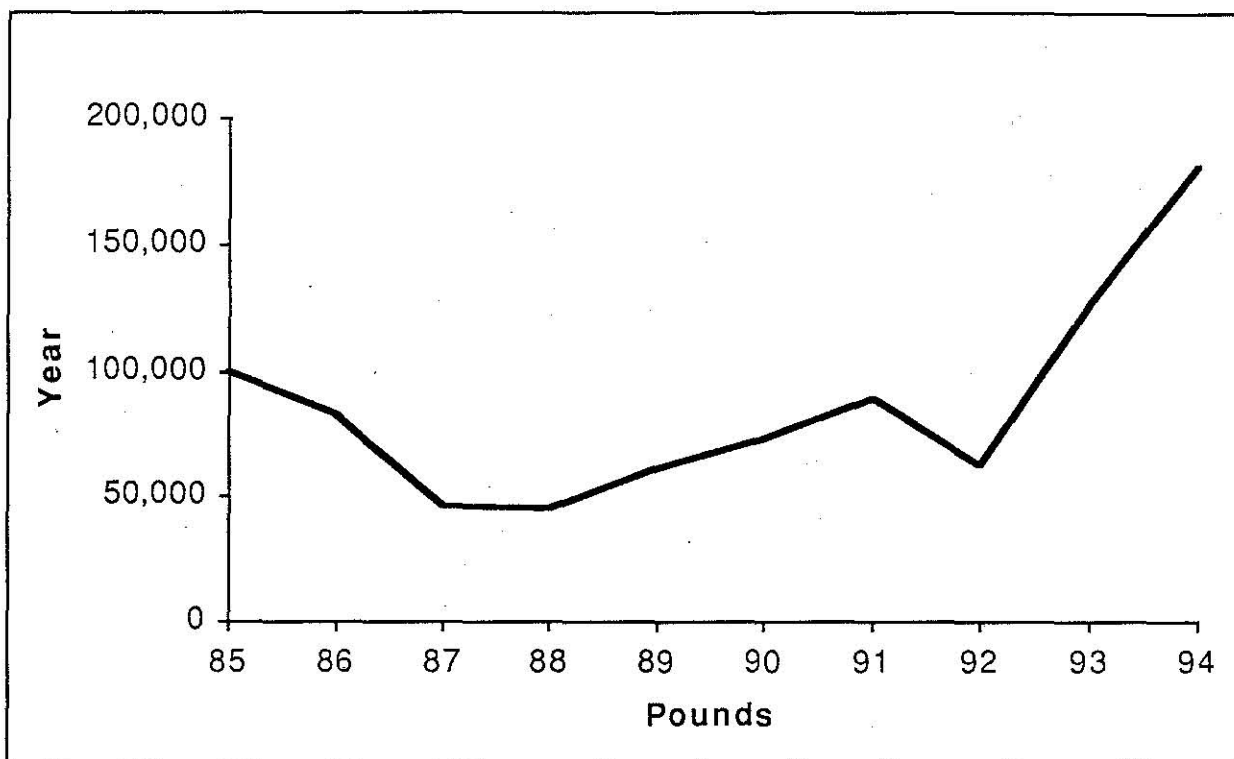


Figure 1. Oregon commercial clam harvest, 1985-1994.

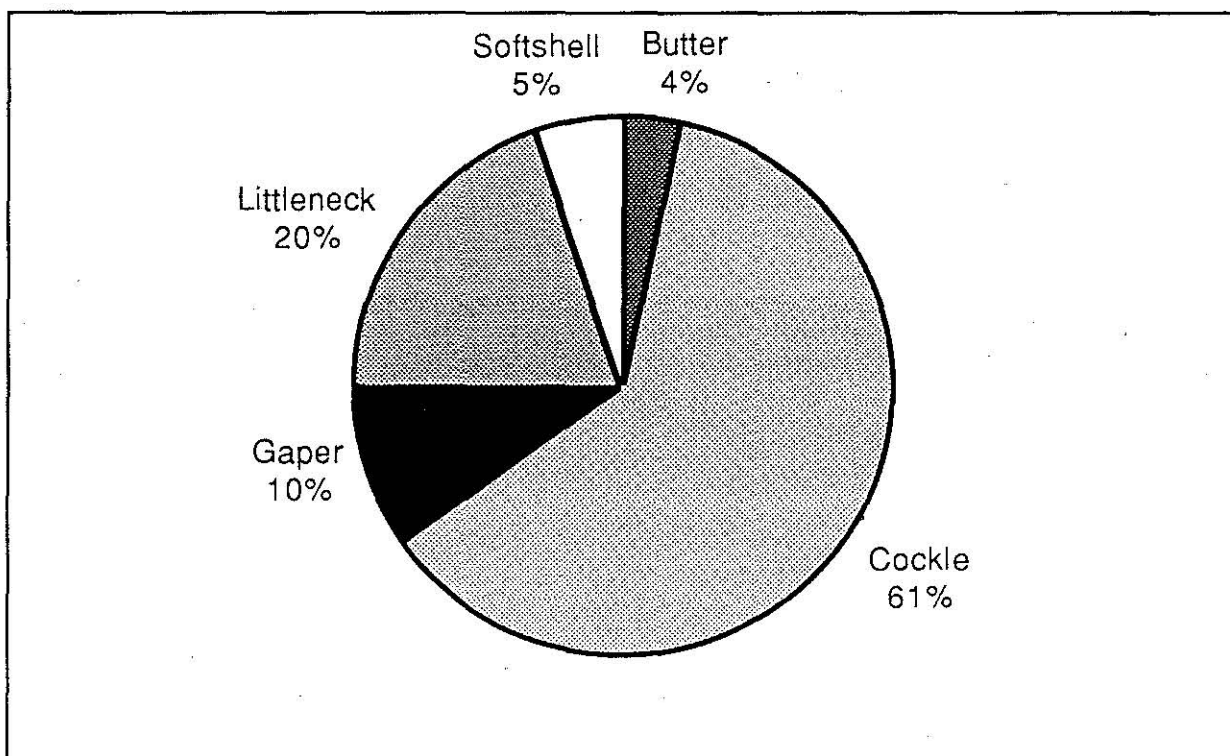


Figure 2. Oregon commercial clam harvest, by species, average 1985-1994.

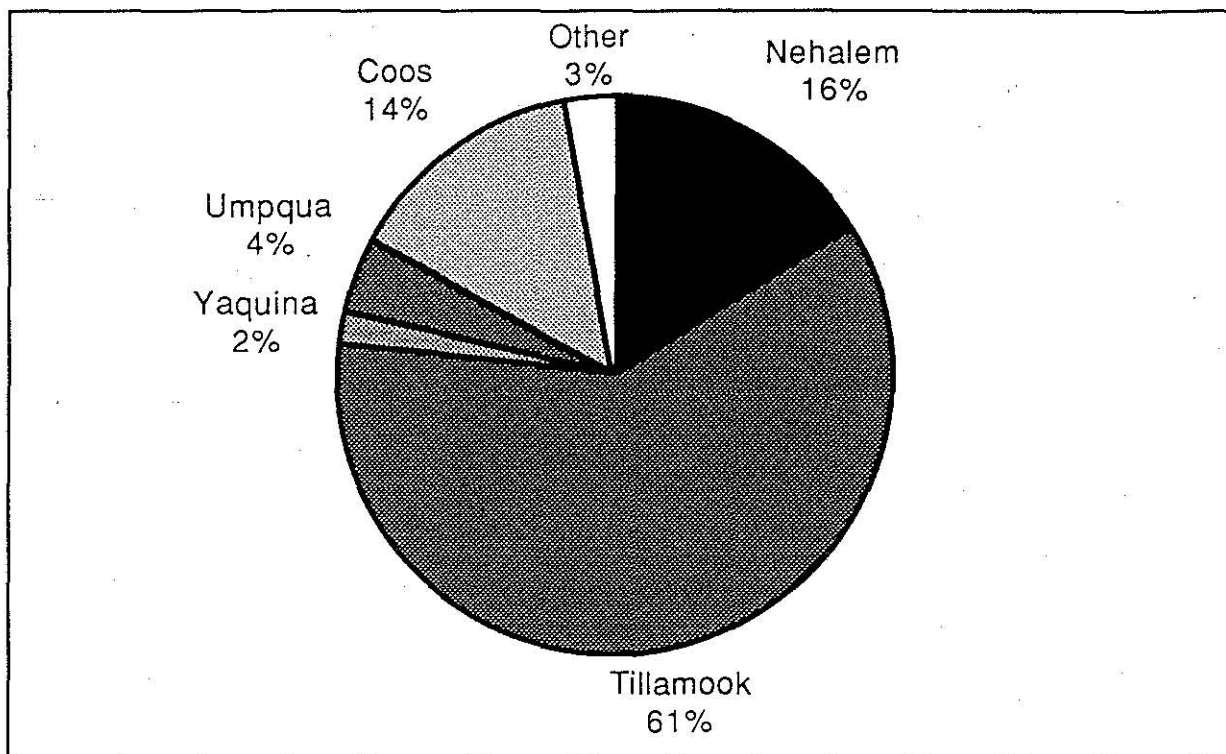


Figure 3. Oregon commercial clam harvest, by estuary, average 1985-1994.



OREGON ADMINISTRATIVE RULES

OREGON DEPARTMENT OF FISH AND WILDLIFE

Developmental Fisheries Species List

635-06-850 (1) The Developmental Fisheries Species List, Category "A," is as follows:

Common and Scientific Name		Renewal Req. (landings/lb)	No. of Permits	Restrictions
<u>Fish</u>				
Pacific hagfish	<i>Eptatretus stouti</i>	5 landings	25	no trawl permits
blue shark	<i>Prionace glauca</i>	5/500 or 1/5000	10	A, B, G, I
swordfish	<i>Xiphias gladius</i>	5/500 or 1/5000	10 others & 20 floating longline	H, I, K, L
northern anchovy & Pacific herring	<i>Engraulis mordax</i> <i>Clupea pallasii</i>	5/500 or 1/5000	15 ocean harvest	F, G, I
Pacific sardine & Pacific saury	<i>Sardinops sagax</i> <i>Cololabis saira</i>	5/500 or 1/5000	15 ocean harvest	F, I
Pacific sandfish	<i>Trichodon trichodon</i>	5 landings	10	C, E, I, G, no trawl *
eulachon & whitebait smelt & night smelt & longfin smelt & surf smelt	<i>Thaleichthys pacificus</i> <i>Allosmerus elongatus</i> <i>Spirinchus starksi</i> <i>Spirinchus thaleichthys</i> <i>Hypomesus pretiosus</i>	5/100	20 ocean harvest	F, I, G, no trawl *
Pacific pomfret	<i>Brama japonica</i>	5/100	10	I
slender sole	<i>Eopsetta exilis</i>	5/100	10	I
<u>Invertebrates</u>				
box crab	<i>Lopholithodes foraminatus</i>	5/100	25	pots only
grooved tanner crab & Oregon hair crab & scarlet king crab	<i>Chionoecetes tanneri</i> <i>Paralomis multispina</i> <i>Lithodes couesi</i>	5/100	10	pots only
spot prawn & coonstripe shrimp & sidestripe shrimp	<i>Pandalus platyceros</i> <i>Pandalus danae</i> <i>Pandalopsis dispar</i>	5/100 (round weight)	6 trawl & 10 other	I, J, E



OREGON ADMINISTRATIVE RULES

OREGON DEPARTMENT OF FISH AND WILDLIFE

(Category A con't)

Common and Scientific Name		Renewal Req. (landings/lb)	No. of Permits	Restrictions
<u>Invertebrates con't</u>				
cockle clams	<i>Clinocardium nuttallii</i>	5/100	5-ocean only	I, G
cockle clams	<i>Clinocardium nuttallii</i>	5/50 ¹⁰⁰	15 dive estuary only	
butter clams	<i>Saxidomus giganteus</i>			
gaper clams	<i>Tresus capax, nuttallii</i>			
native littleneck clams	<i>Protothaca staminea</i>			
softshell clams	<i>Mya arenaria</i>			
giant octopus	<i>Octopus dofleini</i>	5/100	10	octopus pots only
California market squid & other squid spp.	<i>Loligo opalescens</i> several spp.	5/500 or 1/5000	30 trawl & 30 other	I, J
fragile urchin	<i>Allocentrotus fragilis</i>	5/500	6 trawl & 6 other	I, J
sea cucumber	<i>Parastichopus</i> spp.	5/100	6 trawl & 10 diver & 10 other	I, J
marine snails	various spp.	5/100	10	subtidal only

Restrictions

- A - No high seas drift net permits.
- B - No large mesh gill net permits.
- C - No dredging permits.
- D - May have to have a federal "A" permit.
- E - Area specific permits.
- F - Specially adapted small mesh drift/gill net may be permitted.
- G - No permit needed for hand lines or hand harvest.
- H - Specially adapted drift/gill net may be permitted.
- I - Experimental gear permits may be required.
- J - Permits are issued geographically, split at Heceta Head, 50% N/50% S.
- K - Five single-delivery permits will be issued to those who applied by annual filing date, but did not receive a Developmental Fishery Permit.
- L - Gill net gear must conform to California gear restrictions.
- M - Hand harvest only

- FOOTNOTE - limited numbers of experimental gear permits may be issued for trawl harvest.

Appendix A. - Tables of commercial clam fishery data

Table 1. Oregon commercial clam effort and harvest, in pounds, 1970-1994

Year	Harvest (lb)	No. Diggers	No. Landings	Ave. lb/ Landings	Permits Issued
1970	25,884	40	258	100	-
1971	28,526	50	230	124	-
1972	61,523	37	354	175	-
1973	17,156	19	187	92	-
1974	16,315	23	182	40	-
1975	25,908	19	116	227	-
1976	88,054	7	97	947	-
1977	85,733	29	155	304	-
1978	216,926	15	218	943	-
1979	94,912	19	128	742	-
1980	80,467	36	176	442	-
1981	81,138	30	336	223	-
1982	134,105	46	538	245	-
1983	136,185	41	811	168	-
1984	120,574	30	704	171	-
1985	99,254	44	614	162	65
1986	82,829	36	664	125	65
1987	46,283	34	385	120	121
1988	44,696	28	258	173	136
1989	60,482	24	221	274	111
1990	72,756	38	384	190	92
1991	87,842	38	473	186	126
1992	62,044	28	410	151	115
1993	127,730	38	733	174	111
1994	180,934	34	422	429	113

Table 2. Oregon commercial clam harvest, in pounds, by species, 1970-1994

Year	Butter	Cockle	Gaper	Littleneck	Softshell	Total
1970	885	12,257	1,218	863	10,661	25,884
1971	217	9,391	10,345	369	7,714	28,036
1972	52	7,269	34,006	1,406	18,772	61,505
1973	95	5,756	185	9,771	1,349	17,156
1974	412	6,073	0	8,987	743	16,215
1975	0	6,855	15,024	4,311	360	26,550
1976	816	322	85,831	455	630	88,054
1977	607	859	81,775	252	1,366	84,859
1978	1,452	6,717	207,685	1,056	52	216,962
1979	606	2,299	91,028	0	979	94,912
1980	40	2,244	74,459	4,268	456	81,467
1981	2,409	4,580	68,508	4,892	749	81,138
1982	3,654	10,517	106,440	13,231	248	134,090
1983	4,035	2,579	95,091	34,444	36	136,185
1984	4,842	17,912	50,573	46,874	366	120,567
1985	1,646	29,412	20,121	46,266	1,809	99,254
1986	2,862	31,681	17,021	27,487	3,558	82,609
1987	3,046	20,202	6,368	14,140	2,527	46,283
1988	2,492	30,068	3,816	6,884	1,436	44,696
1989	3,806	44,311	5,164	6,032	1,136	60,449
1990	4,604	45,607	10,391	7,521	4,633	72,756
1991	3,690	58,282	8,660	8,708	9,215	88,555
1992	475	35,800	8,609	10,980	6,180	62,044
1993	6,382	72,340	4,169	35,913	7,312	126,116
1994	1,961	163,295	2,146	6,084	7,448	180,934

Table 3. Oregon commercial clam harvest, in percent, by species, 1970-1994

Year	Butter	Cockle	Gaper	Littleneck	Softshell
1970	3.4	47.4	4.7	3.3	41.2
1971	0.8	33.5	36.9	1.3	27.5
1972	0.1	11.8	55.3	2.3	30.5
1973	0.6	33.6	1.1	57.0	7.9
1974	2.5	37.5	0.0	55.4	4.6
1975	0.0	25.8	56.6	16.2	1.4
1976	0.9	0.4	97.5	0.5	0.7
1977	0.7	1.0	96.4	0.3	1.6
1978	0.7	3.1	95.7	0.5	0.0
1979	0.6	2.4	95.9	0.0	1.0
1980	0.0	2.8	91.4	5.2	0.6
1981	3.0	5.6	84.4	6.0	0.9
1982	2.7	7.8	79.4	9.9	0.2
1983	3.0	1.9	69.8	25.3	0.0
1984	4.0	14.9	41.9	38.9	0.3
1985	1.7	29.6	20.3	46.6	1.8
1986	3.5	38.4	20.6	33.3	4.3
1987	6.6	43.6	13.8	30.6	5.5
1988	5.6	67.3	8.5	15.4	3.2
1989	6.3	73.3	8.5	10.0	1.9
1990	6.3	62.7	14.3	10.3	6.4
1991	4.2	65.8	9.8	9.8	10.4
1992	0.8	57.7	13.9	17.7	10.0
1993	5.1	57.4	3.3	28.5	5.8
1994	1.1	90.3	1.2	3.4	4.1

Table 4. Oregon commercial clam harvest, in pounds, by estuary, 1970-1994

Year	Nehalem	Tillamook	Netarts	Yaquina	Alsea	Siuslaw	Umpqua	Coos	Coquille	Total
1970	258	7,819	2,210	444	0	0	10,631	4,522	0	25,884
1971	589	6,168	1,598	1,819	0	0	7,459	10,893	0	28,526
1972	80	9,637	914	57	70	0	6,105	44,642	0	61,505
1973	329	11,997	1,191	0	0	0	786	2,853	0	17,156
1974	882	9,309	2,049	398	0	0	445	3,232	0	16,315
1975	0	4,637	0	0	13	0	309	21,553	38	26,550
1976	0	998	0	0	480	0	0	86,576	0	88,054
1977	0	2,619	0	71,013	0	0	35	12,066	0	85,733
1978	0	3,111	0	172,047	0	0	0	41,804	0	216,962
1979	174	433	0	74,565	0	3,432	0	16,308	0	94,912
1980	373	5,320	486	244	0	9,109	0	65,935	0	81,467
1981	65	4,259	0	128	0	684	0	76,002	0	81,138
1982	10,862	11,501	37	15	0	223	25	111,427	0	134,090
1983	31,856	3,144	200	5,253	0	15	0	95,717	0	136,185
1984	23,069	42,663	0	22	0	50	0	54,763	0	120,567
1985	40,349	34,148	240	0	0	895	268	23,030	324	99,254
1986	30,545	28,737	480	6	0	1,206	0	19,557	2,078	82,609
1987	10,723	22,936	0	1,114	250	654	0	10,214	392	46,283
1988	0	34,450	0	1,153	230	1,200	28	7,086	549	44,696
1989	80	49,650	0	2,790	993	600	150	6,183	36	60,482
1990	5,810	47,198	0	1,543	410	0	3,432	14,363	0	72,756
1991	6,331	50,860	7,451	1,013	530	120	8,322	12,504	60	87,191
1992	4,567	35,935	879	7,067	1,398	0	6,095	5,986	87	62,014
1993	31,966	76,103	54	2,843	1,495	93	7,105	5,698	0	125,357
1994	5,533	149,494	422	2,413	3,441	0	7,403	12,042	25	180,773

Table 5. Percent of Oregon commercial clam harvest, by estuary, 1970-1994

Year	Nehalem	Tillamook	Netarts	Yaquina	Alsea	Siuslaw	Umpqua	Coos	Coquille
1970	1.0	30.2	8.5	1.7	0.0	0.0	41.1	17.5	0.0
1971	2.1	21.6	5.6	6.4	0.0	0.0	26.1	38.2	0.0
1972	0.1	15.7	1.5	0.1	0.1	0.0	9.9	72.6	0.0
1973	1.9	69.9	6.9	0.0	0.0	0.0	4.6	16.6	0.0
1974	5.4	57.1	12.6	2.4	0.0	0.0	2.7	19.8	0.0
1975	0.0	17.5	0.0	0.0	0.0	0.0	1.2	81.2	0.1
1976	0.0	1.1	0.0	0.0	0.5	0.0	0.0	98.3	0.0
1977	0.0	3.1	0.0	82.8	0.0	0.0	0.0	14.1	0.0
1978	0.0	1.4	0.0	79.3	0.0	0.0	0.0	19.3	0.0
1979	0.2	0.5	0.0	78.6	0.0	3.6	0.0	17.2	0.0
1980	0.5	6.5	0.6	0.3	0.0	11.2	0.0	80.9	0.0
1981	0.1	5.2	0.0	0.2	0.0	0.8	0.0	93.7	0.0
1982	8.1	8.6	0.0	0.0	0.0	0.2	0.0	83.1	0.0
1983	23.4	2.3	0.1	3.9	0.0	0.0	0.0	70.3	0.0
1984	19.1	35.4	0.0	0.0	0.0	0.0	0.0	45.4	0.0
1985	40.7	34.4	0.2	0.0	0.0	0.9	0.3	23.2	0.3
1986	37.0	34.8	0.6	0.0	0.0	1.5	0.0	23.7	2.5
1987	23.2	49.6	0.0	2.4	0.5	1.4	0.0	22.1	0.8
1988	0.0	77.1	0.0	2.6	0.5	2.7	0.1	15.9	1.2
1989	0.1	82.1	0.0	4.6	1.6	1.0	0.2	10.2	0.1
1990	8.0	64.9	0.0	2.1	0.6	0.0	4.7	19.7	0.0
1991	7.3	58.3	8.5	1.2	0.6	0.1	9.5	14.3	0.1
1992	7.4	57.9	1.4	11.4	2.3	0.0	9.8	9.7	0.1
1993	25.5	60.7	0.0	2.3	1.2	0.1	5.7	4.5	0.0
1994	3.1	82.7	0.2	1.3	1.9	0.0	4.1	6.7	0.0

Appendix B. - Synopsis of information on bay clam species

Bay clams

gaper	<i>Tresus capax</i>
cockle	<i>Clinocardium nuttallii</i>
butter	<i>Saxidomus giganteus</i>
native littleneck	<i>Protothaca staminea</i>
softshell	<i>Mya arenaria</i>

Ecology

The gaper clam is found from Kodiak, Alaska to San Francisco, California in bays and estuaries in depths from intertidal to 16 fm. They are most abundant at 0.5 to 3 fm depths. Juveniles and adults are found burrowed into the sediment to depths of 10-24 in. Gapers are found in dense sand with shell fragments, gravel, clay, and silty-sand covered with eelgrass. The structure of the sediment affects how deep a gaper will burrow: they will burrow deeper in mud and sand than in clay. Few gapers are found in areas with mud or ghost shrimp because of the unstable substrate the shrimp create. Two species of pinnotherid crabs are known to inhabit the mantle cavity of gapers, but apparently cause little harm to the clam.

Another species of gaper clam, *Tresus nuttallii*, can be found in Netarts Bay and rarely in Yaquina Bay. Its appearance is similar to *T. capax* except the shell is more elongate.

The cockle clam is found from southern California to the Bering Sea and in Japan in depths from the high intertidal to 110 fm. The clams live on beaches and near the mouth of bays on tideflats made of fine to medium sand and also in eelgrass/mud areas. They can be found just below or on the surface of the sand.

The butter clam is found from the Aleutian Islands in Alaska to mid-California in bays and estuaries. They live in a wide variety of substrates but prefer a porous mixture of sand, broken shell, and small gravel. They are generally found 6-12 inches beneath the surface of the beds and can be found in water up to 5 fm deep.

Native littleneck clams are found from the Aleutian Islands, Alaska to Baja California. They prefer firm sediments, but occur in mud to cobble sediments. Along the open coast they are found in coarse sand, gravel, and cobble near rock points and reefs. Juveniles and adults are found in the upper 6-8 inches of the substrate, sometimes at the surface; usually in the intertidal zone, but can be found in water depths up to 20 fm.

Softshell clams were introduced to the Pacific coast, probably in the late 1860's with the first shipments of eastern oysters. However, there is fossil evidence softshells were once native to the Pacific coast. The species is now common in estuaries from mid-California to Alaska. It is also found in the Atlantic, from Labrador to South Carolina and in Europe and in the western Pacific. Softshell clams can occur in full salt water, but is primarily found near river mouths where the salinity is low in medium to soft mud and sand flats. Adults may be found in the sediment down to 10-12 in. They are most abundant in intertidal areas, but can be found in water to depths of 5 fm.

Life History

Reproduction

Sexes of bay clams are separate. Sex ratio is usually 1:1. Hermaphroditic individuals of native littlenecks and softshells have been found. Bay clams are broadcast spawners, so eggs are fertilized externally. Eggs and larvae are pelagic, being dispersed by currents. Larvae settle to the substrate primarily between early spring and summer.

Cockle clams are hermaphroditic, spawning from April to November. The time of spawning varies with currents and temperatures.

The primary spawning season in Oregon for gaper clams is from late January through April, and for butter clams from February to July.

The primary spawning season in Oregon for native littlenecks from March through August. Timing of littleneck spawning appears to be temperature related; suspensions of dense algae may also stimulate spawning.

Softshells spawn between March and September, earlier in California and later in Washington. Males normally spawn first, producing pheromones and sperm which stimulates females to spawn. Fecundity is estimated between 120,000 to 3 million eggs per female per year.

Food and Growth

Bay clams feed by filtering plankton from the water. Predators include worms, boring snails, fishes, crustaceans, octopus, birds, sea stars, and humans. Important predators of adult softshell clams include raccoons and otters. Aging of bay clams can be done by counting the annuli on shells.

Juveniles gaper clams grow to 2.5 cm after the first winter. Most gapers mature at about 70 mm shell length, 3-4 years of age. Subtidal clams show faster growth and are larger than intertidal clams of similar ages. Gapers can live to 16 years, reach

254 mm shell length, and weigh up to four pounds. Average size is 100-130 mm shell length.

Cockles average three to four years of age and are usually are not more than seven years old, but may reach 15 years. Age of maturity is two years at about 50-70 mm. Cockles reach a length of about $1\frac{1}{2}$ in during the first winter and about three inches after four years. Cockles are usually not more than 100 mm in length but can reach 120 mm. There is a great variation in size at any age and is particularly noticeable in the first year. Growth in northern latitudes is slower than in southern latitudes, probably due to decreasing mean air temperature with increasing latitude. Food availability and time submerged under sea water are important factors influencing growth. Cockles have the highest growth rates from subtidal areas with plenty of food.

Young butter clams have little growth after settling until the following spring. The mean size at maturity is 38 mm and 3-4 years of age. Average adult size is 3-4 inches, but can reach 5 inches. They can live 10-15 years.

Juvenile littleneck clams are 0.26-0.28 mm in shell length at settlement. They usually mature sexually after 1.5 years, at 15-35 mm shell length. Littlenecks may live 13-16 year to a maximum size of 80 mm. Growth rates vary widely, depending upon substrate, clam densities, tidal level, and location. Growth rates can be slower in exposed areas and faster in protected sites. Their average size at the end of the second year is 25 mm and 35 mm at the end of the third year.

Growth rates and shape of the shell of softshell clams are dependent on the substrate. Softshells may reach maturity at one year of age and 27-34 mm shell length. They have been reported to live up to 28 years, but 10-12 years is more likely the maximum age. Sizes of 5 inches can be found in some areas.

Migration

There is no migration of bay clams. Eggs and larvae are dispersed by water currents. Juveniles and adults do not move once they become established. Gaper clams lose their ability to reburrow after two years of age.

There is a movement of older cockles from intertidal to subtidal due to weakened ability to remain buried in the substrate. Adult littlenecks are sedentary, but small juveniles can use its foot to crawl to new areas. Very young littlenecks may first attach in deeper water, then move to shallow areas as they grow. Adults and juveniles can

reburrow if they have been disturbed. Softshell clams up to 12-13 mm in diameter will do some wandering.

Population

Survival of the settling spat of bay clam species is highly variable. Many environmental conditions affect successful settlement, such as temperature, food supply, predation, currents, and appropriate substrate. Alterations of estuarine habitats adversely affect populations.

Recruitment of gaper clams can be highly variable on some clam beds, resulting in beds dominated by only one or two age classes. Mechanical dredge harvesting may adversely affect littleneck populations by suspending and depositing fine sediments that can smother clams.

Juveniles cockle clams are more predominant in intertidal area while adults are more predominant in subtidal areas. Populations in the subtidal are more fecund, but the intertidal population outnumbers the subtidal by several times.

Because cockles can be found on the surface of the sand, exposures to extreme heat and cold can cause mass mortalities in intertidal areas. The older cockles are the first to die, contributing to the lack of adults in the intertidal.

The contribution of subtidal stocks to intertidal stocks is not well understood. The subtidal may be a valuable seed area during years when environmental conditions render the intertidal population impotent. The subtidal environment has been suggested to serve as "refugia" for adult breeding populations.

Abundance and distribution of bay clams in Oregon estuaries was extensively surveyed in the early 1970's. Biomass estimates were calculated for areas in three estuaries (Tillamook, Yaquina, and Coos) which were found to have commercial harvest potential. Biomass estimates showed approximately 7,367.3 mt of commercially desirable clams occurred in these three estuaries. Clam densities ranged from 16.5 clams/m² to 627 clams/m².

Harvest

Bay clams have been commercially harvested from Oregon estuaries for many years. Annual landings have ranged from 44,000 to 180,000 lb in the last ten years (Table 1). All of the harvest is done by hand, most is done subtidally with SCUBA gear. Much of the harvest is used for crab

Table 1. Annual harvest of bay clams in Oregon, 1985-1994: landings (thousands of lb), effort (harvesters), and number of harvesters meeting proposed minimum annual renewal requirements.

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Landings	99.3	82.6	46.3	44.7	60.5	72.8	87.8	92.0	127.7	180.9
Effort	44	36	34	28	24	38	40	29	38	32

bait. Species of commercial use include, cockle, gaper, butter, littleneck, and softshell.

In recent years, Tillamook Bay has been the major area of harvest; mostly cockle clams for bait. Nehalem Bay has had significant harvests of littleneck clams in the recent past. In the mid 1970's to mid 1980's, significant numbers of gaper clams were harvested in Yaquina and Coos Bays.

Permits to harvest clams (mostly gaper clams) using mechanical suction dredges in subtidal areas were issued in the mid 1970' to mid 1980's. Because of poor recruitment of gaper clams in subtidal areas and the efficiency of this harvest method, mechanical harvest methods have not been permitted since 1983.

Bay clams are also a very popular recreational fishery. Peak daily counts of 4-500 diggers have been taken on the more popular tide flats. Cockles clams have averaged 37.8% of the recreational harvest in the last 10 years. Gaper, butter, littleneck, and softshell clams comprised 18.8, 16.8 12.0, and 14.5%, respectively. L. In the mid 1970's landings for recreational uses was thought to far exceed reported commercial landings.

Experimental culturing of littleneck and butter clams have been attempted and may be viable in the future.

Management

Present Regulations

In addition to a commercial fishing license, a commercial harvester must have a shellfish harvest permit to harvest bay clams. Gaper clams can be harvested from July 1 through December 31. There is no size or season restrictions for commercial harvest of other bay clam species or for sport harvest. Recreational harvesters do not need a license.

The Oregon Department of Agriculture (ODA) monitors bay clams for presence of shellfish toxins. Estuaries are classified as to their suitability for commercial harvest for human consumption. Commercial harvester for human consumption must obtain a shellfish sanitation permit from ODA. ODFW prohibits sport harvest

of bay clams when a health advisory has been issued.

Suggestions For Future Management

Updated information is needed on abundance and distribution of bay clams to determine appropriate levels of effort.

Effects Evaluation

Information is sufficient to meet statewide planning Goal 19. Short-term and long-term effects of harvesting bay clams on resources and uses of other marine resources, the continental shelf, the Oregon nearshore ocean, and onshore areas are fairly well understood. Bay clams should be managed under the developing fisheries program with liberal numbers of permits and restrictions.

(1) Sustainability of developmental fisheries resources or incidental catch under proposed future harvest;

- a. Bay clam species are widely distributed from Alaska to Baja California, are moderate lived, and fast growing. They are broadcast spawners and highly fecund. Some species are artificially cultured.
- b. Harvest by hand has very little incidental catch.
- c. Harvest with dredge gear can be very efficient, has little incidental catch and can effect the survival of some species of juvenile clams.
- d. The contribution of subtidal clams to intertidal areas is not well documented.

(2) Biological and ecological effects on critical marine habitats, other habitats and other species supported by those habitats;

- a. Harvest by hand has little effect on habitat.
- b. Bay clams are important prey species of other marine animals - effect on other species of heavy fishing of clams is uncertain.

(3) Conformity and compatibility with existing uses such as commercial and recreational fishing, non-consumptive uses, public access, etc;

- a. Recreational harvest of bay clams is very popular.
- b. The general public has good access to intertidal area. Access to subtidal areas by the general public is limited.

(4) Ability of the Department and other agencies to monitor the fishery for needed data and compliance with rules and regulations;

- a. Present level of staff resources is sufficient to monitor the existing fishery.
- b. Updating information on distribution and abundance of clams would require additional staff resources.

(5) Recommendations for future fishery development including gear types and effort levels;

- a. Information on distribution and abundance is dated; needs to be renewed to determine appropriate effort levels.
- b. Information on the contribution of subtidal stocks to intertidal stocks is needed.
- c. Methods for habitat improvement could be explored.
- d. The policy of hand harvest only (no dredge gear) should be continued.

Program Objectives

(1) Determine stock parameters required to optimize biological and economic yield of the species;

(2) Analyze fishery practices, interactions of social, economic, and biological factors to determine optimum levels of effort for the species;

(3) Develop long term management plan.

Management Options

Staff recommendations

- a. Permits - 15 dive gear, estuary only
- b. Gear restrictions - subtidal only
- c. Renewal requirement - 5 landings of at least 50 lb.
- d. Other requirements - continue conservations zones. and annual quotas and size limit for cockles in Tillamook and Netarts Bays.

Other options

- a. Status quo - species not on developmental fisheries list

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Appendix C. - Clam Petition



DEPARTMENT OF
FISH AND
WILDLIFE

June 12, 1995

Linda Rowles, Secretary
Committee to Stop Commercial
Clam Diving
P. O. Box 823
Garibaldi, OR 97118

Dear Ms. Rowles:

The Oregon Fish and Wildlife Commission has accepted your petition to hold a hearing regarding commercial clam diving in Tillamook Bay. The hearing will be at the October 25 Commission Meeting in Coos Bay.

As of this date, we do not have a location for the Coos Bay meeting, however, that information should be available in August and you will be notified. Please let me know if you have any questions about the hearing process.

Sincerely,

REDACTED FOR PRIVACY
REDACTED FOR PRIVACY
REDACTED FOR PRIVACY
REDACTED FOR PRIVACY

Kay Brown
Special Assistant
Fish Division

cp

John A. Kitzhaber
Governor



2501 SW First Avenue
PO Box 59
Portland, OR 97207
(503) 229-5400
TDD (503) 229-5459



June 5, 1995

Linda Rowles, Secretary
Committee to Stop Commercial
Clam Diving
P. O. Box 823
Garibaldi, OR 97118

Dear Ms. Rowles:

This is to acknowledge receipt of your petition to stop commercial clam diving in Tillamook Bay and to advise you that the Oregon Fish and Wildlife Commission will consider your petition to hold a hearing at their June 9-10 Commission meeting in Bend.

At that time they will decide whether to accept the petition and schedule a hearing or deny your petition.

Department staff will recommend that the Commission accept your petition and schedule the hearing for the October 25 Commission meeting which will be held in Coos Bay, Oregon. This is the date the Commission has a number of other marine issues scheduled on the agenda.

I will advise you of the Commission's decision on your petition. You may attend the Commission hearing in Bend if you wish. An agenda is enclosed. Your petition will be handled first thing in the morning of Friday, June 9, under "Director's Report."

Sincerely,

REDACTED FOR PRIVACY
REDACTED FOR PRIVACY
REDACTED FOR PRIVACY

Kay Brown
Special Assistant
Fish Division

bw

Enclosure

cc: Bohn, Coenen - Marine Region, J. Johnson

WP



2501 SW First Avenue
PO Box 59
Portland, OR 97207
(503) 229-5400
TDD (503) 229-5459

BEFORE THE DEPARTMENT OF FISH AND WILDLIFE
OF THE STATE OF OREGON

IN THE MATTER OF AMENDMENT)	
OF OAR 137-01-070 ALLOWING)	PETITION TO AMEND
COMMERCIAL CLAM DIVING IN)	OAR 137-01-070
TILLAMOOK BAY)	[COMMERCIAL CLAM DIVING]

1. PETITIONER'S NAME AND ADDRESS IS LINDA ROWLES, COMMITTEE SECRETARY
PO BOX 823 GARIBALDI, OR. 97118.

2. PETITIONER'S ARE PROPERTY OWNERS, BUSINESS OWNERS, RETIRED, AND ETC.,
IN OREGON WHO ARE CONCERNED ABOUT TILLAMOOK BAY CLAM RESOURCES.

3. UNDER OAR 137-01-070, CURRENTLY ALLOWS COMMERCIAL CLAM DIVERS IN
TILLAMOOK BAY A COCKLE CLAM QUOTA , FOR 1995 OF NINETY THOUSAND (90,000)
POUNDS. QUOTA'S FOR OTHER BAY CLAMS UNKNOWN.

4. PETITIONER'S DEFEND A UNKNOWN RESOURCE. LAST CLAM SURVEY WAS
WAS IN 1975. TWENTY YEARS OF NATURAL AND MAN MADE PROBLEMS HAS PASSED
THROUGH THE BAY. THE POSSIBLE LOSS OF THE CLAM RESOURCE WOULD MAKE A
HUGE FINANCIAL IMPACT.ON THE AREA.

5. PETITIONER'S PROPOSES THAT OAR 137-01-070 BE AMENDED, AND COMMERCIAL
CLAM DIVING IN TILLAMOOK BAY BE DISCONTINUED..

6. OAR 137-01-070 AS PETITIONER'S PROPOSES TO AMEND. IT WOULD
READ AS FOLLOWS: OAR 137-01-070 COMMERCIAL CLAM DIVING
DISCONTINUED...TILLAMOOK BAY

7. PETITIONER'S ARE AWARE THAT THE COMMERCIAL DIVERS MAY HAVE
A INTEREST IN THE PROPOSED AMENEMENT OF OAR 137-01-070.

WHEREFORE, PETITIONER'S REQUESTS THE DEPARTMENT OF FISH AND WILDLIFE
TO ADOPT THE PROPOSED AMENDMENT OF OAR 137-01-070.

DATED JUNE 1, 1995

REDACTED FOR PRIVACY
REDACTED FOR PRIVACY
REDACTED FOR PRIVACY

LINDA ROWLES, COMMITTEE SECRETARY
FOR PETITIONER'S

May 23, 1995



DEPARTMENT OF
FISH AND
WILDLIFE

OREGON FISH AND
WILDLIFE
COMMISSION

Linda Rowles, Secretary
Committee to Stop Commercial
Clam Diving
P. O. Box 823
Garibaldi, OR 97118

Dear Ms. Rowles:

We have received your request to stop commercial clam divers from operating in Tillamook Bay. Oregon Administrative Rule 137-01-070 provides procedures which agencies and interested persons must follow when considering petitions to amend administrative rules. A copy of the rule and a sample petition, which includes examples of the required statements, are enclosed.

Upon receipt of your completed petition, we will be able to provide the Commission the opportunity to either deny the petition or to begin the rulemaking process. If you have any questions regarding the enclosed, please contact Kay Brown, at 503-229-5400, ext. 354.

Sincerely,

REDACTED FOR PRIVACY
REDACTED FOR PRIVACY
REDACTED FOR PRIVACY

Pete Bannister

Chairman

cpw

Enclosures

c Rudy Rosen
Governor John Kitzhaber
Senator Joan Dukes
Representative Tim Josi



LTBA ✓
5-19-1

COMMISSIONER, PETE BARNHISEL
OREGON FISH AND WILDLIFE COMMISSION
2501 SW 1ST AVE.
PORTLAND, OR. 97207

MAY 12, 1995

DEAR: COMMISIONER BARNHISEL

SUBJECT: PETITION TO STOP COMMERCIAL CLAM DIVERS IN TILLAMOOK BAY

THE CLAM POPULATION IN TILLAMOOK BAY IS A UNKNOWN RESOUCE. THE LAST CLAM SURVEY TAKEN WAS TWENTY YEARS AGO. SINCE THAT TIME THE BAY CLAMS HAS SUFFERED THROUGH FLOODS AND POLLUTION. THE SPORTS CLAM DIGGERS HAS SEEN ENTIRE BEDS DISAPPEAR AND THE SIZE DIMMINISH.

PLEASE REVIEW THE ATTACHED PETITION SIGNED BY OVER ELEVEN HUNDRED OREGON RESIDENTS, THAT WANT THE COMMERCIAL CLAM DIVING STOP. WE ARE TIRED OF THE DEPLETING CLAM SUPPLY AND WANT SOMETHING DONE ABOUT IT.

PLEASE KEEP US INFORMED AS TO HOW ACTION WILL BE TAKEN. WE THANK YOU AND THE NEXT GENERATION THANKS YOU.

RESPECTFULLY.

REDACTED FOR PRIVACY
REDACTED FOR PRIVACY

LINDA ROWLES, SECRETARY
COMMITTEE TO STOP COMMERCIAL CLAM DIVING
PO BOX 823
GARIBALDI, OR. 97118

CC: DR. RUDY ROSEN,
DIRECTOR ODF&W

JOHN KITZHABER,
GOVERNOR

SENATOR JOAN DUKES

REPRESENTATIVE TIM JOSI

PETITION COMMITTEE, TO STOP COMMERCIAL CLAM DIVING, IN TILLAMOOK BAY

NAME REDACTED FOR PRIVACY
REDACTED FOR PRIVACY
ADDRESS REDACTED FOR PRIVACY
REDACTED FOR PRIVACY
CITY, S REDACTED FOR PRIVACY
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SIGNAT REDACTED FOR PRIVACY

ATTACHMENTS INCLUDE: PETITION
CORRESPONDENCE FROM LOCAL OFFICIALS



Land of Cheese, Trees and Ocean Breeze

201 Laurel Avenue
Tillamook, Oregon 97141

Tillamook County Commissioners
Ken Burdick • Jerry Dove • Gina Mulford
503.842.3403
Fax 842.1384

December 14, 1994

John A. Johnson
Shellfish Project Leader
Department of Fish & Wildlife
Marine Region
2010 S.E. Marine Science Dr.
Newport, OR 97365

RE: Commercial Harvesting of Cockle Clams
in Tillamook County Bays

Dear Mr. Johnson:

As the Board of Commissioners for Tillamook County, we are deeply concerned over the excessive commercial harvesting of cockle clams in our bays, particularly Tillamook Bay. Tillamook County is very dependent upon the tourist industry for our economic survival; over-harvesting of the clams for commercial purposes could have a very negative impact on the number of people who visit Tillamook County for recreational shellfish gathering.

We receive numerous phone calls from citizens who are very concerned about this potential threat to their businesses, such as motels, marinas, service stations, if the commercial harvestors cut too deeply into recreational clam digging.

Please continue to carefully monitor this situation and keep our office informed. Thank you for your prompt attention to this matter.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
FOR TILLAMOOK COUNTY, OREGON
[REDACTED FOR PRIVACY]

Gina Mulford, Chairperson

[REDACTED FOR PRIVACY]
[REDACTED FOR PRIVACY]

Jerry A. Dove, Vice Chairperson

[REDACTED FOR PRIVACY]

Kenneth M. Burdick, Commissioner

CC: Bob Carnes, Old Mill Marina

CITY OF GARIBALDI
P.O. BOX 708 • GARIBALDI, OR 97118

PHONE (503) 322-3327
FAX (503) 322-3737

COPY

January 10, 1995

James T. Golden
Shellfish and Marine Habitat Program Leader
Oregon Department of Fish and Wildlife
2040 SE Marine Science Drive
Newport, OR 97365

Dear Mr. Golden,

The City of Garibaldi continues to be concerned about the commercial harvesting of all bay clams in Tillamook Bay.

Upon review of a conditional permit, which limits commercial harvest to the north end of Tillamook Bay, we found that all of Garibaldi's clam beds have been approved for commercial harvest.

These beds are one of the largest attractions to Garibaldi for sport clammers. Though we support some commercial activity, we believe it equally important to maintain the clam beds for sport clammers.

Therefore, the Garibaldi City Council requests that ODFW conduct an appropriate survey of all bay-type clams, and bring the results and other data up to date. Accurate information is needed to make determinations about all commercial and sport clamming.

Thank you for your consideration.

Sincerely,

REDACTED FOR PRIVACY

Joel L. Johnson
Mayor

JLJ/rb

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DEVELOPMENTAL FISHERIES

Issue 1: ADDITION OF BAY CLAMS TO DEVELOPMENTAL FISHERY SPECIES LIST

- Option A: (preferred)
 - Adopt rules adding bay clams to the list of species considered developmental- category A.
 - Establish harvest program
- Option B: No action

HARVEST PROGRAM- BAY CLAMS As Proposed to Board

- Permit covers all species
 - butter
 - cockle
 - gaper
 - native littleneck
 - softshell
- Permit covers all estuaries
- 15 permits for subtidal harvest with SCUBA gear (no limit on permits needed for intertidal hand harvest)

HARVEST PROGRAM- BAY CLAMS as Proposed to Board

- Qualifying & annual renewal requirement
 - 5 landings of at least 50 lb
- Continue restrictions for cockle clams in Tillamook and Netarts Bays
- If funded by Tillamook National Estuary Program, conduct biological survey FY96

BOARD RECOMMENDATIONS

- Unlimited numbers of permits for intertidal hand harvest - \$25 fee
 - No qualifying or renewal requirements
- Continue restrictions for cockle clams in Tillamook and Netarts Bays

BOARD RECOMMENDATIONS

- 20 Permits Subtidal Harvest with Dive Gear
 - \$75 fee
- Qualifying requirement
 - 5 landings of at least 200 lb each
 - or 2,500 lb annual total
 - Qualifying period of January 1, 1990 through October 16, 1995
- Annual renewal requirement
 - 5 landings of at least 100 lb or 2,500 lb

Issue 2: PROHIBIT COMMERCIAL HARVEST OF CLAMS IN TILLAMOOK BAY USING DIVE GEAR

- Option A: Prohibit the commercial harvest of clams from Tillamook Bay using dive gear.
- Option B: (preferred) No action

